Department of
Conservation and
Development

30 Muir Road
Martinez, CA 94553

Phone: 1-855-323-2626

Contra Costa County

John Kopchik
Director

Aruna Bhat
Deputy Director

Jason Crapo
Deputy Director

Maureen Toms
Deputy Director

Amalia Cunningham
Assistant Deputy Director

May 11, 2022

NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT

A PROPOSED MITIGATED NEGATIVE DECLARATION (Revised)

County File No. CDSD20-09531

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Community Development Division of the Department of Conservation and Development of Contra Costa County has prepared an initial study on the following project:

PROJECT NAME: Grayson Road 10-Lot Subdivision (County File #CDSD20-09531)

LOCATION: **The property is located at 1024 and 1026 Grayson Rd, Pleasant Hill, CA 94523**
Assessor's Parcel Numbers: 166-030-001 and 166-030-002

APPLICANT: Calibr Ventures c/o Andy Byde, 1908 Cambridge Place, Walnut Creek, CA 94598

LEAD AGENCY: Contra Costa County, Department of Conservation and Development (925)655-2872
30 Muir Road, Martinez, CA 94553

DESCRIPTION:

Project Description: The applicant is requesting approval of a vesting tentative map for a subdivision which proposes to subdivide the 3.05 acre project site into 10 lots ranging in size from 7,347 to 22,460 square feet. On each new lot, a 4- to 5-bedroom single-family residence ranging in size from approximately 2,900 to 3,500 square feet, is expected to be constructed. Two existing, vacant, residences would be demolished to accommodate the project.

Associated access, drainage, and utility facilities would be constructed throughout the site. For access, a 28-foot roadway and 4.5-foot sidewalk would connect the lots to Grayson Road. Stormwater flows would be directed to a 2,021 square foot detention basin located at the northeast corner of the property. Treated stormwater will be discharged from the basin into a Contra Costa County maintained stormwater drainage system that currently exists under Grayson Road.

A riparian setback between the project's grading limits and Grayson Creek would be included as part of the project. With implementation of the geotechnical engineering study recommendations, the project could include more than 1,000 cubic yards of grading. To accommodate improvements, a tree permit would be included for the removal of 83 code-protected trees.

An exception to Title 9 of the County Code would be required to allow for the alternative roadway improvements along Grayson Road (where curb, 5-foot-wide sidewalk, necessary longitudinal and transverse drainage are required).

The home on Lot 1 would be restricted for-sale to a moderate-income household, therefore the project is eligible for a Density Bonus, waivers or reductions in development standards, incentives and concessions, and parking reductions under the California Density Bonus Law, Gov. Code Section 65915. By providing one lot of the nine base units for sale to a moderate income household, the Project qualifies for a 7% density bonus, resulting in one additional unit. In addition to the increased density of one unit (10 units total), the project is seeking waivers of development standards to accommodate the increased density pertaining to: (a) a reduction in minimum lot size for Lots 1 and 4-10; (b) a reduction in the minimum lot width for Lots 1-10 of an average of 73 feet (instead of 100 feet); (c) a reduction in minimum lot depth for Lot 1; and (d) a waiver of the setback requirement for retaining walls. The project is seeking these reductions and waivers as application of the required standard would physically preclude the development of the project at the proposed density with the proposed one moderate income unit. Finally, the project is seeking a concession to allow the installation of the complete frontage improvements be omitted in lieu of a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road along the project frontage as well as bicycle lane striping.

Site and Area Description: The 3.05-gross-acre project site is located on the south side of Grayson Road, opposite the intersection of Grayson Road and Buttner Road in unincorporated Pleasant Hill. The roughly L-shaped project site is comprised of two parcels: a northern parcel that fronts on Grayson Road, and a southern parcel that is bound by Grayson Creek to the south and east. Grayson Creek runs roughly east-west along the southern boundary of the project site, then takes a northward bend forming the east boundary. Other private properties with single-family residences abut the property to the north and west.

The immediate surrounding area is representative of single-family residential development in central Contra Costa County. Properties along Grayson Road are predominantly developed with single-family residences. Within a half-mile radius, developed parcels range in size from 4,000 square feet to 68,700 square feet, with a median size of approximately 13,000 square feet. The larger vicinity includes a mix of neighborhood-residential uses including single-family residences, churches, schools, and parks.

ENVIRONMENTAL EFFECTS:

The initial study for the proposed project identified potentially significant impacts in the environmental areas of Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Tribal Cultural Resources. Environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, a Mitigated Negative Declaration (MND) has been prepared pursuant to Public Resources Code Section 21080(c), 21063.5, and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

Pursuant to the requirements of CEQA (CEQA Guidelines Section 15071) the MND describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the proposed project; and identifies measures to mitigate adverse environmental impacts. The mitigations identified in this document and designed for the proposed project, will ensure that the project will not cause a significant impact on the environment.

A copy of the mitigated negative declaration and all documents referenced in the mitigated negative declaration may be reviewed on the Department of Conservation and Development webpage at the following address:

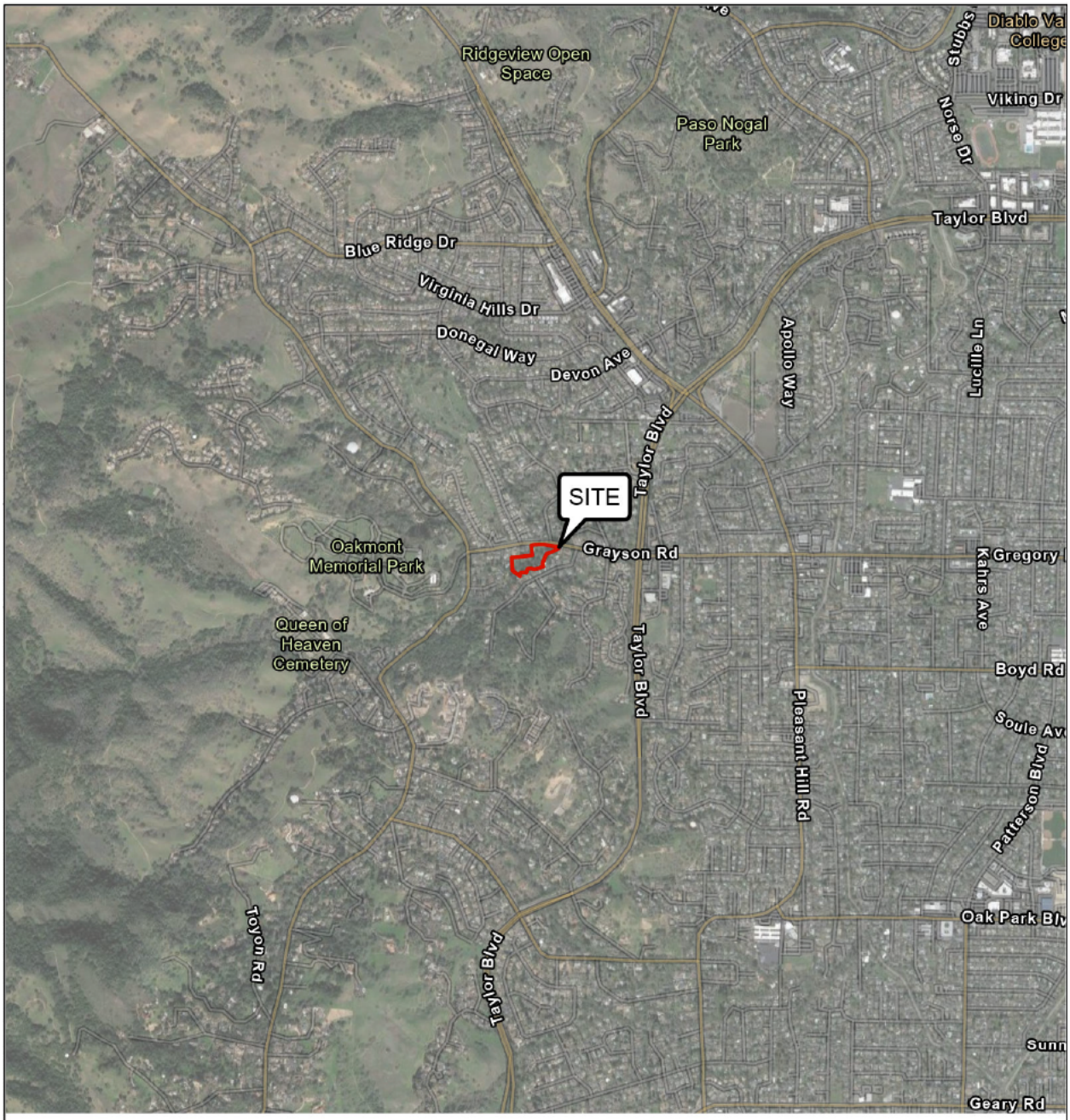
https://www.contracosta.ca.gov/4841/CEQA-Notifications

Public Comment Period - The period for accepting comments on the adequacy of the environmental documents extends to **Tuesday, May 31, 2022, at 5:00 P.M**. Following the close of the public comment period, the County will consider adopting the Mitigated Negative Declaration prior to consideration of the Vesting Tentative Map. Any comments should be in writing and submitted by email to joseph.lawlor@dcd.cccounty.us or by post to the following address:

Name: Joseph W. Lawlor Jr, AICP; Project Planner; (925) 655-2872
Community Development Division
Contra Costa County, Department of Conservation and Development
30 Muir Road, Martinez, CA 94553

Joseph W. Lawlor Jr, AICP
Project Planner

cc: County Clerk's Office (2 copies)
Adjacent Occupants and Owners Notification List
Attached: Vicinity Map


Ridgeview Open Space
Paso Nogal Park
Diablo Va
College
Stubbs
Viking Dr
Norse Dr
Taylor Blvd
Blue Ridge Dr
Virginia Hills Dr
Donegal Way
Devon Ave
Apollo Way
Lucille Ln
SITE
Taylor Blvd
Oakmont Memorial Park
Grayson Rd
Gregory
Kahrs Ave
Queen of Heaven Cemetery
Taylor Blvd
Boyd Rd
Pleasant Hill Rd
Soule Av
Patterson Blvd
Oak Park Blv
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Department of
Conservation and
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30 Muir Road
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Phone: 1-855-323-2626

Contra Costa County

John Kopchik
Director

Aruna Bhat
Deputy Director

Jason Crapo
Deputy Director

Maureen Toms
Deputy Director

Amalia Cunningham
Assistant Deputy Director

April 22, 2022

NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT
A PROPOSED MITIGATED NEGATIVE DECLARATION

County File No. CDSD20-09531

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APPLICANT: Calibr Ventures c/o Andy Byde, 1908 Cambridge Place, Walnut Creek, CA 94598

LEAD AGENCY: Contra Costa County, Department of Conservation and Development (925)655-2872
30 Muir Road, Martinez, CA 94553

DESCRIPTION:
Project Description: The applicant is requesting approval of a vesting tentative map for a subdivision which proposes to subdivide the 3.05 acre project site into 10 lots ranging in size from 7,347 to 22,460 square feet. On each new lot, a 4- to 5-bedroom single-family residence ranging in size from approximately 2,900 to 3,500 square feet, is expected to be constructed. Two existing, vacant, residences would be demolished to accommodate the project.

Associated access, drainage, and utility facilities would be constructed throughout the site. For access, a 28-foot roadway and 4.5-foot sidewalk would connect the lots to Grayson Road. Stormwater flows would be directed to a 2,021 square foot detention basin located at the northeast corner of the property. Treated stormwater will be discharged from the basin into a Contra Costa County maintained stormwater drainage system that currently exists under Grayson Road.

A riparian setback between the project's grading limits and Grayson Creek would be included as part of the project. With implementation of the geotechnical engineering study recommendations, the project could include more than 1,000 cubic yards of grading. To accommodate improvements, a tree permit would be included for the removal of 83 code-protected trees.

An exception to Title 9 of the County Code would be required to allow for the alternative roadway improvements along Grayson Road (where curb, 5-foot-wide sidewalk, necessary longitudinal and transverse drainage are required).

The home on Lot 1 would be restricted for-sale to a moderate-income household, therefore the project is eligible for a Density Bonus, waivers or reductions in development standards, incentives and concessions, and parking reductions under the California Density Bonus Law, Gov. Code Section 65915. By providing one lot of the nine base units for sale to a moderate income household, the Project qualifies for a 7% density bonus, resulting in one additional unit. In addition to the increased density of one unit (10 units total), the project is seeking waivers of development standards to accommodate the increased density pertaining to: (a) a reduction in minimum lot size for Lots 1 and 4-10; (b) a reduction in the minimum lot width for Lots 1-10 of an average of 73 feet (instead of 100 feet); (c) a reduction in minimum lot depth for Lot 1; and (d) a waiver of the setback requirement for retaining walls. The project is seeking these reductions and waivers as application of the required standard would physically preclude the development of the project at the proposed density with the proposed one moderate income unit. Finally, the project is seeking a concession to allow the installation of the complete frontage improvements be omitted in lieu of a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road along the project frontage as well as bicycle lane striping.

Site and Area Description: The 3.05-gross-acre project site is located on the south side of Grayson Road, opposite the intersection of Grayson Road and Buttner Road in unincorporated Pleasant Hill. The roughly L-shaped project site is comprised of two parcels: a northern parcel that fronts on Grayson Road, and a southern parcel that is bound by Grayson Creek to the south and east. Grayson Creek runs roughly east-west along the southern boundary of the project site, then takes a northward bend forming the east boundary. Other private properties with single-family residences abut the property to the north and west.

The immediate surrounding area is representative of single-family residential development in central Contra Costa County. Properties along Grayson Road are predominantly developed with single-family residences. Within a half-mile radius, developed parcels range in size from 4,000 square feet to 68,700 square feet, with a median size of approximately 13,000 square feet. The larger vicinity includes a mix of neighborhood-residential uses including single-family residences, churches, schools, and parks.

ENVIRONMENTAL EFFECTS:

The initial study for the proposed project identified potentially significant impacts in the environmental areas of Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Tribal Cultural Resources. Environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, a Mitigated Negative Declaration (MND) has been prepared pursuant to Public Resources Code Section 21080(c), 21063.5, and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

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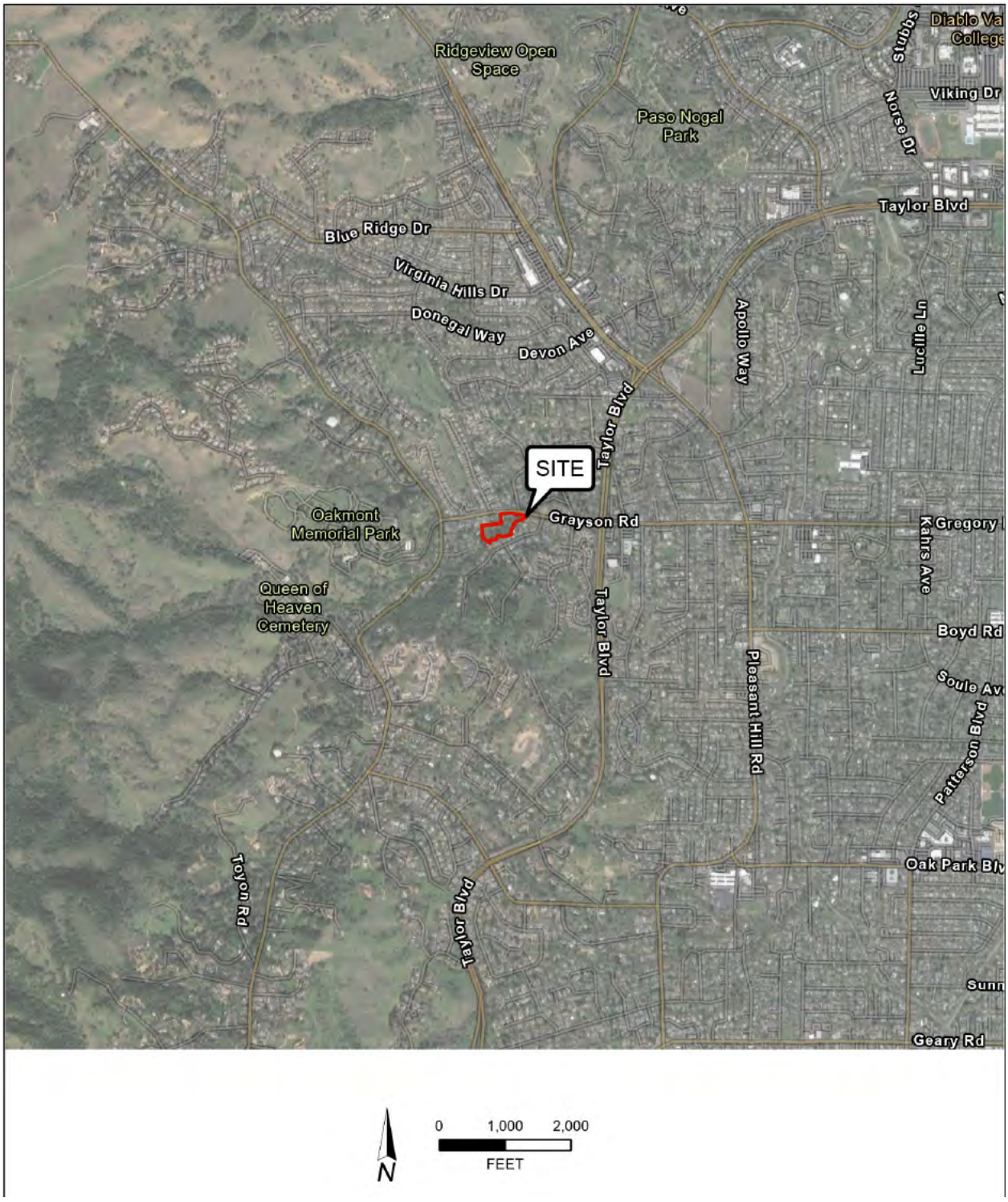
https://www.contracosta.ca.gov/4841/CEQA-Notifications

Public Comment Period - The period for accepting comments on the adequacy of the environmental documents extends to **Thursday, May 12, 2022, at 5:00 P.M**. Following the close of the public comment period, the County will consider adopting the Mitigated Negative Declaration prior to consideration of the Vesting Tentative Map. Any comments should be in writing and submitted by email to joseph.lawlor@dcd.cccounty.us or by post to the following address:

Name: Joseph W. Lawlor Jr, AICP; Project Planner; (925) 655-2872
Community Development Division
Contra Costa County, Department of Conservation and Development
30 Muir Road, Martinez, CA 94553

Joseph W. Lawlor Jr, AICP
Project Planner

cc: County Clerk's Office (2 copies)
Adjacent Occupants and Owners Notification List
Attached: Vicinity Map


Ridgeview Open Space
Paso Nogal Park
Diablo Va
College
Stubbs
Viking Dr
Norse Dr
Taylor Blvd
Blue Ridge Dr
Virginia Hills Dr
Donegal Way
Devon Ave
Apollo Way
Lucille Ln
SITE
Taylor Blvd
Grayson Rd
Oakmont Memorial Park
Gregory
Kahrs Ave
Queen of Heaven Cemetery
Boyd Rd
Taylor Blvd
Pleasant Hill Rd
Soule Av
Patterson Blvd
Oak Park Blv
Toyon Rd
Taylor Blvd
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ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	Grayson Road 10-Lot Subdivision (County File #CDSD20-09531)
2.	**Lead Agency Name and Address:**	Contra Costa County Department of Conservation and Development 30 Muir Road Martinez, CA 94553
3.	**Contact Person and Phone Number:**	Joseph W. Lawlor Jr, AICP (925) 655-2872 joseph.lawlor@dcd.cccounty.us
4.	**Project Location:**	1024 and 1026 Grayson Road Pleasant Hill, CA 94523 Assessor's Parcel Numbers: 166-030-001 and 166-030-002
5.	**Project Sponsor's Name and Address:**	Calibr Ventures c/o Andy Byde 1908 Cambridge Place Walnut Creek, CA 94598
6.	**General Plan Designation:**	The project site is located within the Single-Family Residential – Low Density (SL) General Plan Land Use designation.
7.	**Zoning:**	The project site is located within the R-15 Single-Family Residential (R-15) District.

8. **Description of Project:** The applicant is requesting approval of a vesting tentative map for a subdivision which proposes to subdivide the 3.05 acre project site into 10 lots ranging in size from 7,347 to 22,460 square feet. On each new lot, a 4- to 5-bedroom single-family residence ranging in size from approximately 2,900 to 3,500 square feet, is expected to be constructed. Two existing, vacant, residences would be demolished to accommodate the project.

Associated access, drainage, and utility facilities would be constructed throughout the site. For access, a 28-foot roadway and 4.5-foot sidewalk would connect the lots to Grayson Road. Stormwater flows would be directed to a 2,021 square foot detention basin located at the northeast corner of the property. Treated stormwater will be discharged from the basin into a Contra Costa County maintained stormwater drainage system that currently exists under Grayson Road.

Running southwest to northwest along the southern boundary of the project site is Grayson Creek, a perennial creek. The proposed project does not anticipate placing any development or infrastructure in Grayson Creek or the associated riparian corridor. A riparian setback between the project's grading limits and Grayson Creek would be included as part of the project. To accommodate improvements, a tree permit would be included for the removal of 83 code-protected trees.[1]

An exception to Title 9 of the County Code would be required to allow for the alternative roadway improvements along Grayson Road (where curb, 5-foot-wide sidewalk, necessary longitudinal and transverse drainage are required).

The home on Lot 1 would be restricted for-sale to a moderate-income household, therefore the project is eligible for a Density Bonus, waivers or reductions in development standards, incentives and concessions, and parking reductions under the California Density Bonus Law, Gov. Code Section 65915. By providing one lot of the nine base units for sale to a moderate income household, the Project qualifies for a 7% density bonus, resulting in one additional unit. In addition to the increased density of one unit (10 units total), the project is seeking waivers of development standards pertaining to: (a) a reduction in minimum lot size for Lots 1 and 4-10; (b) a reduction in the minimum lot width for Lots 1-10 of an average of 73 feet (instead of 100 feet); (c) a reduction in minimum lot depth for Lot 1; and (d) a waiver of the setback requirement for retaining walls. The project is seeking these reductions and waivers as application of the required standard would physically preclude the development of the project at the proposed density with the proposed one moderate income unit. Finally, the project is seeking a concession to allow the installation of the complete frontage improvements be omitted in lieu of a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road along the project frontage as well as bicycle lane striping.

9. **Surrounding Land Uses and Setting:** The 3.05-gross-acre project site is located on the south side of Grayson Road, opposite the intersection of Grayson Road and Buttner Road in unincorporated Pleasant Hill. The roughly L-shaped project site is comprised of two parcels: a northern parcel that fronts on Grayson Road, and a southern parcel that is bound by Grayson Creek to the south and east. Grayson Creek runs roughly east-west along the southern boundary of the project site, then takes a northward bend forming the east boundary. Other private properties with single-family residences abut the property to the north and west.

The immediate surrounding area is representative of single-family residential development in central Contra Costa County. Properties along Grayson Road are predominantly developed with single-family residences. Within a half-mile radius, developed parcels range in size from 4,000 square feet to 68,700 square feet, with a median size of approximately 13,000 square feet. The larger vicinity includes a mix of neighborhood-residential uses including single-family residences, churches, schools, and parks.

[1] Tree #134 was authorized to be removed under an emergency tree removal by Contra Costa County on 10/28/21

10. Other Public Agencies Whose Approval is Required (e.g., permits, financing approval, or participation agreement.)

Contra Costa County Public Works Department, City of Pleasant Hill, Contra Costa County Fire District, Contra Costa County Local Area Formation District (LAFCO), East Bay Municipal Utility District, and Central Contra Costa Sanitary District.

11. 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.?

Notice of the proposed project was sent to Native American tribes, as applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1. A Tribal Consultation List from the Native American Heritage Commission, dated October 28, 2015, was used to identify tribes traditionally and culturally affiliated with the project area. No requests for consultation were received

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/Services Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Environmental 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 (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) 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.

Joseph W Lawlor Jr — 04/22/2022

Joseph W. Lawlor Jr, AICP, Project Planner — Date
Contra Costa County
Department of Conservation & Development

ENVIRONMENTAL CHECKLIST

EVALUATION OF ENVIRONMENTAL IMPACTS

1. ***AESTHETICS –*** *Except as provided in Public Resources Code Section 21099,* **would *the project*:**				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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?	☐	☒	☐	☐

SUMMARY: Less Than Significant

a) *Would the project have a substantial adverse effect on a scenic vista?* ***(No Impact)***

Figure 9-1 of the Open Space Element of the County General Plan identifies major scenic ridges and scenic waterways in the County. According to this map, there are no designated scenic vista points in the area of the project site and therefore the project would not displace or obstruct views from a scenic vista. Furthermore, existing views of, and from the project site, would not be affected by the project because the proposed residential development would be built primarily at lower-lying elevations consistent with the existing surrounding residential neighborhood.

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?* ***(No Impact)***

The Scenic Routes Map (Figure 5-4) of the County General Plan's Transportation and Circulation Element identifies scenic routes in the County, including both State Scenic Highways and County designated Scenic Routes. No scenic routes are located in the project vicinity. The site is surrounded by predominantly single-family residential development. The project is not located near any designated scenic highway and would not damage any scenic resources related to a scenic highway. The project would not

impact trees, rock outcroppings or historic buildings considered to be significant scenic resources. Thus, no impact is expected on these resources.

c) *In non-urbanized areas, would the project 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* ***(Less than Significant Impact)***

The project is located in an urbanized area as designated by the U.S. Census Bureau Urban Area Reference Maps. The visual character of the site would change with the eventual development of the proposed 10 lots. However, the applicant would be required to submit a landscape plan prior to the issuance of the first building permit. Additionally, the proposed development is consistent with the General Plan designation of Single-Family Residential – Low Density and the surrounding residential neighborhood. Though the project would include waivers from development standards for the R-15 zoning district, the residential project would be consistent with other residential development in the area, and thus the impact to the visual character of the area is expected to be less than significant.

d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* ***(Less Than Significant Impact with Mitigation)***

Minimal glare would be introduced in the area. The change in ambient nighttime light levels on the project site, and the extent to which project lighting would spill off the project site and affect adjacent light-sensitive areas, would determine whether the project could adversely affect nighttime views in the area. The new sources of light associated with the proposed new 10 homes would illuminate the surrounding properties and Grayson Creek; thus, the project lighting could create a potentially significant adverse environmental impact due to substantial new light. Consequently, the applicant is required to implement the following mitigation measures to reduce impacts on nighttime views.

Aesthetics 1: *Thirty days prior to application for a building permit for subdivision improvements, the applicant shall submit a Lighting Plan for review and approval by the CDD. At a minimum, the plan shall include the following measures:*

1. *All outdoor lighting, including façade, yard, security, and street lights, shall be oriented down, onto the project site or road.*

2. *Back shields or functionally similar design elements shall be installed on every lighting pole to reduce lighting from spilling off site, and to ensure that lighting remains within the project site.*

Implementation of this mitigation measure would reduce the impact on nighttime views to a less than significant level.

Sources of Information

- Contra Costa County General Plan, 2005-2020. *Open Space Element*.
- Contra Costa County General Plan, 2005-2020. *Transportation and Circulation Element.*
- U.S. Department Of Commerce, Economics & Statistics Administration, U.S. Census Bureau. 2012. *2010 Census - Urbanized Area Reference Map: Concord, CA.*
- DeBolt Civil Engineering, March 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)

2. *AGRICULTURAL AND FOREST RESOURCES – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?	☐	☐	☐	☒

a) Would the project 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 non-agricultural use? ***(No Impact)***

As shown on the California Department of Conservation's Contra Costa County Important Farmland 2016 map, the project site includes land classified as "Urban And Built-Up Land." "Urban And Built-Up Land" is occupied by structures with a building density of at least one unit to one and one half acres, or approximately 6 structures to a

10-acre parcel, and is not considered farmland. Thus, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance to a non-agricultural use; therefore, no impact is expected.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?* ***(No Impact)***

The project site is within the R-15 Single-Family Residential district and has a Single-Family Low-Density General Plan Land Use designation. No agricultural uses are in the immediate vicinity of the project. Furthermore, the project site is not zoned for agricultural use, the project site is not included in a Williamson Act contract, and there is no reason to believe the project would conflict with any existing agricultural uses. Therefore, no impact is expected from a conflict with existing agricultural uses.

c) *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g) or 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)?* ***(No Impact)***

The project site is not considered forest land as defined by California Public Resources Code Section 12220(g), timberland as defined by California Public Resources Code Section 4526, or zoned Timberland Production as defined by Government Code section 51104(g). Furthermore, the project site is within the R-15 district and the proposed use is an allowed use within the zoning district. Thus, the project would not conflict with existing zoning for, or cause rezoning of forest land or timberland.

California Public Resources Code Section 12220, under the Forest Legacy Program Act, defines "forest land" as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Public Resources Code 4526, under the Forest Practice Act, defines "timberland" as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species are determined by the board on a district basis after consultation with the district committees and others.

California Government Code 51104, under the Timberland Productivity Act, defines "timberland" as privately owned land, or land acquired for state forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre. "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 of the Government Code and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in Public Resources Code 4526 or 12220. With respect to the general plans of cities and counties, "timberland preserve zone" means "timberland production zone." As stated in the Contra Costa County General Plan, no land is used for timber harvesting in the County.

d) *Would the project involve or result in the loss of forest land or conversion of forest land to non-forest use?* ***(No Impact)***

The project site is not considered forest land, as discussed in "c" above.

e) *Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?* ***(No Impact)***

The proposed project would add 10 single-family residences to a residentially zoned property in a residential area. This improvement would not remove any land from potential agricultural production. Thus, the project would have no impact on the conversion of farmland.

Sources of Information

- Contra Costa County Code, Title 8, Zoning Ordinance.
- Contra Costa County General Plan 2005-2020. *Land Use Element*.
- California Department of Conservation. Accessed July 19, 2021. *Contra Costa County Important Farmland 2016.*
- Contra Costa County Department of Conservation and Development. Accessed July 19, 2021. *2016 Agricultural Preserves Map*. http://www.co.contra-costa.ca.us/DocumentCenter/View/882/Map-of-Properties-Under-Contract?bidId=

3. *AIR QUALITY – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒	☐	☐

SUMMARY:

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?* ***(Less Than Significant Impact)***

Contra Costa County is within the San Francisco Bay air basin, which is regulated by the Bay Area Air Quality Management District (BAAQMD) pursuant to the Bay Area 2017 Clean Air Plan. The purpose of the Clean Air Plan is to bring the air basin into compliance with the requirements of Federal and State air quality standards. BAAQMD has prepared CEQA Guidelines to assist lead agencies in air quality analysis, as well as to promote sustainable development in the region. The CEQA Guidelines support lead agencies in analyzing air quality impacts. If, after proper analysis, the project's air quality impacts are found to be below the significance thresholds, then the air quality impacts may be considered less than significant. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions.

The proposed project could result in the future construction of ten single-family residences and associated development on the project site. This would be well below the BAAQMD screening criteria threshold of 56 dwelling units. Therefore, a detailed air quality analysis is not necessary, and the project would not be in conflict with the Clean Air Plan or obstruct its implementation.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ***(Less Than Significant Impact)***

The region is in nonattainment for the federal and state ozone standards, the state PM10 standards, and the federal and state PM2.5 standards. As discussed above, the proposed project would not result in significant emissions of criteria air pollutants during the construction period or during project operation. Although the proposed project would contribute small increments to the level of criteria air pollutants in the atmosphere, the project would have a less than significant adverse environmental impact on the level of any criteria pollutant, because it is below the screening threshold.

c) *Would the project expose sensitive receptors to substantial pollutant concentrations?* ***(Less Than Significant With Mitigation)***

Subdivision of the 3.05-acre Project Site, and future occupancy of the 10 single-family residences would not cause any localized emissions that could expose sensitive receptors (e.g., nearby residences, schools) to unhealthy long-term air pollutant levels. Construction activities, however, could result in localized emissions of dust and diesel exhaust that could result in temporary impacts to nearby single-family residences.

Construction and grading activities would produce combustion emissions from various sources, including heavy equipment engines, paving, and motor vehicles used by the construction workers. Dust would be generated during site clearing, grading, and construction activities, with the most dust occurring during grading activities. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed, amount of activity, soil conditions, and meteorological conditions. Although grading and construction activities would be temporary, such activities could have a potentially significant adverse environmental impact during project construction. Consequently, the applicant would be required to implement the following recommended BAAQMD mitigation measures to reduce construction dust and exhaust impacts.

> ***Air Quality 1:*** *The following Bay Area Air Quality Management District, Basic Construction Mitigation Measures shall be implemented during project construction and shall be included on all construction plans.*
>
> 1. *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.*
>
> 2. *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
>
> 3. *All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
>
> 4. *All vehicle speeds on unpaved roads shall be limited to 15 mph.*

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

6. *Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.*

7. *All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.*

8. *Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.*

Implementation of these mitigation measures would reduce the impact on the sensitive receptors during project construction to a less than significant level.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ***(Less Than Significant Impact with Mitigations)***

The proposed project would not produce any major sources of odor and is not located in an area with existing issues (e.g. landfills, treatment plants). Therefore, the operation of the project would have a less than significant impact in terms of odors.

During construction and grading, diesel powered vehicles and equipment used on the site could create localized odors. These odors would be temporary; however, there could be a potentially significant adverse environmental impact during project construction due to the creation of objectionable odors. Consequently, the applicant is required to implement Mitigation Measure ***Air Quality 1*** above.

Implementation of this mitigation would reduce the impact from the creation of objectionable odors to a less than significant level

Sources of Information

- Bay Area Air Quality Management District. 2017. *Bay Area 2017 Clean Air Plan.*
- Bay Area Air Quality Management District. 2017. *Air Quality Guidelines.*

4. *BIOLOGICAL RESOURCES – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of 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?	☐	☐	☐	☒

SUMMARY: Potentially significant unless mitigation incorporated.

a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?* ***(Less Than Significant Impact with Mitigation)***

A Biological Resources Analysis Report (BRA) was prepared for the project by Olberding Environmental, Inc. (OBI) in May 2021, and subsequently updated in February 2022. To inform the report, OBI conducted a field reconnaissance survey of the project site on April 6, 2021 for the purpose of identifying special status plant and wildlife species, sensitive habitats, and biological constraints.

OBI utilized the California Natural Diversity Database (CNBBD), maintained by the California Department of Fish and Wildlife (CDFW), to identify the likelihood that a plant or animal species would be present on the project site. According to the report, four special-status plant species have a potential to occur on the project site: Congdon's tarplant (*Centromadia parryi ssp. congdonii*), Diablo helianthella (*Helianthella castanea*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), and bent-flowered fiddleneck (*Amsinckia lunaris*). The April 2021 survey of the project site coincided with the blooming period for three of these species (*Diablo helianthella, Mount Diablo fairy lantern, bent-flowered fiddleneck*) and these species were not observed. Therefore, they are presumed absent from the project site. Although the April 2021 survey was performed outside of the identified blooming period for Congdon's tarplant (June-November), remnant plants would have been observed if they were present. For these reasons Congdon's tarplant is also presumed absent from the project site.

A total of five bird species were identified to have a moderate to high potential to occur on the project site in a nesting or foraging capacity. The red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), and Cooper's hawk (*Accipiter cooperii*) all have a high potential to occur in a nesting and foraging capacity. The sharp-shinned hawk (*Accipiter striatus*) and American kestrel (*Falco sparverius*) have a moderate potential to occur in a nesting and foraging capacity. Three of the birds listed above (red-tailed hawk, red-shouldered hawk, Cooper's hawk, sharp-skinned hawk, and destrel) were present, and observed foraging on the project site. Additionally, a Cooper's hawk was observed on the project site exhibiting nesting behaviors. Based on this information, the Project Biologist has recommended the following Mitigation Measure

> ***Biology 1:*** *If project construction-related activities would take place during the nesting season (February 15 through August 31), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the project site and the large trees within the adjacent riparian area should be conducted by a qualified biologist no earlier than one week prior to the commencement of the tree removal or site grading activities. If any active nests are observed during surveys, a suitable avoidance buffer from the nests should be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors). These nests would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. The qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report should be submitted to the County's Department of Conservation and Development for review and approval prior to the time that buffers are removed.*

CNDDB listed 5 occurrences of California red-legged frog (*Rana draytonii*) (CRLF) in the 5-mile radius of the project site. Additionally, during the April 2021 survey, the Project Biologist identified suitable habitat for the CRLF. Furthermore, USFWS designated CRLF critical habitat is located approximately 1.6 miles west of the project

site. For these reasons, the Project Biologist stated that CRLF has a moderate potential to occur on the project site, and potential impacts to the species could occur.

> ***Biology 2:*** *Prior to construction activities, pre-construction surveys for CRLF shall be completed by a qualified biologist. The qualified biologist shall survey the project site for CRLF preceding the commencement of construction activities to verify absence/presence of the species. All ruts, holes, and burrows shall be inspected for CRLF prior to and during excavation or removal. The biological monitor shall precede initial grading equipment to look for and avoid amphibians that may be present on the project site. In the event a CRLF is encountered onsite, construction activities in the area shall cease until the animal has left the location on its own will and is no longer in danger. The Project Manager or Project Biologist will report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours. No one other than a USFWS-approved biologist is permitted to handle or capture CRLF, and CRLF will not be taken or harassed.*
>
> *Exclusion fencing shall be installed along the entire length of Grayson Creek to prevent CRLF and Western Pond Turtle from migrating into work areas. No BMPs or other construction materials containing monofilament netting, or other plastic netting that could entangle reptiles or amphibians shall be used.*

CNDDB listed four occurrences of California tiger salamander (*Ambystoma californiense*) (CTS) within five miles of the project site. However, all of these occurrences are historical and the species is considered to be extirpated within this area. The project site lacks vernal pools or ponds required for breeding. For these reasons there is a low potential for CTS to occur on the project site and is not likely to occur.

CNDDB listed 13 occurrences of Alameda whipsnake (*Masticophis lateralis euryxanthus*) within the 5-mile radius of the project site. Due to the sensitivity of these species, the exact locations of these occurrences are unknown. The mixed woodland habitat present on the project site lacks the shrub or rocky outcrop habitat that the whipsnake generally prefers. More suitable habitat is located within USFWS designated critical habitat for Alameda Whipsnake approximately 0.9 west in Briones Regional Park. Additionally, the project site is surrounded by residential development making it unlikely that the Alameda whipsnake would utilize the project site for dispersal. For these reasons Alameda whipsnake has a low potential to occur on the project site and is not likely to occur.

CNDDB listed 5 occurrences of western pond turtle (*Actinemys marmorata*) within the 5-mile radius of the project site. Water was present in Grayson Creek during the April 2021 survey. Therefore, western pond turtle could use the creek for foraging and aquatic dispersal. For these reasons, western pond turtle has a moderate potential to occur in a dispersal capacity only.

> ***Biology 3:*** *A pre-construction survey for Western Pond Turtle shall be performed by a qualified biologist no more than 48 hours prior to ground disturbance or vegetation removal. Surveys shall determine the presence/absence of this species.*

No sign of bat use was observed on the project site during the April 2021 survey; however, based on habitat suitability, it was determined that bats have a moderate potential to utilize the site in a roosting and foraging capacity. These bat species include: Western red bat (*Lasiurus blossevillii*), hoary bat (Lasiurus cinereus) and Yuma myotis (*Myotis yumanensis*). Since project construction-related activities such as tree or structure removal would take place, impacts to these species is possible. However, with implementation of the following mitigation measure, impacts to bats area expected to be less than significant.

Biology 4: *To avoid impacts of special–status bats, the following mitigation measures shall be implemented prior to the removal of any existing trees or structures on the project site:*

a) A bat habitat assessment shall be conducted by a qualified bat biologist no earlier than 15 days prior to commencement of construction activities, if construction occurs during seasonal periods of bat activity (February 15 to October 30), to determine suitability of each existing structure or tree to be removed as bat roost habitat.

b) Structures found to have no suitable openings can be considered clear for project activities as long as they are maintained so that new openings do not occur. Structures found to provide suitable roosting habitat, but without evidence of use by bats, may be sealed until project activities occur, as recommended by the bat biologist. Structures with openings and exhibiting evidence of use by bats shall be scheduled for humane bat exclusion and eviction, conducted during appropriate seasons, and under supervision of a qualified bat biologist.

c) Bat exclusion and eviction shall only occur between February 15 and April 15, and from August 15 through October 30, in order to avoid take of non–volant (non–flying or inactive, either young, or seasonally torpid) individuals. If a maternity site is found, impacts to the tree or structure will be avoided until the young have reached independence.

Biology 5**:** *Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the project site could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. A Storm Water Pollution Prevention Plan (SWPPP) and a SWMP shall be designed to ensure that best management practices (BMPs) are implemented so there are no impacts to water quality in Grayson Creek resulting from project construction or postconstruction storm water run-off.*

With implementation of the mitigation measures **Biology 1 through Biology 4** above, and **Biology 5** the Project is not expected to have a substantial adverse effect, either

directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW and USFWS.

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

As detailed in the Biological Resources Report prepared for the project, riparian habitat occurs along the Grayson Creek corridor along the southern boundary of the project site. Specifically, a riparian woodland corridor of approximately 1.5 acres occurs along Grayson Creek, a perennial creek, located in the southern portion of the project site . Riparian woodland is considered to be one of the most valuable wildlife habitats of temperate climates. The mixture of oaks, bays, and buckeyes along with the dense cover of shrubby understory vegetation provide wildlife with many different food sources, nesting opportunities and cover from predators. Within the riparian woodland area, no trees are proposed to be removed. To ensure the protection of the riparian woodland area and reduce the impacts of the project , Mitigation measure ***Biology 6*** would be implemented, as described below.

> ***Biology 6.*** *A permanent riparian setback shall be designated as shown on the Vesting Tentative Map as the Limit of Riparian Area (and further shown as Figure 11 of* Biological Resources Report) *as shown on the project site plan (Sheet 1). A permanent wildlife -friendly fence shall be constructed along the setback line to limit encroachment into the area. The riparian setback shall be protected via a permanent deed restriction that is recorded against the title of the property and that shall run with the title of land in perpetuity (subject to any pre-existing publicly owned easements). The deed restriction shall be recorded on the Final Map and shall include written documentation specifying allowed and prohibited uses within the setback. Any activities allowed within the setback shall inure to the benefit of the preserved creek and riparian corridor. No development of any kind, including roads or grading, shall be allowed in the deed restricted area. Implementation of these mitigation measures would reduce impacts to trees to a level considered*
> less than significant.

With implementation of the mitigation measures ***Biology 6***, the Project is not expected to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

c) *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?* ***(Less Than Significant Impact with Mitigation)***

Grayson Creek is a perennial creek that flows along the southern boundary of the project site from west to east through an oak woodland riparian corridor and is a jurisdictional water potentially regulated under the authority of the Army Corps of Engineers, RWQCB, and CDFW. The project is not proposing any structures or grading within Grayson Creek or its riparian corridor and will implement all County ordinances that require a setback from Grayson Creek to prevent the fill of waters or impacts to Grayson Creek or to its bed or bank. All structures will also be outside of the canopy dripline of trees at or below top of bank, and all grading shall occur outside of the limits of the riparian area. (See Vesting Tentative Tract Map, Sheet VTM-1; see also Olberding Biological Resources Analysis Report, dated February 2022, Figure 11). As such, no waters of the U.S. or State regulated resources would be impacted by the proposed project and authorization from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or the California Department of Fish and Wildlife or is not required. The proposed project will maintain both a creek-structure setback and a permanent riparian setback (as discussed in Biology 6) between the proposed project footprint and Grayson Creek and will ensure that future property owners do not encroach into the creek-structure setback area by relinquishing development rights within the creek setback area as provided on the Vesting Tentative Map, and which shall be identified on the Final Map. The creek-structure setback will be protected via dedication of development rights on the Final Map and thus will be of record on the title of each lot in perpetuity. No development of any kind would be allowed in deed restricted area. The project does propose to remove 83 trees, however none of those tree are within the riparian corridor.

No wetlands, marshes or vernal pools exist within the development are of site; therefore no substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act would occur by the establishment of the proposed project.

> ***Biology 7:*** *Grayson Creek shall be permanently protected from site development by the establishment of the Creek Structure setback (as shown* on the Vesting Tentative Map*). The Creek Structure setback shall be protected via a permanent deed restriction and dedication of development rights to the County and shall be recorded against the title of the property and shall run with the title of land in perpetuity.*

With implementation of the mitigation measure ***Biology 6*** **and** ***Biology 7,*** the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?* ***(Less Than Significant Impact with Mitigation)***

As detailed in the Olberding Biological Resources Analysis Report, dated February 2022, , a riparian woodland corridor of approximately 1.50 acres and dominated by coast live oak occurs along Grayson Creek in the southern portion of the project site. However, no tree removal would occur with the riparian woodland corridor. The

proposed development would not significantly impact wildlife movement in the region due to the relatively small size of the project site and the implementation of minimization measures. Specifically, the project site is comparatively small and is currently occupied and surrounded by existing single family residences and associated improvements; thus, the project site does not represent a significant wildlife corridor. With implementation of the mitigation measures ***Biology 1*** through ***Biology 7***, provided above, the Project would not 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) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* ***(Less Than Significant Impact with Mitigation)***

The proposed project plans on the removal of approximately 83 trees including native species such as coast live oak, valley oak, black walnut, and buckeye. Native trees and all trees greater than 6.5 inches in diameter at breast height (dbh) are considered to be protected under the Contra Costa County Tree Protection and Preservation Ordinance (Chapter 816-6, Ordinances 94-59, 94-22, Contra Costa County Code).

With implementation of mitigation measures ***Biology 1 through Biology 7***, plus ***Biology 8*** and ***Biology 9*** provided below, the Project is not expected to conflict with local policies and ordinances protecting biological resources, including the Contra Costa County tree protection and setback ordinances:

> ***Biology 8:*** *To offset impacts resulting from the removal of trees, the project site shall be restored by planting replacement trees in all open areas within the project site. Mitigation numbers would be based on a 3: 1 replacement ratio for the native trees removed and a 1: 1 ratio for nonnative trees that are removed. Replacement trees would be native species of the same species composition as exists in the natural areas of the project site, and would be no larger than five gallon size.*
>
> *At least 30 days prior to recording the Final Map, the applicant shall submit a tree preservation and management plan, to be reviewed and approved by the Zoning Administrator. The planting plan shall include a planting detail that specifies where all replacement trees would be planted on the project site. Adequate measures shall be established to minimize predation of planted trees by rodents including, but not limited to, pocket gophers and/or California ground squirrels. The landscape plan planting plan shall be installed prior to the acceptance of the subdivision.*
>
> ***Biology 9:*** *During project implementation, the applicant shall implement the following Tree Preservation Guidelines, as detailed in the Revised Arborist Report Dated May 6, 2020 prepared by Traverso Tree Service, specially:*
>
> *Pre- Grading Phase*
>
> *a. Mulch from tree removals may be spread out under the driplines of trees that will be retained, keeping at least 12" away from the trunks.*

b. *Prior to construction or grading, contractor shall install protection fencing to construct a temporary Tree Protection Zone (TPZ) around each tree or grove of trees to be saved.*
c. *TPZ fencing shall encompass the driplines and be approved by the project arborist.*
d. *TPZ fencing shall remain in an upright sturdy manner from the start of grading until the completion of construction. Fencing shall not be adjusted or removed without consulting the project arborist.*

Grading and Construction Phase

a. *The project arborist shall be on-site during excavation/grading within driplines, especially trees: #'s 102, 137, 138, 154, 157, 159, 160, 160b, 162, 163, 173, 173c, 182, 183, 185, 186, 189.*
b. *Should roots > 2" be encountered, arborist shall cleanly prune roots with a handsaw or sawzall, and immediately re-cover. Irrigate as necessary.*
c. *If needed, canopy pruning shall be performed by personnel certified by the International Society of Arboriculture (ISA). All pruning shall adhere to ISA and American National Standards Institute (ANSI) Standards and Best Management Practices.*
d. *Project arborist to set guidelines prior to pruning.*
e. *Should Tree Protection Zone (TPZ) encroachment be necessary, the contractor shall contact the project arborist for consultation and recommendations.*
f. *Contractor shall keep TPZs free of all construction-related materials, debris, fill soil, equipment, etc. The only acceptable material is mulch spread out beneath the trees.*
g. *Should any damage to the trees occur, the contractor shall promptly notify the project Arborist to appropriately mitigate the damage.*

Landscaping Phase

a. *The Tree Protection Zone (TPZ) fencing shall remain in place with the same restrictions until landscape contractor notifies and meets with the project arborist.*
b. *Avoid all fill work, grade changes, and trenching within driplines unless it is performed by hand, and approved by the project arborist.*
c. *Pipes shall be threaded under or through large roots without damaging them.*
d. *Contractor shall avoid trenching and grade changes within driplines.*
e. *All planting and irrigation shall be kept a minimum of 10' away from native oaks. All irrigation within the driplines shall be targeted at specific plants, such as drip emitters or bubblers. No overhead irrigation shall occur within the driplines of native oaks.*
f. *All planting within oak driplines shall be compatible with oaks, consisting of plant material that requires little to no water after two years' establishment. A list of oak compatible plants can be found in a publication from the California Oak Foundation, available at: http://californiaoaks.org/wpcontent-/uploads/2016/04/CompatiblePlantsUnderAroundOaks.pdf*

When implemented, the prescribed mitigations would reduce potentially significant adverse impacts to protected trees to a level considered less than significant pursuant to CEQA.

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* ***(No Impact)***

There is one adopted habitat conservation plan in Contra Costa County: the East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan (HCP/NCCP). The plan was approved in May 2007 by the East Contra Costa County Habitat Conservancy, comprised of the cities of Brentwood, Clayton, Oakley, and Pittsburg, and Contra Costa County. The HCP/NCCP establishes a coordinated process for permitting and mitigating the incidental take of endangered species in East Contra Costa County. The plan lists Covered activities that fall into three distinct categories: (1) all activities and projects associated with urban growth within the urban development area (UDA); (2) activities and projects that occur inside the HCP/NCCP preserves; and (3) specific projects and activities outside the UDA. As the project does not fall into any of these categories, the project is not covered by, or in conflict with the adopted HCP.

Sources of Information

- California Department of Fish and Wildlife. https://map.dfg.ca.gov/lands/.
- Department of Conservation and Development, Site Visit Conducted by County Staff.
- Olberding Environmental, Inc., May 2021. *Biological Resources Analysis*
- DeBolt Civil Engineering, March 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)
- Traverso Tree Service, May 6, 2020. *Revised Arborist Report for the Development of 1024-1026 Grayson Road*.

5. *CULTURAL RESOURCES – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SUMMARY: Potentially significant unless mitigation incorporated.

a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?* ***(Less Than Significant Impact)***

Historical resources are defined in the California Environmental Quality Act Guidelines Section 15064.5 as resources that fit any of the following definitions:

- Is listed in the California Register of Historic Places and has been determined to be eligible for listing by the State Historic Resources Commission;

- Is included in a local register of historic resources, and identified as significant in a historical resource survey that has been or will be included in the State Historic Resources Inventory; or

- Has been determined to be historically or culturally significant by a lead agency.

The archaeological sensitivity map of the County's General Plan (Figure 9-2), identifies the project area as "Largely Urbanized Area," which may contain significant archeological resources. While unlikely since the site is fully disturbed, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic and prehistoric resources. Historic resources can include wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. If during project construction, subsurface construction activities damaged previously undiscovered historic and prehistoric resources, there could be a potentially significant impact.

An Archaeological Survey Report and Historic Resources Evaluation Report, dated February 8, 2007, was prepared for the Project by Suzanne Baker of Archaeological/Historical Consultants. The following are excerpts from the Archaeological Survey and Historic Resources Evaluation Report.

On February 5, 2007, Suzanne Baker of Archaeological/Historical Consultants conducted an on-foot archaeological reconnaissance of the project site. The ground was covered in systematic transects two to four meters apart. The ground surface was inspected for evidence of cultural occupation, including midden soil, shell, bone, modified lithic materials, fire- cracked rock, and historic debris and features. Soil was friable, medium brown clay silt containing only a little rock, principally angular pebbles. The two houses occupy much of the project site's high ground. These and accompanying landscaping, driveways and outbuildings, such as sheds; were the principal impediments to surface observation. Vegetation also obscured the banks of the creek. This included trees, shrubs, and especially, dense groundcover like ivy, vincula, and berry vines. In the rest of the project site, ground visibility was somewhat obscured by a light spring grass cover. Grass was, however, kicked aside at intervals and there were numerous ground squirrel burrows that provided open surfaces for soil observation. Ground visibility in general ranged from fair to good in the open areas of much of the project site. Aside from introduced plants adjacent to the houses and some oleander shrubs and a line of small oak trees parallel and adjacent to Grayson Road, most vegetation occurred along the creek. This was a mix of native riparian species, including live oak, buckeye,

blackberry, and introduced species, such as eucalyptus and pine trees, ivy and vincula. A few live oaks stand in the field at the west end of the project area. There are also several redwood trees near the creek, but it is unclear if these are native or were planted by the residents. There are redwoods in some of the drainages in the interior valleys of Contra Costa County.

Findings

No prehistoric or historic (over 50 years of age) archaeological sites or materials were found during the course of reconnaissance. Two residential structures over 50 years of age exist on the project site. The residence at 1024 Grayson Road was built about 1948 and that at 1026 Grayson Road in 1955. These were recorded on DPR 523 forms, photographed, and evaluated (refer to Appendix 1 in the report).

Significance Criteria

The significance criteria for the California Register of Historic Places and the National Register of Historic Places are essentially the same. Section 101 of the Historic Preservation Act of 1966 authorizes the Secretary of the Interior to "expand and maintain a national register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture..." Part 60.4 of Chapter 1 of Title 36 of the Code of Federal Regulations outlines the criteria for evaluation of properties for nomination to the National Register of Historic Places (NRHP). The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, including:

a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
b) That are associated with the lives of persons significant in our past; or
c) That embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
d) That have yielded, or maybe likely to yield information important in prehistory or history (36 CFR 60. 4).

Integrity involves the authenticity of a given property and its ability to convey its significance. The seven aspects of integrity location, setting, design, workmanship, materials, feeling and association are used to measure and property' s integrity.

Neither structures at 1024 and 1026 Grayson Road is considered eligible for the California or National Registers of Historic Places. Although both have relatively good historic integrity, they are not associated with events or persons significant in local history (Criteria A and B) and are not architecturally significant (Criterion C).

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act Guidelines Section 15064.5? ***(Less Than Significant Impact with Mitigation)***

As stated previously, the project site does not appear to host any historic archaeological resources. However, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic and prehistoric resources. In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds. If during project construction, subsurface construction activities damaged previously undiscovered historic and prehistoric resources, there could be a potentially significant impact. Mitigation Measure **MM CUL-1** would reduce the potentially significant impact to a less than significant level.

With the implementation of MM CUL-1 impacts will be less than significant.

MM CUL-1. Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archeological Materials

An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology should inspect the site once grubbing and clearing are complete, and prior to any grading or trenching into previously undisturbed soils. This will be followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the Contra Costa County Department of Conservation and Development for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an Archaeologist has evaluated the situation. The applicant for the proposed project shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the Contra Costa County Department of Conservation and Development, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.

c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?* ***(Less Than Significant with Mitigation)***

The discovery of human remains is always a possibility during ground-disturbing activities. With adherence to existing regulations and with the incorporation of **MM CUL-2** impacts will be less than significant.

MM CUL-2. Stop Construction Upon Encountering Human Remains.
In the event of accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 shall be followed. If during the course of construction activities there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98.

2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
- The descendant identified fails to make a recommendation.
- The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

With the implementation of MM CUL-2 impacts will be less than significant.

Sources of Information

- Contra Costa County General Plan 2005-2020. *Open Space Element*.
- Archaeological/Historical Consultants, February 2007. *Archaeological Survey and Historic Resources Evaluation Report.*
- DeBolt Civil Engineering, 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)

6. *ENERGY – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in 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?	☐	☐	☒	☐

SUMMARY:

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? ***(Less Than Significant Impact)***

Environmental effects related to energy include the project's energy requirements and its energy use efficiencies by amount and fuel type during construction and operation; the effects of the project on local and regional energy supplies; the effects of the project on peak and base period demands for electricity and other forms of energy; the degree to which the project complies with existing energy standards; the effects of the project on energy resources; and the project's projected transportation energy use requirements and its overall use of efficient transportation alternatives, if applicable. The following factors demonstrate a project's significance in relation to these effects: (1) Why certain measures were incorporated in the project and why other measures were dismissed; (2) The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid-waste; (3) The potential for reducing peak energy demand; (4) Alternate fuels (particularly renewable ones) or energy systems; and (5) Energy conservation which could result from recycling efforts.

New energy consumption includes energy required for operation of the expected new residence and transportation system (private and commercial vehicles), as well as energy used for construction and maintenance of the proposed project. Issues related to energy use include the levels of consumption of non-renewable and renewable energy sources for the construction and operation of the proposed project.

The proposed project's energy demand would be typical for a development of this scope and nature, and would comply with current state and local codes concerning energy consumption, including Title 24 of the California Code of Regulations, enforced by the Building Inspection division. That the Legislature added the energy analysis requirement in CEQA at the same time that it created an Energy Commission authorized to impose building energy standards indicates that compliance with the building code is a necessary but not exclusive means of satisfying CEQA's independent requirement to

analyze energy impacts broadly. Thus, this report also considers energy consumption related to transportation and efficiency measures not included in the building design.

The project is located in a urban residential neighborhood, within walking distance of a commercial district, and within biking distance of the Pleasant Hill Bart Station. The close proximity to these amenities could reduce the automobile trip generation from the project; thus, reducing energy consumption.

Other measures that are included in the project that demonstrate the projects efficiency include a photovoltaic (PV) system as required by Title 24 (Energy Code). In addition vegetated landscaping, which would reduce the contamination and quantity of stormwater discharge from the site. Furthermore, compliance with the State Model Water Efficient Landscape requirements indicates that water related energy use would not be considered wasteful, inefficient, or unnecessary.

Given the above considerations, the project would have a less than significant impact due to energy consumption.

b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?* ***(Less Than Significant Impact)***

The Contra Costa County Climate Action Plan includes a number of Green House Gas (GHG) emission reduction strategies. The strategies include measures such as implementing standards for green buildings and energy-efficient buildings, reducing parking requirements, and reducing waste disposal. Green building codes and debris recovery programs are among the strategies currently implemented by the County.

The project would not conflict with the policies outlined in the CAP. Furthermore, as the polices in the CAP are recommendations and not requirements, the project would not conflict with the CAP. Thus, the project would not be considered to have a significant impact. Furthermore, as previously stated, the proposed project's energy demand would be typical for a development of this scope and nature, and would comply with current state and local codes concerning energy consumption, including Title 24 of the California Code of Regulations, enforced by the Building Inspection division.

Sources of Information

- Contra Costa County, 2015. *Municipal Climate Action Plan*.

7. *GEOLOGY AND SOILS – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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?	☐	☒	☐	☐

SUMMARY

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? ***(Less Than Significant Impact)***

The California Geological Survey (CGS) has delineated Alquist-Priolo (A-P) zones along the known active faults in California. The nearest fault considered active by CGS is the Concord fault, which is mapped approximately 4.5 miles east of the project site. However, because the site is not within the Concord A-

P zone, the risk of fault rupture is generally regarded as low. As a result, the potential impact from surface fault rupture would be less than significant.

ii) Strong seismic ground shaking? ***(Less Than Significant Impact)***

Figure 10-4 (Estimated Seismic Ground Response) of the County General Plan Safety Element identifies the site in an area rated "Lowest" damage susceptibility. The risk of structural damage from ground shaking is regulated by the building code and the County Grading Ordinance. The building code requires use of seismic parameters which allow structural engineers to design structures based on soil profile types and proximity of faults deemed capable of generating strong violent earthquake shaking. Quality construction, conservative design and compliance with building and grading regulations can be expected to keep risks within generally accepted limits. Thus, the environmental impact from seismic ground shaking would be considered to be less than significant.

iii) Seismic-related ground failure, including liquefaction? ***(Less Than Significant Impact)***

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. The soil considered most susceptible to liquefaction is clean, loose, saturated, uniformly graded fine sands below the groundwater table; however, low-plasticity silt and clay can also experience liquefaction (or cyclic-softening) under certain conditions. When seismic ground shaking occurs, the soil is subjected to cyclic shear stresses that can cause excess hydrostatic pressures to develop and liquefaction of susceptible soil to occur.

According to the US Geological Survey (USGS) seismic hazard map (Figure 6), the site is mostly included in the "very low" liquefaction risk area. However, the south and southeast boundary of the site is mapped as "moderate" liquefaction risk area. In our explorations, we encountered relatively low-blow-count loose material at a depth between approximately 15 to 20 feet below the ground surface at the location of Boring 1-B1 (ENGEO 2019, pg. 25). Therefore, ENGEO performed liquefaction and cyclic softening analysis to evaluate the potential for these seismic hazards and potential effects at the project site.

Boulanger and Idriss (2008) found that for practical purposes, soil can be divided into either "sand-like" or "clay-like" behavior. Where sand-like soil can experience "liquefaction" and clay-like soil can experience "cyclic failure or softening". In general, sand-like soil tends to be gravel, sand, and very low-plasticity silt, whereas clay-like soil comprises clay and plastic silt.

In order to evaluate the clay-like, intermediate, and sand-like behavior of the fined-grained soil at the site, ENGEO plotted PI and liquid limit (LL) of the

tested soil relative to the soil behavior limits. Based on site-specific study of the liquefaction hazard, ENGEO conlcuded that the magnitude of the liquefaction/cyclic softening settlement is limited and can be accommodated by the proposed shallow foundation system, such as post tension slab foundations. Thus, the environmental impact from seismic-related ground failure would be considered to be less than significant.

iv) Landslides? ***(Less Than Significant Impact)***

In 1975 the United States Geological Survey (USGS) issued photo-interpretation maps of landslide and other surficial deposits of Contra Costa County. This mapping is presented on page 10-24 of the Safety Element of the County General Plan. According to this USGS map, there are no suspected landslides in proximity of the proposed project. Within the site area being considered for development no landslides were identified. Four "definite or probable" landslides are mapped within 1,000 feet of the project site but none poses a hazard to the property. Detailed analysis of the site by Purcell, Rhoades & Associates confirms there are no slides on the parcel. In addition ENGEO conducted a subsequent geotechnical exploration, including borings of the site and determined that no slides occurred on the project site. Thus, a less than significant impact can be expected regarding landslide hazards.

b) Would the project result in substantial soil erosion or the loss of topsoil? ***(Less Than Significant Impact)***

The project site is largely level and no development is proposed within the top of creek bank of Grayson Creek. The stormwater on the subject property would be conveyed to a storm drain system and bio-filtration basin located on the north-east of the project site. Given the proposed storm drain infrastructure, no significant soil erosion or loss of topsoil is expected. Thus, a less than significant impact from soil erosion or top soil loss is expected.

c) Would the project 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? ***(Less Than Significant Impact)***

As discussed in a) iii above, the project site is in an area that has "moderate to low" liquefaction potential. Building and grading regulations can be expected to keep risks within generally acceptable limits. Thus, the environmental impact from an unstable geologic unit or soil would be considered to be less than significant.

d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?* ***(Less Than Significant Impact with Mitigation)***

With regard to its engineering properties, the surficial clayey soil which potentially indicates high expansion potential. Expansive soil can shrink and swell as a result of moisture changes. This shrinking and swelling can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Therefore, construction of at-grade improvements will need to consider the potential impacts of expansive soil.

Successful construction on expansive soil requires special attention during grading. It is imperative to keep exposed soil moist by occasional sprinkling. If the soil is dry, it is extremely difficult to remoisturize the soil (because of their clayey nature) without excavation, moisture conditioning, and recompaction. Building damage due to volume changes associated with expansive soil can be reduced by: (1) using a rigid mat foundation that is designed to resist the settlement and heave of expansive soil, (2) deepening the foundations to below the zone of moisture fluctuation, i.e. by using deep footings or drilled piers, and/or (3) using footings at normal shallow depths but bottomed on a layer of select fill having a low expansive potential. Conventional grading operations, incorporating fill placement specifications tailored to the expansive characteristics of the soil, and use of a mat foundation such as a post-tensioned are common, generally cost-effective measures to address the expansive potential of the foundation soils. Detailed foundation design criteria are provided by the project geotechnical report (ENGEO). It should be recognized that expansive soils are an engineering issue, and not a land use or feasibility issue.

Thus, the environmental impact from a moderately expansive soil would be considered to be less than significant with incorporation of **MM GEO-1**.

MM GEO-1. Incorporation of and Compliance with the Recommendations in the Geotechnical Investigation.

All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical report on the proposed project site that has been prepared by ENGEO, titled Preliminary Geotechnical Exploration, (October 2019). Design, grading, and construction shall be performed in accordance with the requirements of the Contra Costa County Building Code and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the County Public Works Department, or designee, prior to commencement of grading activities.

e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?* ***(No Impact)***

The project does not require a septic or wastewater-disposal system; the site receives waste water and sanitary service from the Central Contra Costa Sanitary District, who have reviewed the project and stated that sufficient capacity exists to accommodate the project, therefore, no impact is expected.

f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?* ***(Less Than Significant Impact)***

Similar to archaeological resources, there is a possibility that previously undiscovered buried fossils and other paleontological resources could be present and accidental discovery could occur. If during project construction, subsurface construction activities damaged previously undiscovered historic and prehistoric resources, there could be a potentially significant impact. Mitigation Measure **MM CUL-1** would reduce the potentially significant impact to a less than significant level. No unique geologic features exist on the site. Thus, a less than significant impact would be expected with the included mitigations.

Sources of Information

- ENGEO, October 4, 2019. *Preliminary Geotechnical Investigation 1024 and 1026 Grayson Road*.
- Geologic Peer Review dated October 27, 2006. prepared by Darwin Myers Associates
- Geologic Peer Review dated February 10, 2020. prepared by Darwin Myers Associates
- Purcell and Rhodes, 2006. *Geotechnical Reconnaissance*
- California Geological Survey, 1992. *Earthquake Zones of Required Investigation.*
- Contra Costa County General Plan, 2005-2020. *Safety Element.*
- *United States Department of Agriculture, Natural Resources Conservation Service. 2019. Web Soil Survey. Accessed June 4, 2019.* *https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey*
- DeBolt Civil Engineering, 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)

8. *GREENHOUSE GAS EMISSIONS – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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?	☐	☐	☒	☐

SUMMARY:

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***(Less Than Significant Impact)***

Greenhouse gases are gases that trap heat in the atmosphere and contribute to global climate change. Greenhouse gases include gases such as carbon dioxide, methane, nitrous oxide, and various fluorocarbons commonly found in aerosol sprays. Typically, a single residential or commercial construction project in the County would not generate enough greenhouse gas (GHG) emissions to substantially change the global average temperature; however, the accumulation of GHG emissions from all projects both within the County and outside the County has contributed and will contribute to global climate change.

Senate Bill 97 directed the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines for evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the Technical Advisory: CEQA and Climate Change, and proposed revisions to the State CEQA guidelines (April 14, 2009) for consideration of GHG emissions. The California Natural Resources Agency adopted the proposed State CEQA Guidelines revisions on December 30, 2009 and the revisions were effective beginning March 18, 2010.

The bright-line numeric threshold of 1,100 MT CO2/yr is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 60 single-family dwelling units. Future construction and operation of the 10 new residences (8 net new residences as 2 existing homes will be demolished) would generate some GHG emissions; however, the amount generated would not result in a significant adverse environmental impact. As the project does not exceed the screening criteria, the project would not result in the generation of GHG emissions that exceed the threshold of significance.

b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* ***(Less Than Significant Impact)***

At a regional scale, the BAAQMD adopted the Bay Area 2017 Clean Air Plan that addresses GHG emissions as well as various criteria air pollutants. The BAAQMD Plan included a number of pollutant reduction strategies for the San Francisco Bay air basin, many of which would be included in the project through Title 24 energy efficiency requirement for the expected new residence.

Within Contra Costa County, the Contra Costa County Board of Supervisors convened a Climate Change Working Group (CCWG) in May 2005, to identify existing County activities and policies that could reduce GHG emissions. In November 2005, the CCWG presented its Climate Protection Report to the Board of Supervisors, which included a list of existing and potential GHG reduction measures. This led to the quantification of relevant County information on GHGs in the December 2008 Municipal Climate Action Plan.

In April 2012, the Board directed the Department of Conservation and Development to prepare a Climate Action Plan (CAP) to address the reduction of GHG emissions in the unincorporated areas of the County. In December 2015, the Climate Action Plan was adopted by the Board of Supervisors. The Climate Action Plan includes a number of GHG emission reduction strategies. The strategies include measures such as implementing standards for green buildings and energy-efficient buildings, reducing parking requirements, and reducing waste disposal. Green building codes and debris recovery programs are among the strategies currently implemented by the County.

The project does not conflict with the policies outlined in the CAP. The project will incorporate Contra Costa County Climate Action Plan (CCC) emission reduction measures (as referenced in Appendix E "Developer Checklist" of the CCC). Implementation of these emission reduction measures is considered a Qualified GHG Reduction Strategy under the CCC and therefore meets the BAAQMD's GHG threshold. Furthermore, as other measures identified in the CAP are recommendations and not requirements, the project would not conflict with the CAP and thus would not be considered to have a significant impact.

Sources of Information

- Bay Area Air Quality Management District, 2017. *Bay Area 2017 Clean Air Plan.*
- Bay Area Air Quality Management District, 2017. *Air Quality Guidelines.*
- Contra Costa County Code, *Title 8. Zoning Ordinance*.
- Contra Costa County, 2008. *Municipal Climate Action Plan*. Contra Costa County, 2015. *Climate Action Plan.*

9. HAZARDS AND HAZARDOUS MATERIALS – *Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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, would create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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?	☐	☐	☒	☐

SUMMARY:

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* ***(Less Than Significant Impact)***

Subsequent to approval of the Tentative Vesting Parcel Map, it is expected that two existing single-family residence would be demolished and 10 new single family homes constructed on Lots 1-10. There would be associated use of fuels, lubricants, paints, and other construction materials during the construction period. The use and handling of hazardous materials during construction would occur in accordance with applicable federal, state, and local laws, including California Occupational Health and Safety Administration (Cal/OSHA) requirements. With compliance with existing regulations, the project would have a less than significant impact from construction.

Project operation would involve the routine transport, use, and disposal of hazardous materials in very small quantities as they relate to household use. Contra Costa County regulates household hazard disposal, and the home's occupants would be responsible for proper handling and disposal of household materials. For example, household hazardous substances can be dropped off for free at one of the Contra Costa County Household Hazardous Waste Drop-off Facilities, located throughout the County. Because any hazardous materials used for household operations would be in small quantities, long-term impacts associated with handling, storing, and dispensing of hazardous materials from project operation would be considered less than significant.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?* ***(Less Than Significant Impact)***

The proposed residential use of the site would not involve handling, use, or storage of substances that are acutely hazardous.

The lot currently hosts two single family residences. No evidence reviewed by staff suggests that the project would include foreseeable conditions involving the likely release of hazardous materials into the environment. Thus, with compliance with existing regulations, the project would have a less than significant impact.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?* ***(No Impact)***

The nearest school is the private school, Pleasant Hill Adventist Academy, located approximately a quarter mile east of the project site. As the project would not be expected to release hazardous materials into the environment, no impact on the school is expected.

d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?* ***(No Impact)***

The project site currently contains two single-family residences. A review of regulatory databases maintained by County, State, and federal agencies found no documentation of hazardous materials violations or discharge on the project site. The site is not listed on the State of California Hazardous Waste and Substance Sites (Cortese) List. California Government Code section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Cortese List is a planning document with hazardous material contaminated site information, used by the State, local agencies and developers to comply with the California Environmental Quality Act. Because the project is not located on a listed hazardous materials site the project will not result in a significant hazard to the public or the environment.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ***(No Impact)***

The project site is not within an airport influence area, not within an airport safety zone, and outside of the 55-60 dB CNEL airport noise contour. Thus, there would be no hazard related to a public airport or public use airport.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact)***

The proposed project would not impair implementation of or physically interfere with the County's adopted emergency response plan related to Grayson Road or the project site. Thus, project impacts on emergency response would be a less than significant.

The proposed access road off of Grayson Road and the additional 10 single-family residences (8 net new single-family residences) located on the proposed private access road is not expected to have any significant impact on emergency evacuation plans within the area.

With respect to proposed onsite improvements, the Contra Costa County Fire Protection District has reviewed the project plans and provided routine comments for the site. Furthermore, the Fire Protection District would review the construction drawings for the project at the time of submittal of a building permit application.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ***(Less Than Significant Impact)***

The project site is in a developed area within the urbanized community of Contra Costa County, which is designated as an "urban unzoned" area by the California Department of Forestry and Fire Protection. Additionally, the Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zone Map characterizes this area as a Non-Very High Fire Hazard Severity Zone area. Therefore, there would not be a significant risk of loss, injury or death involving exposure of people or structures to wildland fires.

Sources of Information

- California Department of Forestry and Fire Protection (CalFire). 2009. *Very High Fire Hazard Severity Zones in LRA Map.*
- Contra Costa County, 2000. *Contra Costa County Airport Land Use Compatibility Plan.*

- Contra Costa County General Plan, 2005-2020. *Transportation and Circulation Element.*
- DeBolt Civil Engineering, 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)

10. *HYDROLOGY AND WATER QUALITY – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
iv) 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?	☐	☐	☒	☐

SUMMARY:

a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?* ***(Less Than Significant Impact)***

The proposed project would comply with applicable water quality and discharge requirements. Contra Costa County, the Contra Costa County Flood Control and Water Conservation District, and 16 incorporated cities in the county have formed the Contra Costa Clean Water Program. In 2015, the Regional Water Quality Control Board for the San Francisco Bay Region (RWQCB) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP Order No. R2-2015-0049) for the Program, which regulates discharges from municipal storm drains. Provision C.3 of the Municipal Regional Permit places requirements on site design to minimize creation of impervious surfaces and control stormwater runoff.

The County has the authority to enforce compliance with its Municipal Regional Permit through the County's adopted C.3 requirements. The C.3 requirements stipulate that projects creating and/or redeveloping at least 5,000 square feet of impervious surface shall treat stormwater runoff with permanent stormwater management facilities, along with measures to control runoff rates and volumes.

The proposed project would add an estimated 50,825 square feet of new impervious surface area. The C.3 requirements stipulate that projects that create or replace 5,000 square feet or more of impervious surface must incorporate specific measures to reduce runoff, such as dispersion of runoff to vegetated areas, use of pervious pavement, installation of cisterns, and installation of bioretention facilities or planter boxes. Implementation of these measures would be required as a condition of approval.

Design of the new project will include the installation of a single C3 compliant low impact development (LID) flowthrough treatment planter to act as a source control, treating all replaced impervious surfaces prior to connecting to the public storm drain system. No direct storm water discharge would be placed within Grayson Creek. All storm water would be metered and cleaned by the C3 compliant LID flowthrough treatment planter.

With implementation of the practicable stormwater controls, the project would be compliant with applicable water quality standards or waste discharge requirements, resulting in a less than significant impact.

b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?* ***(Less Than Significant Impact)***

The site is in the water service area from the East Bay Municipal Utility District (EBMUD). After construction of the new residence, water service to the building would be provided by EBMUD. Since any future water service at the site will be provided by EBMUD, no groundwater wells will be required.

The design of the C3 compliant LID flowthrough treatment planter would maintain existing ground water recharging that currently occurs on the site resulting in a less than significant impact.

c) *Would the project substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

i) Result in substantial erosion or siltation on- or off-site? ***(Less Than Significant Impact)***

The proposed project would not substantially alter the drainage pattern of the area or change the course of Grayson Creek. In the preliminary stormwater review, the grading pattern of the property will follow the existing drainage pattern and will ultimately connect to an existing drainage located along the

northeast side of the project site after the water is detained and treated in a C3 compliant LID flowthrough treatment planter. Accordingly, the proposed project would not substantially alter the drainage pattern of the site or area or result in substantial erosion or siltation. The additional impervious surface flows will be directed to a single C3 compliant LID flowthrough treatment planter to act as a source control, treating all replaced impervious surfaces prior to connecting to the public storm drain system. No direct storm water discharge would be placed within Grayson Creek. All storm water would be metered and cleaned by the C3 compliant LID flowthrough treatment planter, prior to the indirect discharge into Grayson Creek.

With implementation of the practicable stormwater controls, the project would not result in substantial erosion or siltation, resulting in a less than significant impact.

ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?* ***(Less Than Significant Impact)***

As described previously, the proposed project would not substantially alter the existing drainage pattern of the site or area nor would it substantially increase the rate or amount of surface runoff. Thus, the project would not result in any significant impacts associated with an increase in the volume of runoff that would result in onsite or off-site flooding.

iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?* ***(Less Than Significant Impact)***

The project site includes 3.05 acres of gently sloping terrain adjacent to an existing creek (Grayson Creek). Higher elevations along the westerly boundary are at approximate elevation of 116 feet (local datum) and 110 along Grayson Road. The site slopes southeasterly to Grayson Creek with top of bank elevations at approximately 90 feet, with creek waterlines around elevation 80. Grayson Creek drains northeasterly along the project's boundary. An existing 24" reenforced concrete pipe within Grayson Road currently collects stormwater runoff from upstream properties. The 24" storm drain pipe connects to 2 6x6 concrete boxes under Grayson Creek and discharges water directly to Grayson Creek.

The project will connect into the existing 24" storm drain pipe within Grayson Road, just to the east of storm drain man hole (SDMH) #32. The existing 24" storm drain pipe will remain undisturbed by development of the site.

In order to reduce the increase in peak flow rates due to the added impervious surface area caused by redevelopment, detention of storm water runoff is proposed. The unit hydrograph is used to size the required detention volume. For tributary areas less than 1 square mile, a 10-year storm event is used in

accordance with the County's design guidelines. Using the 10-year storm event and 5-minute time of concentration, a detention volume of 899 cu.ft. is calculated. The proposed project has in excess of 900 cu.ft of storage within the proposed storm drain system on site (prior to discharge). The County Public Works Department has reviewed the applicant's preliminary stormwater control plan and determined that the proposed drainage facilities on-site and in the area can accommodate the increased surface runoff. Accordingly, the proposed project would not exceed the capacity of the stormwater system.

iv) Impede or redirect flood flows? ***(Less Than Significant Impact)***

According to Flood Insurance Rate Map (FIRM) 06013C0280G, the project is located in area that is outside of the Special Flood Hazard Area. Furthermore, the improvements on the site are not expected to create any barrier that would impede or redirect flood flows, should flooding occur.

d) *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?* ***(Less Than Significant Impact)***

According to Flood Insurance Rate Map (FIRM) 06013C0280G, all of the proposed improvements from the project are located in area that is outside of the Special Flood Hazard Area. The proposed project would not be susceptible to inundation by seiche or tsunami. The California Geological Survey (2009) has projected and mapped the tsunami hazard posed by a tidal wave that passes through the Golden Gate and into San Francisco Bay, San Pablo Bay and Carquinez Strait. The project site is not included in the inundation area on any tsunami hazard map.

e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?* ***(Less Than Significant Impact)***

As stated above, the proposed project would comply with applicable water quality and discharge requirements and will not install or utilize any groundwater wells on the Project site. Provision C.3 of the Municipal Regional Permit places requirements on site design to minimize creation of impervious surfaces and control stormwater runoff. Thus the project would not conflict with or obstruct implementation of a water quality control plan.

The Sustainable Groundwater Management Act (SGMA), effective January 1, 2015, established a framework of priorities and requirements to facilitate sustainable groundwater management throughout the State. The intent of SGMA is for groundwater to be managed by local public agencies and newly-formed Groundwater Sustainability Agencies (GSAs) to ensure a groundwater basin is operated within its sustainable yield through the development and implementation of a Groundwater Sustainability Plans (GSP). The project is located near the San Ramon Valley and Ygnacio Valley Basins, both of which are Very Low Priority groundwater basins based on the Groundwater Basin Prioritization by the State Department of Water Resources (DWR). No sustainable groundwater management plan has been prepared for the basins due to their low priority status.

Sources of Information

- California Department of Water Resources. *https://water.ca.gov/Programs/Groundwater-Management*
- Federal Emergency Management Agency (FEMA). *National Flood Insurance Rate Map (FIRM). https://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping*.
- Debolt Civil Engineering. 2021. *Preliminary Hydrology and Storm Water Detention Report for 1024 and 1026 Grayson Road SD 20-9531*
- Debolt Civil Engineering. 2021. *Preliminary Storm Water Control Plan for 1024 and 1026 Grayson Road SD 20-9531*
- DeBolt Civil Engineering, 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)

11. *LAND USE AND PLANNING – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

SUMMARY*:*

a) Would the project physically divide an established community? ***(No Impact)***

Development of the proposed project would not physically divide an established community. The proposed project will occur on a developed parcel within a residential portion of unincorporated Pleasant Hill.

b) Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ***(Less Than Significant Impact)***

General Plan

The proposed project would conform to the applicable General Plan land use designation of SL, Single-Family Low Density, 1.0-2.9 units per acre. The project proposes to utilize a Density Bonus pursuant to Government Code Section 65915 and County Code Chapter 822-2.

Conservatively calculating the Project's density based on the net project site acreage of approximately 2.76 acres (2.76 acres x 2.9 du/ac =8.004 du), each fractional unit rounds to the next whole unit, or 9 base units pursuant to Government Code Section 65915(5).

The home on Lot 1 would be restricted for-sale to a moderate-income household (12% of 9 base lots), therefore the project is eligible for a Density Bonus, waivers or reductions in development standards, incentives and concessions, and parking reductions under the California Density Bonus Law, Gov. Code Section 65915, subdivision (b)(1)(D). By providing one lot of the nine base units for sale to a moderate income household, the Project qualifies for a 7% density bonus, resulting in one additional unit (9 du x.07 = 9.63, which rounds up to 10). (Gov. Code, § 65915(f)(4), (5).)

The density of the proposed project would be 3.62 dwelling units per net acre, which would be deemed consistent with the SL Land Use designation density range of 1 to 2.9 dwelling units per acre as a result of the utilization of a Density Bonus.

Government Code Sections 65915(j)(1) and 65915(C)(5) state that either granting a density bonus, concession, incentive, or waiver, "Shall not require or be interpreted, in and of itself, to require a general plan amendment, local coastal plan amendment, zoning change, study, or other discretionary approval." This language means that the applicant's requests made pursuant to the Density Bonus Law do not require a General Plan Amendment to accommodate the additional density in the proposed project.

Category	Totals
Total Area =	3.05 Acres
Private Right-of-way =	0.29 Acres
Net Area=	2.76 acres
2.76 Net Acres X 2.9 = base units	9 base units
1 moderate unit / base units=	11.11% (rounds up to 12%)[2]
10% moderate income density bonus=	7%
Density Bonus Calculation 9 (base units) x .07= (9.63) Bonus	10 units

Zoning

The project would be considered consistent with the R-15 Single-family zoning district as a result of the utilization of the Density Bonus, pursuant to Government Code sections 65915(j)(1) and 65915(C)(5) and County Ordinance Code Section 822-2. The State Density Bonus Law provides for unlimited number of waivers of development standards in order to construct the project at the proposed density. (See Gov. Code, § 65915(b)(1), (e)(1).) Where a development standard would physically prevent the project from being

[2] Government Code section 65915(f)(5).

built at the permitted density and with the granted concessions/incentives, the developer may propose to have those standards waived or reduced.

The applicant is seeking waivers of development standards pertaining to:

(a) a reduction in minimum lot size for Lots 1 and 4-10;
(b) a reduction in the minimum lot width for Lots 1-10 (instead of 100 feet);
(c) a reduction in minimum lot depth for Lot 1;
(d) a reduction in minimum front yard and side yard setback and
(e) a waiver of the setback requirement for retaining walls.

The proposed lot sizes, lot width, depth, and setbacks, are shown in **Table 1** on the following page. The project is seeking these reductions and waivers as application of the required standard would physically preclude the development of the project at the proposed density with the proposed one moderate income unit and with the application of the available incentives, concessions, and density bonus.

Finally, the project is seeking a concession to allow the installation of the complete frontage improvements be omitted in lieu of a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road along the project frontage as well as bicycle lane striping.

The project would be considered consistent with the General Plan and the R-15 Single-family zoning district as a result of the utilization of the Density Bonus, pursuant to Government Code sections 65915(j)(1) and 65915(C)(5), accordingly there is no significant impact resulting from the project.

Sources of Information

- Contra Costa County Code, Title 8, Zoning Ordinance.
- DeBolt Civil Engineering, 2022. *Vesting Tentative Map, SD 20-9531.* (Project Plans)
- Contra Costa County General Plan 2005-2020. *Land Use Element*.
- California Government Code Section 65915

Table 1

1024 & 1026 Grayson Rd. Proposed Alternative Development Standards (R-15 Standards)						
Lot #	**Area (15,000 Sq. Ft.)**	**Depth (100 Ft. Min.)**	**Average Width (100 Ft. Min.)**	**Front Yard Setback (20 feet)**	**Side Yard Setback (25 feet aggregate, no yard less than 10 feet)**	**Retaining Walls 6' or less**
Lot 1	7,347	87.45	84.01	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 2	22,460	331	67.85	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 3	15,236	270	56.43	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 4	14,257	144	99.01	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 5	14,713	195	75.45	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 6	11,261	163	69.09	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 7	11,360	166	68.43	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 8	13,388	185	72.37	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 9	13,655	173	78.93	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'
Lot 10	14,013	220	63.70	20' feet to face of garage; 14' Feet to living area	15 feet aggregate, (no yard less than 5 feet)	0'

12. *MINERAL RESOURCES – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUMMARY:

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ***(No Impact)***

Known mineral resource areas in the County are shown on Figure 8-4 (Mineral Resource Areas) of the General Plan Conservation Element. No known mineral resources have been identified in the project vicinity, and therefore the proposed project would not result in the loss of availability of any known mineral resource.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ***(No Impact)***

The project site is not within an area of known mineral importance according to the Conservation Element of the General Plan, and therefore, the project would not impact any mineral resource recovery site.

Sources of Information

- Contra Costa County General Plan, 2005-2020, *Conservation Element.*

13. ***NOISE – Would the project result in:***				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SUMMARY:

a) *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* ***(Less Than Significant Impact)***

Activities at the future 10-lot subdivision are not expected to expose persons to, or generate, noise levels in excess of the Community Noise Exposure Levels shown on Figure 11-6 of the General Plan Noise Element. Figure 11-6 shows that levels of 60 dB or less are normally acceptable and noise levels between 60 dB to 70 dB are conditionally acceptable in residential areas. Types and levels of noise generated from the residential uses associated with the future residence would be similar to noise levels from the existing residential developments in the area. Thus, project noise impacts to the existing surrounding land uses would be less than significant.

b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?* ***(Less than Significant)***

Project construction would not include any components (e.g. pile-driving) that would generate excessive groundborne vibration levels. Additionally, normal residential activities would not generate groundborne vibrations during project operations. Thus, project noise impacts associated with groundborne vibration would be less than significant.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* ***(No Impact)***

As discussed in Section 9.e, the project site is not within an airport influence area, not within an airport safety zone, and outside of the 55-60 dB CNEL airport noise contour. Thus, the project would not expose people residing or working in the project area to excessive noise levels from an airport use.

Sources of Information

- Contra Costa County General Plan, 2005-2020, Noise *Element.*
- Contra Costa County, 2000. *Contra Costa County Airport Land Use Compatibility Plan.*

14. *POPULATION AND HOUSING – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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?	☐	☐	☒	☐

SUMMARY:

a) *Would the project 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)?* ***(Less Than Significant)***

The proposed project would result in the development of eight additional single-family residences (net), which would directly increase the unincorporated Pleasant Hill area population by an estimated 28 persons, based on the Census 2010 estimate of 2.77 people per household for Contra Costa County. The development is limited to the project site, and would not be expected to lead to indirect population growth. Further, due to its small scope and size (less than .09% of the estimated annual population growth for the County), the project would have a less than significant impact on population growth in the area.

b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?* ***(Less Than Significant)***

The project site is currently occupied by two unoccupied single-family residences which would be demolished, and the proposed project is expected to result in the construction of ten new single family residences (eight net). Therefore, the project would have no impact on housing displacement.

Sources of Information

- Contra Costa County, Census 2010. Accessed June 6, 2019. http://www.bayareacensus.ca.gov/counties/ContraCostaCounty.htm

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

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire Protection?	☐	☐	☒	☐
b) Police Protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

SUMMARY*:*

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

a) *Fire Protection?* ***(Less Than Significant Impact)***

Fire protection and emergency medical response services for the project vicinity are provided by the Contra Costa County Fire Protection District (CCCFPD). As detailed in the comment letter on the proposed project from the Contra Costa County Fire Protection District (CCCFPD), the project is required to comply with the applicable provisions of the 2019 California Fire Code, the 2019 California Building Code, and applicable Contra Costa County Ordinances that pertain to emergency access, fire suppression systems, and fire detection/warning systems. Prior to the issuance of building permits, the construction drawings would be reviewed and approved by the CCCFPD. As a result, potential impacts of the proposed project relating to fire protection would be less than significant.

b) *Police Protection?* ***(Less Than Significant Impact)***

Police protection services in the project vicinity are provided by the Contra Costa County Sheriff's Office, which provides patrol service to the unincorporated Pleasant Hill area. The addition of eight new (net) single-family residence in the project area would not significantly affect the provision of police services to the area.

c) *Schools?* ***(Less Than Significant Impact)***

The applicant for the future residences would be required to pay the state-mandated school impact fees for the residential dwelling unit. Payment of the fees pursuant to State regulations for school services would reduce school impacts to less than significant levels.

d) *Parks?* ***(Less Than Significant Impact)***

The new residents of the ten single family homes (eight net) would be expected to increase use of the parks; however, given the amount of available park space compared to the project's small addition to the County's population, no significant impact on the park facilities would be expected. Additionally, prior to issuance of a building permit, the applicant/developer would be required to pay the County-mandated park impact fees, compensating for impacts on park facilities.

e) Other public facilities? ***(Less Than Significant Impact)***

Impacts to other public facilities, such as hospitals and libraries are usually caused by substantial increases in population. Implementation of the proposed project is not anticipated to induce population growth since only eight (net) new residence would result from project approval. The project is not anticipated to create substantial additional service demands besides those which have been preliminarily reviewed by various agencies of Contra Costa County, or result in adverse physical impacts associated with the delivery of fire, police, schools, parks, or other public services. Therefore, the impact to hospitals, libraries or other public facilities is less than significant

Sources of Information

- Contra Costa County Fire Protection District. January 30, 20202. *Agency Comment Letter.*

16. *RECREATION*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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?	☐	☐	☒	☐

SUMMARY:

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?* ***(Less Than Significant Impact)***

The new residents of the ten (eight net) new single family homes would incrementally increase use of parks and recreational facilities in the area. However, the modest increase in population is not expected to impact recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Thus, the impact of this increase in use of the parks and recreational facilities would be less than significant.

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?* ***(Less Than Significant Impact)***

Given the proximity of nearby parks, the new residents would likely use these nearby facilities. As described above, use of these public recreational facilities by the residents of the new dwelling units would incrementally increase use of the facilities, but would not be expected to result in the construction or expansion of recreational facilities.

17. *TRANSPORTATION – Would the project:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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(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?	☐	☐	☒	☐

SUMMARY:

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? ***(Less Than Significant Impact)***

Policy 4-c of the Growth Management Element of the Contra Costa County General Plan requires a traffic impact analysis of any project that is estimated to generate 100 or more AM or PM peak-hour trips. Based on the Institute of Transportation Engineers (ITE) peak period trip generation rates of 1.0 trip per dwelling unit for single-family residences, the proposed project consisting of the ten-lot subdivision, and the future construction of 10 single-family residence (8 net new units) would generate an additional eight AM and eight PM new peak period trips, and therefore, is not required to have a project-specific traffic impact analysis. Since the project would yield less than 100 peak-hour AM or PM trips, the proposed project would not conflict with the circulation system in the Pleasant Hill area.

The Complete Streets Policy, adopted by the Contra Costa County Board of Supervisors on July 12, 2016, requires Complete Streets infrastructure sufficient to enable reasonably safe travel along and across the right of way for each category of users be incorporated into all planning, funding, design, approval, and implementation processes for any construction, reconstruction, retrofit, maintenance, operations, alteration, or repair of streets (including streets, roads, highways, bridges, and other portions of the transportation system). Projects may seek exemptions from the policy based upon 4 potential exemptions outlined in Section C.1 of the policy. Specifically, this project has sought the exemption provided for in C.1(2): “inclusion of Complete Streets design principles would result in a disproportionate cost to the project.”

The proposed subdivision project includes a new 28-foot wide access road which would permit two 10-foot travel lanes and an 8-foot wide parking on one side of the street. Additionally a 5-foot wide, monolithic, elevated sidewalk would be constructed adjacent to the new road to provide access for pedestrians and persons with disabilities within the project. Along the project frontage, the project will provide a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road, as well as bicycle lane striping in-lieu of complete frontage improvements.

Improved frontage improvements are defined as curb, gutter pan, and a sidewalk. No complete frontage improvements exist along the southern portion of Grayson Road, from the intersection of Reliez Valley Road to the west and Heritage Hills Drive to the East (that road segment is in is in excess of 2,000 feet in length). Complete frontage improvements would be prohibitively expensive given the length of the project frontage (354 feet), the required grading, tree removal, and utility requirements. In addition, there is no sidewalk along the southern side of Grayson Road to connect with, in 1,000 feet in either direction. The adjacent properties that front along Grayson Road are not expected to develop in the future. Finally, existing Grayson Road has adequate width to support two travel lanes, parking, and a bike lane. Therefore the overall the surrounding circulation system is consistent with the Complete Streets policy and qualifies for an exemption as outlined in Section C.1(2) of the Policy.

Moreover, the Density Bonus law provides for regulatory incentives or concessions that result in identifiable and actual cost reductions to provide for affordable housing costs. (Gov. Code § 65915(d)(1)). The Density Bonus Law puts the burden of rejecting any proposed incentives or concessions on the County and requires the County to grant the concession or incentive requested by the applicant unless the County makes a written finding, based upon substantial evidence, of any of the following:

(A) The concession or incentive does not result in identifiable and actual cost reductions;
(B) The concession or incentive would have a specific, adverse impact upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households;
(C) The concession or incentive would be contrary to state or federal law.

The Density Bonus application submitted to the County has requested that the installation of the complete frontage improvements be omitted in lieu of a reconstructed asphalt-concrete curb along the edge of pavement of Grayson Road along the project frontage as well as bicycle lane striping, as shown on the Tentative Map.

b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?* ***(Less Than Significant Impact)***

The California Environmental Quality Act ("CEQA") Guidelines Section 15064.3(b) establishes criteria for determining the significance of transportation impacts. Vehicle Miles Traveled ("VMT") is the metric for measuring transportation impacts. The County adopted Transportation Analysis Guidelines (2020) providing technical assistance, thresholds of significance and mitigation measures for land development projects. Per County guidelines, projects of 20 residential units or less should be expected to cause a less-than-significant impact under CEQA. The project proposes 10 (eight net) residential units which is under the County guidelines VMT screening criteria threshold. Therefore, the project should be considered to have a less-than-significant impact under CEQA and would not require a VMT analysis.

c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* ***(Less Than Significant Impact)***

According to the project's Civil Engineer, the center line of the proposed project's access road from Grayson Road is located approximately 164 feet to the east of the existing Golf Links Street (located to the north) and 280-feet to the west of the existing Buttner road (located to the north east). Both of these roads are minor roads with low vehicle counts that have no through connections and serve only the single-family homes located directly on them. The proposed new access road is located in excess of 150 feet of either center line of Buttner and Golf Links roads, consistent with ITE (Institute of Transportation Engineers) recommendations for intersection separation on 35 MPH streets, such as Grayson Road. In addition, cars traveling either eastbound or westbound on Grayson road have over 500- feet of sight distance, which is more than adequate to provide for adequate stopping time on the 35 MPH designated Grayson road. Thus, the project would result in a less than significant impact due to design features or incompatible uses.

d) *Would the project result in inadequate emergency access?* ***(Less Than Significant Impact)***

The project is located in an urban residential neighborhood with available emergency services provided by the County Sheriff's Department and Contra Costa County Fire Protection District. Furthermore, prior to the County review of construction drawings for building permits, the Contra Costa County Fire Protection District would review the construction drawings and ensure that adequate emergency access to buildings on the project site could be provided. Thus, a less than significant impact is expected due to emergency access.

Sources of Information

- Contra Costa County Code, Title 8, Zoning Ordinance.
- Contra Costa County, July 12, 2016. *Complete Streets Policy*

- Contra Costa County, Department of Conservation and Development, Transportation Division, March 26 2021. Comment Letter
- DeBolt Civil Engineering, March 26 2021. *Vesting Tentative Map, SD 20-9531.* (Project Plans)
- DeBolt Civil Engineering, June 8, 2020. Response to Comments Letter to Joseph Lawlor
- Contra Costa County General Plan 2005-2020. *Land Use Element*.
- California Government Code Section 65915

18. ***TRIBAL CULTURAL RESOURCES – Would the project*** *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, 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:*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	☐	☒	☐	☐

SUMMARY:

Would the project 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, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? ***(Less Than Significant Impact With Mitigations)***

As discussed in Sections 5.a through 5.c above, no historical resources are known to exist on the project site. On February 5, 2007, Suzanne Baker of Archaeological/ Historical Consultants conducted an on-foot archaeological reconnaissance of the project area. No prehistoric or historic (over 50 years of age) archaeological sites or materials were found on-site during the course of reconnaissance. Further, according to the County's Archaeological Sensitivities map, Figure 9-2, of the County General Plan, the subject site is located in an area that is considered "largely urbanized," and is generally not considered to be a location with significant archaeological resources. Given all of these factors, there is little potential for the project to impact tribal cultural resources on the site.

Pertaining to the significance of tribal cultural resources, there are no onsite historical resources, pursuant to Public Resources Code section 5020.1(k) that are included in a local register of historic resources.

Nevertheless, the expected construction and grading could cause ground disturbance which may impact heretofore undocumented cultural resources. Implementation of

Mitigation Measures **MM CUL-1 and MM CUL-2** would reduce the impact on tribal cultural resources during project related work to a level that would be considered less than significant.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?* ***(Less Than Significant Impact With Mitigations)***

As discussed in Sections 5.a through 5.c above, no historical resources are likely to exist on the project site. Further, according to the County's Archaeological Sensitivities map, Figure 9-2, of the County General Plan, the subject site is located in an area that is considered "largely urbanized," and is not considered to be a location with significant archaeological resources. Thus, there is little potential for the project to impact tribal cultural resources on the site.

It is not likely that the project would cause a substantial adverse change in the significance of a tribal cultural resource that meets the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, for the reasons stated above.

Nevertheless, the expected construction and grading could cause ground disturbance which may impact heretofore undocumented cultural resources. Implementation of Mitigation Measure **MM CUL-1 and MM CUL-2** would reduce the impact on tribal cultural resources during project related work to a less than significant level

Sources of Information

- Contra Costa County General Plan 2005-2020. *Open Space Element*.
- Archaeological Survey and Historic Resources Evaluation Report prepared by Archaeological/Historical Consultants dated February 2007

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

SUMMARY:

a) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?* ***(Less Than Significant Impact)***

The project site has been previously developed and is currently connected to wastewater, electric, gas, and telecommunication facilities. Agency comment letter received by Central Contra Costa Sanitary District, East Bay Municipal Utility District (EBMUD), and the County Public Works Department have stated that adequate facilities would be available to accommodate the project. Thus, no significant environmental effects are expected from the construction of new facilities that would be required to provide services to the project.

b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?* ***(Less Than Significant Impact)***

The project site would receive water service from EBMUD. EBMUD has reviewed the project application documents regarding the provision of new water service pursuant to EBMUD water service regulations and stated that adequate water service is available. Accordingly, the impact of providing water service to the proposed project would be less than significant.

c) *Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?* ***(Less Than Significant Impact)***

The project site is already serviced by Central Contra Costa Sanitary District. The district has provided comments stating that the project's addition of eight (net) new single family homes would not be expected to produce an unmanageable added capacity demand on the wastewater system. As proposed, the project would not result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

d) *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?* ***(Less Than Significant Impact)***

The proposed project would generate construction solid waste and post-construction operational solid waste. Construction waste would be hauled to one of the recycling centers and/or transfer stations located in the area. The recycling center and/or transfer station would sort through the material and pull out recyclable materials. Future construction of the proposed project would incrementally add to the construction waste headed to a landfill; however, the impact of the project-related incremental increase would be considered to be less than significant. Furthermore, construction on the project site would be subject to the CalGreen Construction and Demolition Debris Recovery Program administered by the CDD at the time of application for a building permit. The Debris Recovery Program would reduce the construction debris headed to the landfill by diverting materials that could be recycled to appropriate recycling facilities.

With respect to residential waste, the receiving landfill for operational waste is Keller Canyon, located at 901 Bailey Road in Bay Point. Keller Canyon is estimated to be at 15 percent of capacity. Residential waste from, the expected one new dwelling unit would incrementally add to the operational waste headed to the landfill; however, the impact of the project-related residential waste is considered to be less than significant. As is the case with construction debris, a portion of the residential waste is expected to be recycled, and would thereby reduce the residential waste headed to the landfill.

e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?* ***(Less Than Significant Impact)***

The proposed project would be required to comply with applicable federal, state, and local laws related to solid waste. The project includes residential land uses that would not result in the generation of unique types of solid waste that would conflict with existing regulations applicable to solid waste.

Sources of Information

- Contra Costa County General Plan 2005-2020. Public Facilities Element
- East Bay Municipal Utility District, February 10, 2020. Comment Letter
- Central Contra Costa Sanitary District February 6, 2020. Comment Letter

20. *WILDFIRE –* *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones,* ***would the project:***				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

SUMMARY:

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

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?* ***(No Impact)***

As discussed in section 9.g above, the project site is in a developed area within the urbanized community of Contra Costa County, which is designated as an "urban unzoned" area by the California Department of Forestry and Fire Protection. Additionally, the Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zone Map characterizes this area as a Non-Very High Fire Hazard Severity Zone area. Thus, no impact is expected.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?* ***(No Impact)***

See discussion under (a) above.

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?* ***(No Impact)***

See discussion under (a) above.

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?* ***(No Impact)***

See discussion under (a) above.

Sources of Information

- California Department of Forestry and Fire Protection (CalFire). 2018. *Very High Fire Hazard Severity Zones in LRA Map.*

21. *MANDATORY FINDINGS OF SIGNIFICANCE*				
Environmental Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation 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 a rare or endangered plant or animal, 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?	☐	☐	☒	☐

SUMMARY:

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 a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As discussed in individual sections of this Initial Study, the project proposes to create ten lots on the existing two-parcel on the project site and to construction 10 (eight net) new single family homes. Thus, the project may impact the quality of the environment (Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Tribal Cultural Resources) but the impact would be reduced to a less than significant level with the adoption of the recommended Mitigation Measures that are specified in the respective sections of this Initial Study. The project is not expected to threaten any wildlife population, impact endangered plants or animals, or affect state cultural resources with the already identified Mitigation Measures.

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.)*

The proposed project would not create substantial cumulative impacts. The project site is located within the Urban Limit Line in an area that has been designated for single-family residential development. The proposed project would be consistent with the existing surrounding single-family residential development.

c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

This Initial Study has disclosed impacts that would be less than significant with the implementation of Mitigation Measures. All identified Mitigation Measures would be included in the conditions of approval for the proposed project, and the applicant would be responsible for implementation of the measures. As a result, there would not be any environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

REFERENCES

In the process of preparing the Initial Study Checklist and conduction of the evaluation, the following references (which are available for review at the Contra Costa County Department of Conservation and Development, 30 Muir Rd., Martinez, CA 94553) were consulted:

1. **Vicinity Map**
2. **DeBolt Civil Engineering, January 2022. Vesting Tentative Map, SD 20-9531. (Project Plans)**
3. **MMRP**
4. **Contra Costa Resource Mapping System – Walnut Creek Quad Sheet Panels**
5. **County General Plan (2005) and EIR on the General Plan**
6. **General Plan Maps and Zoning Maps**
7. **Contra Costa County Code, including zoning and subdivision ordinances and the State Planning and Zoning Law, Subdivision Map Act, and California Environmental Quality Act.**
8. **Public agency comments**
9. **Field Review by County Staff.**
10. **Preliminary Geotechnical Exploration prepared by ENGEO Incorporated dated October 4, 2019.**
11. **Contra Costa County Important Farmland Map, 2016.**
12. **U.S. Department Of Commerce, Economics & Statistics Administration, U.S. Census Bureau. 2012. 2010 Census - Urbanized Area Reference Map: San Francisco--Oakland, CA**
13. **California Department of Conservation. Accessed June 3, 2019. Contra Costa County Important Farmland 2016.**
14. **Contra Costa County Department of Conservation and Development. Accessed June 3, 2019. 2016 Agricultural Preserves Map.**
15. **http://www.co.contra-costa.ca.us/DocumentCenter/View/882/Map-of-Properties-Under-Contract?bidId=**
16. **Bay Area Air Quality Management District. 2017. Bay Area 2017 Clean Air Plan.**
17. **Bay Area Air Quality Management District. 2017. Air Quality Guidelines.**

18. **California Department of Fish and Wildlife. https://map.dfg.ca.gov/lands/.**

19. **Olberding Environmental, Inc., February 2022. Biological Resources Analysis**

20. **Traverso Tree Service, May 6, 2020. Revised Arborist Report for the Development of 1024-1026 Grayson Road.**

21. **Archaeological/Historical Consultants, February 2007. Archaeological** *Survey and Historic Resources Evaluation Report.*

22. **Contra Costa County, 2015. Municipal Climate Action Plan**

23. **ENGEO, October 4, 2019. Preliminary Geotechnical Investigation 1024 and 1026 Grayson Road.**

24. **Geologic Peer Review dated October 27, 2006. prepared by Darwin Myers Associates**

25. **Geologic Peer Review dated February 10, 2020. prepared by Darwin Myers Associates**

26. **Purcell and Rhodes, 2006. Geotechnical Reconnaissance**

27. **California Geological Survey, 1992. Earthquake Zones of Required Investigation.**

28. **Contra Costa County General Plan, 2005-2020. Safety Element.**

29. **United States Department of Agriculture, Natural Resources Conservation Service. 2019. Web Soil Survey. Accessed June 4, 2019.**

30. **https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey**

31. **Bay Area Air Quality Management District, 2017. Bay Area 2017 Clean Air Plan**.

32. **Bay Area Air Quality Management District, 2017. Air Quality Guidelines.**

33. **California Department of Forestry and Fire Protection (CalFire). 2009. Very High Fire Hazard Severity Zones in LRA Map.**

34. **Contra Costa County, 2000. Contra Costa County Airport Land Use Compatibility Plan.**

35. **California Department of Water Resources. https://water.ca.gov/Programs/Groundwater-Management**

36. **Federal Emergency Management Agency (FEMA). National Flood Insurance Rate Map (FIRM). https://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping.**

37. **Debolt Civil Engineering. 2022. Preliminary Hydrology and Storm Water Detention Report for 1024 and 1026 Grayson Road SD 20-9531**

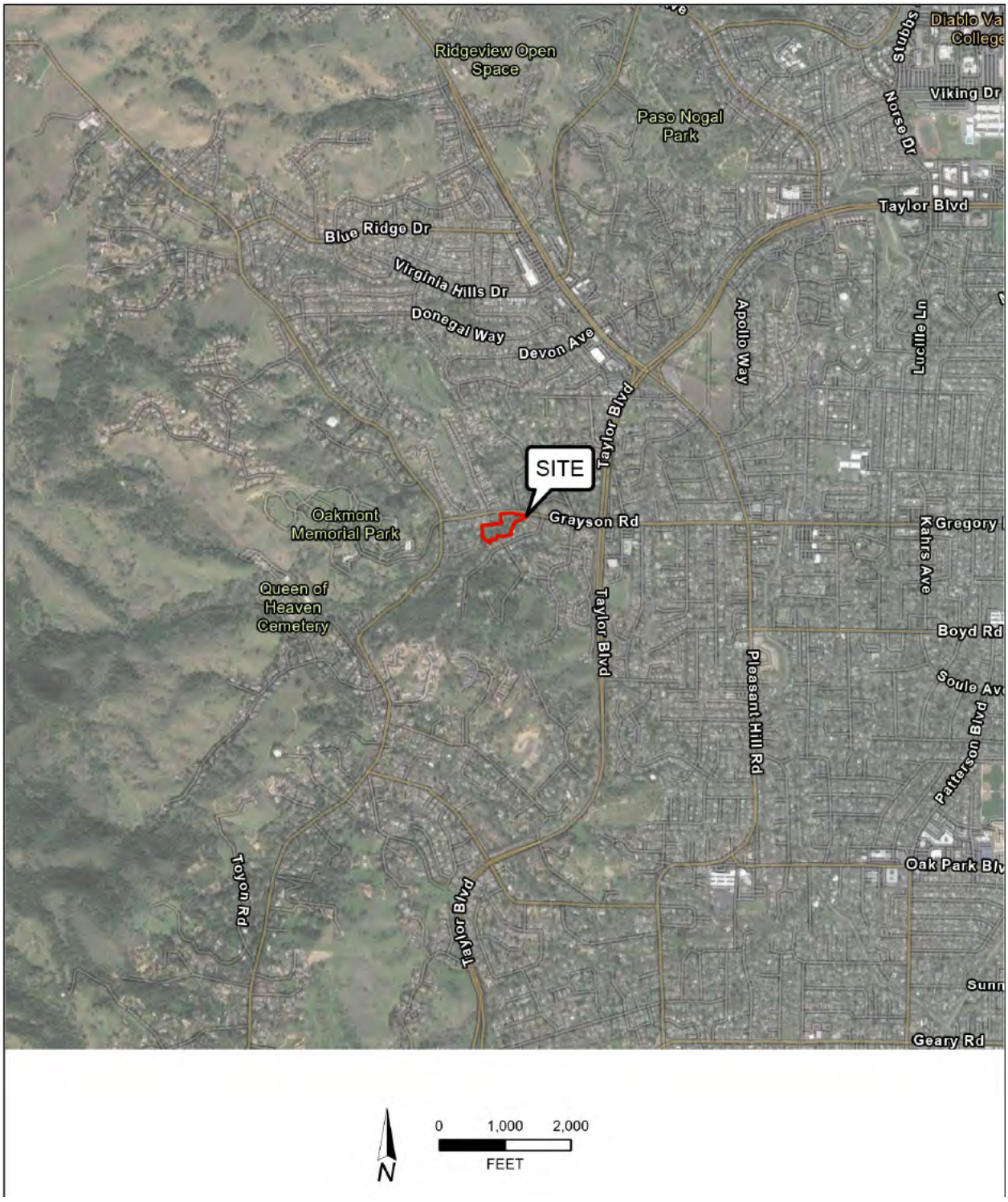
38. **Debolt Civil Engineering. 2022. Preliminary Storm Water Control Plan for 1024 and 1026 Grayson Road SD 20-9531**

39. **California Government Code Section 65915**

40. Contra Costa County, July 12, 2016. Complete Streets Policy

41. DeBolt Civil Engineering, June 8, 2020. Response to Comments Letter to Joseph Lawlor

42. California Department of Forestry and Fire Protection (CalFire). 2018. Very High Fire Hazard Severity Zones in LRA Map


Ridgeview Open Space
Paso Nogal Park
Diablo Va
College
Stubbs
Viking Dr
Norse Dr
Taylor Blvd
Blue Ridge Dr
Virginia Hills Dr
Donegal Way
Devon Ave
Apollo Way
Lucille Ln
SITE
Taylor Blvd
Grayson Rd
Oakmont Memorial Park
Gregory
Kahrs Ave
Queen of Heaven Cemetery
Boyd Rd
Taylor Blvd
Pleasant Hill Rd
Soule Av
Patterson Blvd
Oak Park Blv
Toyon Rd
Taylor Blvd
Sunn
Geary Rd
N
0
1,000
2,000
FEET

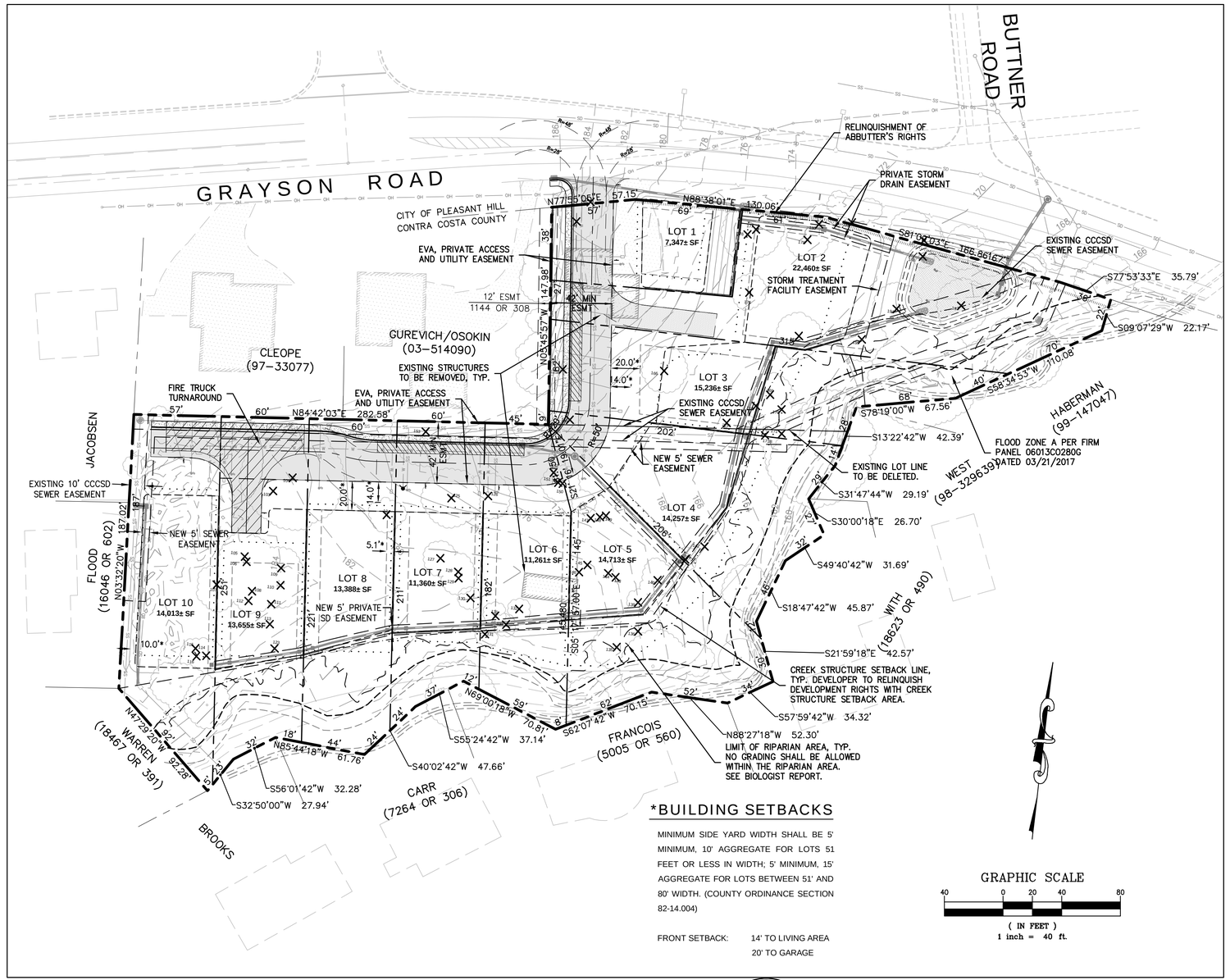
VESTING TENTATIVE MAP
SUBDIVISION SD20-9531
1024 & 1026 GRAYSON ROAD

CITY OF PLEASANT HILL, CONTRA COSTA COUNTY, CALIFORNIA

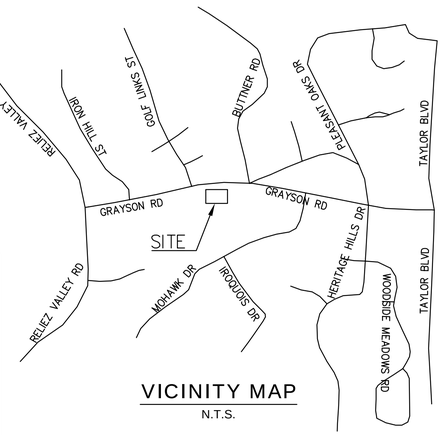
TOTAL UNITS: 10 RESIDENTIAL

LEGEND:

BLDG	BUILDING
CONC	CONCRETE
(E)/EX	EXISTING
ESMT	EASEMENT
FNC	FENCE
INV.	INVERT
P.U.E	PRIVATE UTILITY EASEMENT
REBAR.	REBAR
( )	RECORD DATA
R/W	RIGHT OF WAY
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
SDDI	STORM DRAIN DRAIN INLET
(T)	TOTAL
WM	WATER METER
WV	WATER VALVE
Ⓢ	SANITARY SEWER MANHOLE
WV	WATER VALVE
○	FOUND MONUMENT AS NOTED
◉	STANDARD STREET MONUMENT
— — — —	EASEMENT LINE
———	ADJACENT PROPERTY LINE
▬ ▬ ▬	BOUNDARY LINE
- - - - -	TIE LINE
—— – ——	CENTERLINE
—— W ——	EXISTING WATER LINE
—— EX SD ——	EXISTING STORM DRAIN PIPE
—— OE ——	EXISTING ELECTRIC CABLE
—— (E)SS ——	EXISTING SANITARY SEWER LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING BUILDING
	EXISTING BRICK PATH
	EXISTING CONCRETE
	EXISTING AC PAVEMENT
	EXISTING TREE



VICINITY MAP



N.T.S.

PROJECT SUMMARY

PROPERTY ADDRESS:	1024 & 1026 GRAYSON ROAD PLEASANT HILL, CA 94523
PROPERTY OWNER:	ANDY BYDE CALIBR VENTURES 925-683-5493
SUBDIVIDER:	ANDY BYDE CALIBR VENTURES 925-683-5493
CIVIL ENGINEER:	DEBOLT CIVIL ENGINEERING 811 SAN RAMON VALLEY BLVD DANVILLE, CA 94526 (925) 837-3780
SURVEYOR:	DEBOLT CIVIL ENGINEERING 811 SAN RAMON VALLEY BLVD DANVILLE, CA 94526 (925) 837-3780
ASSESSOR'S PARCEL NO:	166-030-001 & 002
TOTAL AREA:	3.05± AC GROSS (2.76± AC NET)
EXISTING ZONING:	R-15
PROPOSED ZONING:	PLANNED DEVELOPMENT
EXISTING LAND USE:	SINGLE-FAMILY RESIDENTIAL
PROPOSED LAND USE:	SINGLE-FAMILY RESIDENTIAL
UTILITIES:	
WATER SUPPLY:	CONTRA COSTA WATER DISTRICT
FIRE PROTECTION:	CONTRA COSTA COUNTY FPD
SEWAGE DISPOSAL:	CENTRAL CONTRA COSTA SANITARY DISTRICT
STORM DRAIN:	CITY OF PLEASANT HILL
GAS & ELECTRIC:	PACIFIC GAS & ELECTRIC
TELEPHONE:	AT&T
CABLE TELEVISION:	COMCAST

SHEET INDEX

EXISTING UTILITY NOTE:

THE UTILITY LINES SHOWN ON THIS DRAWING ARE DERIVED FROM SURFACE OBSERVATION AND ARE APPROXIMATE ONLY. ACTUAL LOCATION AND SIZE, TOGETHER WITH PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS DRAWING SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY EXCAVATION.

FLOOD ZONE

ZONE A: SPECIAL FLOOD AREA WITHOUT BASE FLOOD. ELEVATION (BFE)

ZONE X: AREAS OF 0.2% CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% CHANCE FLOOD. FLOOD INSURANCE RATE MAP PANEL NUMBER 06013C0280G, DATED 03/21/2017.

*BUILDING SETBACKS

MINIMUM SIDE YARD WIDTH SHALL BE 5' MINIMUM, 10' AGGREGATE FOR LOTS 51 FEET OR LESS IN WIDTH; 5' MINIMUM, 15' AGGREGATE FOR LOTS BETWEEN 51' AND 80' WIDTH. (COUNTY ORDINANCE SECTION 82-14.004)

FRONT SETBACK: 14' TO LIVING AREA
20' TO GARAGE

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

ENGINEER'S STATEMENT

CIVIL ENGINEERING WORK ON THIS TENTATIVE PARCEL MAP HAS BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD CIVIL ENGINEERING PRACTICE.

01/28/22

EASTON C. MCALLISTER, PE — DATE
P.E. #61148 EXP 12/31/20

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY

VESTING TENTATIVE MAP

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531
VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY CALIFORNIA

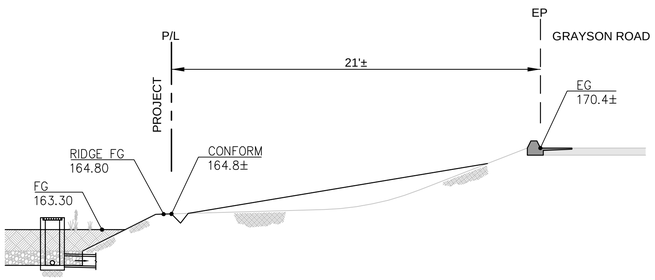
REGISTERED PROFESSIONAL ENGINEER — EASTON C. MCALLISTER — No. 61148 — EXP. 12/31/22 — CIVIL — STATE OF CALIFORNIA

EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING
45+ YEARS
811 SAN RAMON VALLEY BLVD #201
DANVILLE, CALIFORNIA 94526
(925) 837-3780 | DEBOLTCIVIL.COM

Date: 01/28/22
Scale: 1" = 40'
By: EM/mm
Job No.: 19300



B

GRAYSON ROAD FRONTAGE

SCALE: 1"=5'

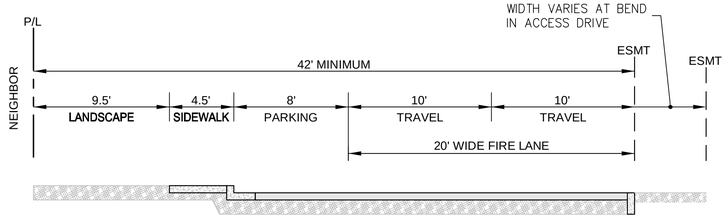
* TRASH CAPTURE DEVICE:

TRASH CAPTURE DEVICE TO BE INSTALLED IN ALL SITE INLETS (EXCLUDES C.3 TREATMENT POND OUTLET STRUCTURE.

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.



A

ACCESS DRIVE TYPICAL SECTION

SCALE: 1"=5'

PRELIMINARY GRADING, DRAINAGE AND UTILITY PLAN

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER EASTON C. McALLISTER No. 61148 EXP. 12/31/22 STATE OF CALIFORNIA CIVIL

EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING
45+ YEARS
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DANVILLE, CALIFORNIA 94526
(925) 837-3780 | DEBOLTCIVIL.COM

Date: 01/28/22
Scale: 1" = 20'
By: EM/mm
Job No.: 19300

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY.

VTM-2

Project Name: Grayson Road
Project Type: Treatment Only
APN:
Drainage Area: 137,690
Mean Annual Precipitation: 20.0

Self-Treating DMAs

DMA Name	Area (sq ft)
DMA-13	41,288.0

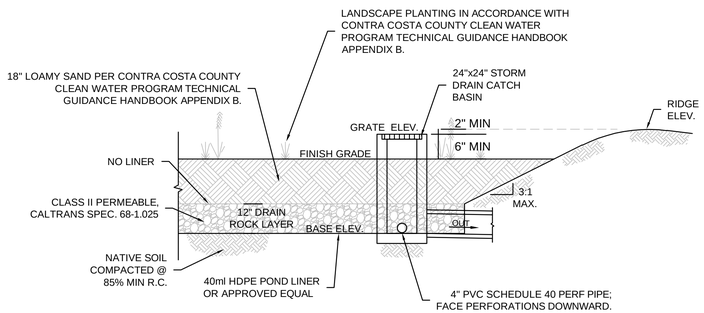
IV. Areas Draining to IMPs

IMP Name: IMP1
IMP Type: Flow-Through Planter
Soil Group: IMP1

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing			
					IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
DMA-1D	420	Pervious Concrete	0.10	42				
DMA-1H	1,859	Conventional Roof	1.00	1,859				
DMA-2D	1,912	Pervious Concrete	0.10	191				
DMA-2H	2,606	Conventional Roof	1.00	2,606				
DMA-3D	539	Pervious Concrete	0.10	54				
DMA-3H	2,606	Conventional Roof	1.00	2,606				
DMA-4D	1,554	Pervious Concrete	0.10	155				
DMA-4H	2,138	Conventional Roof	1.00	2,138				
DMA-5D	769	Pervious Concrete	0.10	77				
DMA-5H	1,859	Conventional Roof	1.00	1,859				
DMA-6D	541	Pervious Concrete	0.10	54				
DMA-6H	2,606	Conventional Roof	1.00	2,606				
DMA-7D	541	Pervious Concrete	0.10	54				
DMA-7H	2,606	Conventional Roof	1.00	2,606				
DMA-8D	541	Pervious Concrete	0.10	54				
DMA-8H	2,606	Conventional Roof	1.00	2,606				
DMA-9D	419	Pervious Concrete	0.10	42				
DMA-9H	2,606	Conventional Roof	1.00	2,606				
DMA-10D	473	Pervious Concrete	0.10	47				
DMA-10H	1,859	Conventional Roof	1.00	1,859				
DMA-11	15,913	Concrete or Asphalt	1.00	15,913				
DMA-12	47,408	Landscape	0.10	4,741				
			Total	44,776				
				Area	0.040	1.000	1,791	2,021

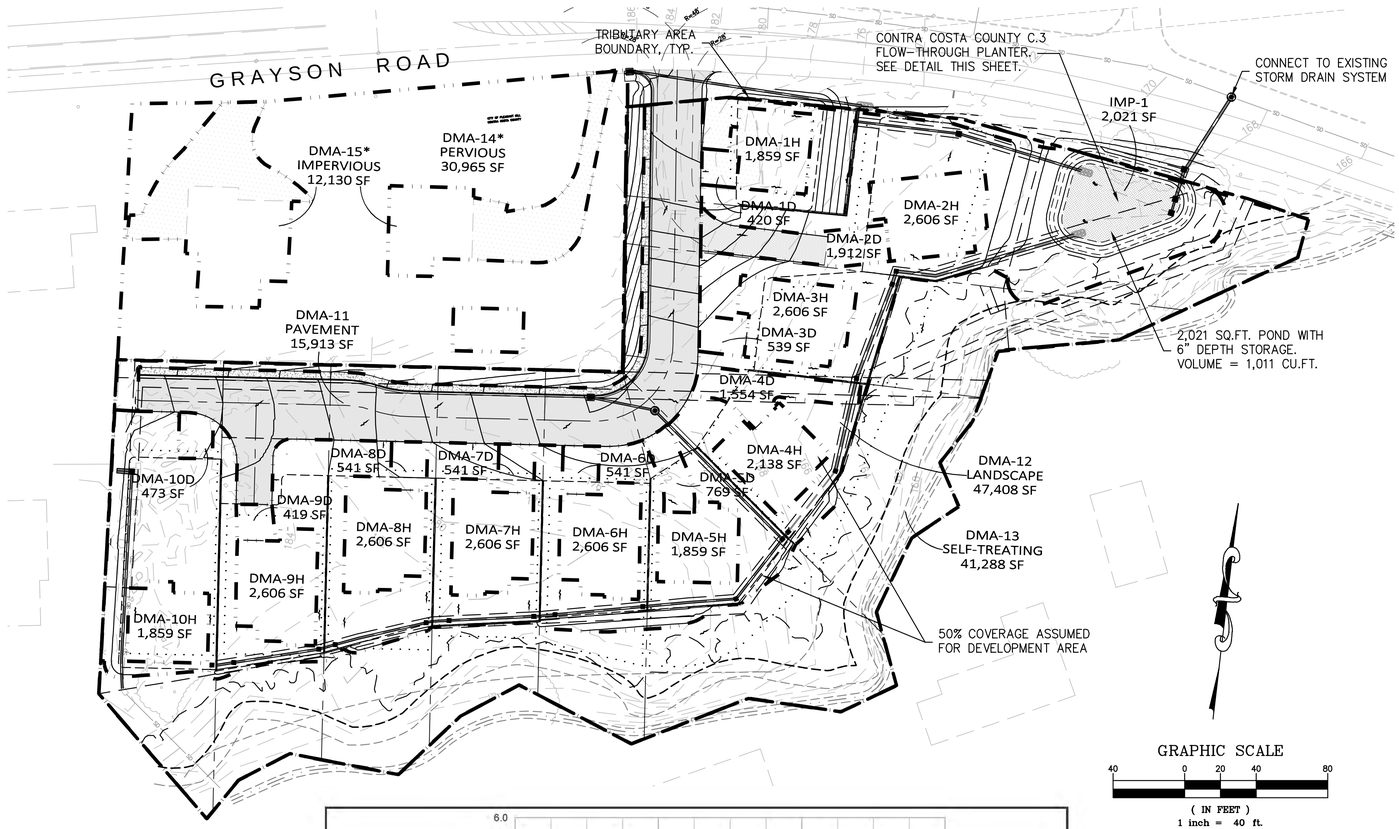
Report generated on 1/25/2022 12:00:00 AM by the Contra Costa Clean Water Program IMP Sizing Tool software (version 1.3.1.0).

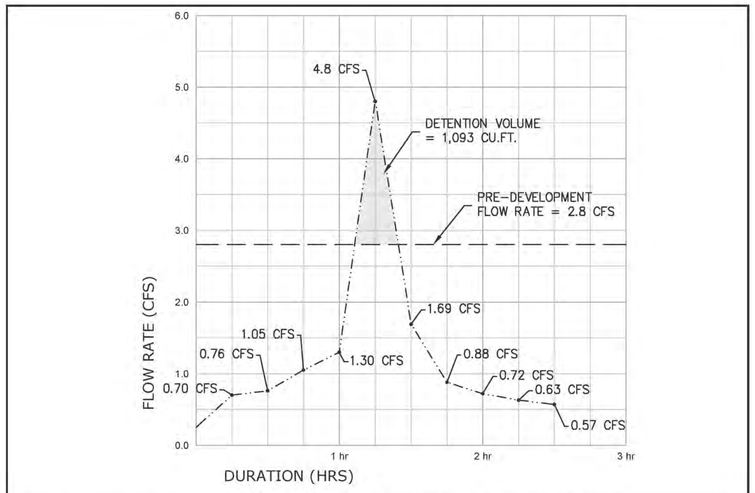
C.3 TREATMENT SIZING CALCULATIONS



NOTE:
REFER TO CONTRA COSTA COUNTY CLEAN WATER PROGRAM TECHNICAL GUIDANCE HANDBOOK CHAPTER 4 FOR ADDITIONAL INFORMATION ON FLOW-THROUGH PLANTERS.

1 / - C.3 FLOW-THROUGH PLANTER
N.T.S.





DEBOLT CIVIL ENGINEERING 45+ YEARS
811 SAN RAMON VALLEY BLVD #201 DANVILLE, CALIFORNIA 94526 (925) 837-3760 | DEBOLTCIVIL.COM

GRAYSON ROAD (SD 20-9531)
HYDROLOGY STUDY
DETENTION SIZING HYDROGRAPH

Job No.: 19300 Date: 08/10/20 Sheet: 1 of 1

DETENTION SIZING CALCULATIONS

HYDROLOGY AND STORM WATER CONTROL PLAN

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER EASTON C. McALLISTER No. 61148 EXP. 12/31/22 CIVIL STATE OF CALIFORNIA

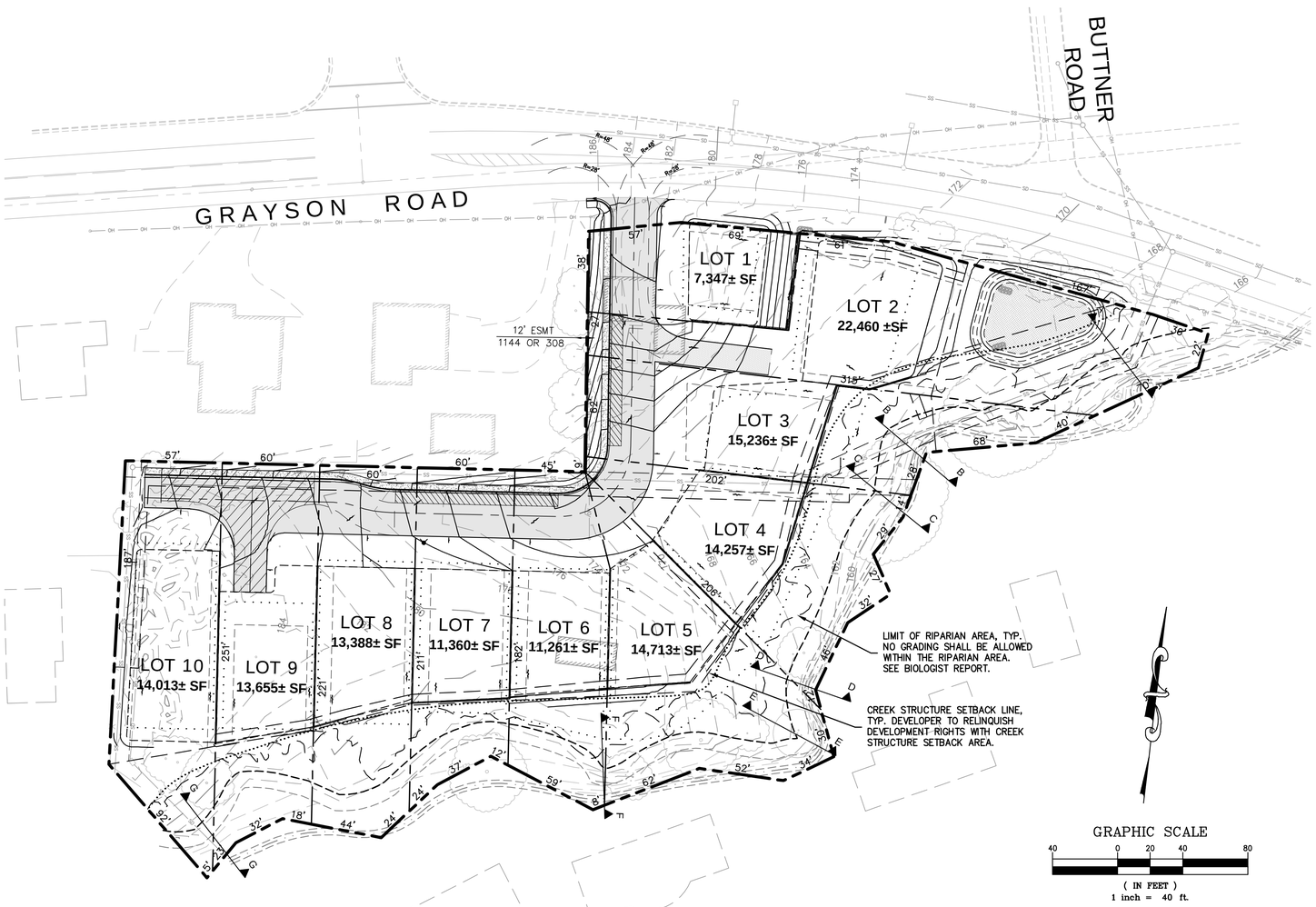
EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING 45+ YEARS
811 SAN RAMON VALLEY BLVD #201 DANVILLE, CALIFORNIA 94526 (925) 837-3780 | DEBOLTCIVIL.COM

Date: 01/28/22
Scale: 1" = 40'
By: EM/mm
Job No.: 19300

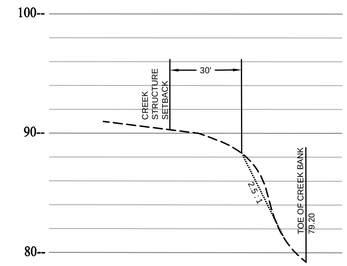
VTM-3



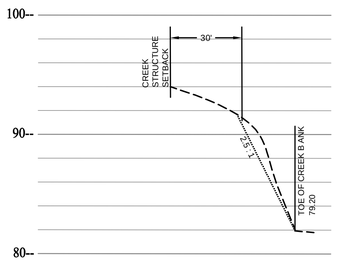
GRAPHIC SCALE

40 0 20 40 80

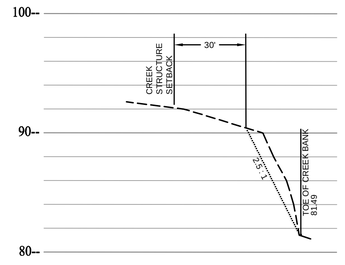
(IN FEET)
1 inch = 40 ft.



SECTION A-A



SECTION B-B



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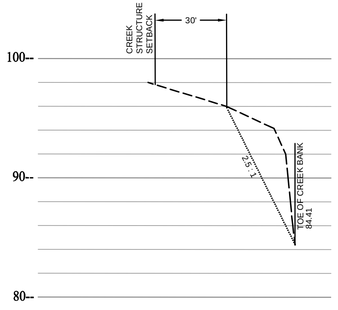

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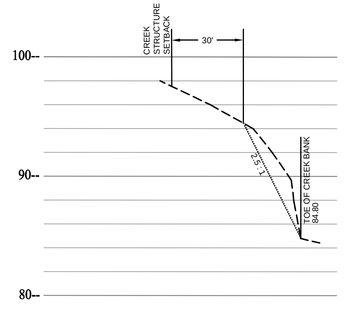
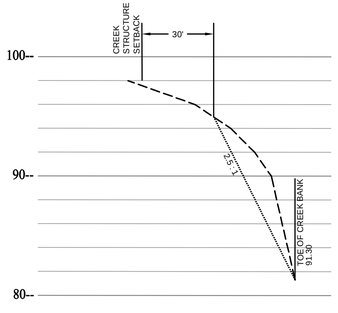
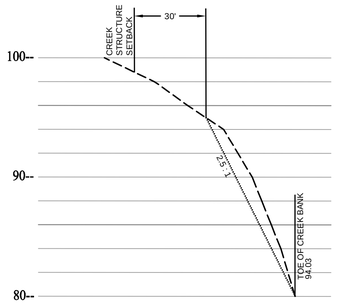


SECTION E-E



SECTION F-F



SECTION G-G

CREEK STRUCTURE SETBACK EXHIBIT

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
EASTON C. McALLISTER
No. 61148
EXP. 12/31/22
CIVIL
STATE OF CALIFORNIA

EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING
45+ YEARS
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DANVILLE, CALIFORNIA 94526
(925) 837-3780 | DEBOLTCIVIL.COM

Date: 01/28/22
Scale: 1" = 40'
By: EM/mm
Job No.: 19300

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
101	Coast live oak											This tree no longer exists. Old report stated it as a 9" tree. No evidence of a stump was found.	N/A
102	Valley oak	16	G-F	G	20	25	20	20	Y	X	M	Epicormic sprouts along scaffold branches. Within west p/l set back, some grading will likely occur within dripline.	Save Set protection fencing at dripline (d/l), and have arborist on site for any d/l encroachment:
103	Fruiting pear	10, 5, 5, 4, 4	P	P	10	0	10	10	OM	X	H	Declining tree. In proposed driveway	Remove
104	Valley oak	18, 19, 20, 12	G	G	30	30	30	30	M	X	H	Co-dominant stems at 3'. In proposed driveway.	Remove
105	Coast live oak	11, 7, 6	F-P	F	15	15	10	0	M	X	H	Co-dominant stems. Understory tree. Within building footprint.	Remove
106	Valley oak	11, 12	G	F	25NW-W				M	X	H	Co-dominant stems. Within building footprint.	Remove
107	Valley oak	4, 3, 12, 11, 5, 7, 5	G	F	25	0	18	25	M	X	H	Basal shoot from old stump. In proposed driveway. Within building footprint.	Remove
107 B	Coast live oak	11, 5, 8	F	P	15	0	0	25	M	X	H	Growing out from base of #107. Co-dominant trunks. Within building footprint.	Remove
108	Coast live oak	17	F	F	25NW-W				M	X	H	Curved trunk. Within building footprint.	Remove
109	Valley oak	12, 11, 7, 6	F	F	30N				M	X	H	One sided tree to the N/W. Dieback & epicormic sprouting. Within building footprint.	Remove
110	Valley oak	20, 11, 11, 16	G	F	25	25	0	25	M	X	H	Co-dominant trunks. Within building footprint.	Remove

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
111	Coast live oak	19	F-P	F	20	25	20	20	M	X	H	Bark inclusion on all 3 attachments. Sparse with stunted growth. Within building footprint.	Remove
112	Coast live oak	11	F	P	0	6	10	10	Y	X	H	Top broken at 12' with sprouting. Within building footprint.	Remove
113	Valley oak	7	F	P	6S				Y	X	H	Sparse canopy, 2 trunks removed. Within building footprint.	Remove
114	Valley oak	7, 4	F	F	6	6	6	6	Y	X	H	Crowded. Within building footprint.	Remove
115	Coast live oak	13	G	G	12	0	8	10	Y	X	H	3" from base of #116; crowded. Within building footprint.	Remove
116	Valley oak	7, 6	F	F	18N				Y	X	H	Very crowded. Co-dominant trunks; sweeping lean to N. Within building footprint.	Remove
117	Coast live oak	17	F-P	F-P	15NE				M		L	Sparse understory tree. Outside of grading limits.	Save
118	Valley oak	14, 18	F	F	15	15	20	20	M		L	Co-dominant stem bends to N. Outside of grading limits.	Save
119	Coast live oak	17	Dead										Remove.
120	Coast live oak	17	F-P	F	10	10	10	10	M		L	Ivy covering trunk. In decline; sycamore borer damage. Treat for Borer. Outside of grading limits in creek setback.	Save
121	Valley oak	13	F	F	20S				Y		L	Ivy covering trunk. Outside of grading limits in creek setback.	Save
122	Valley oak	22	P	P	25N				M		L	Ivy covering trunk. Declining canopy; sweeping lean to N. Outside of grading limits in creek setback.	Save
122 A	Coast live oak	30	F	F	50N				M		L	In creek structure setback. Significant lean to N. Ivy covering trunk. Outside of grading limits in creek setback.	Save
123	Valley oak	14, 7, 7, 10, 10	F	F	0	25	0	15	M	X	H	Sparse canopy. Co-dominant stems at 6'. Within grading limits	Remove
124	Valley oak	16	F	G	15	20	15	8	M	X	H	Tag embedded in trunk. Epicormic sprouts. Within grading limits	Remove

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
124 B	Coast live oak	7	F	P	6	10	4	0	Y	X	H	90° correcting bend in trunk. Within grading limits	Remove
125	Chinese pistache	27	G	G	25	25	25	25	OM	X	H	Dieback; slightly drought stressed. Within grading limits	Remove
126	Chinese pistache	17, 17, 10, 8	F	G	25	25	25	6	OM	X	H	Within grading limits	Remove
127	Coast live oak	17	G	G	15	0	0	20	M	X	H	Within grading limits	Remove
128	Valley oak	19	G	F	20	25	0	20	M	X	H	Within grading limits	Remove
129	Valley oak	14	G	F	0	20	20	20	Y	X	H	Within grading limits	Remove
130	Coast live oak	16	F	G	15	15	10	0	Y	X	H	Sparse lower canopy. Within grading limits	Remove
131	Calif. Buckeye	11, 8	F	F	15	20	25	20	M	X	H	Dead lower/interior canopy. Within grading limits	Remove
131 B	Valley oak	18	F	F	35N				M	X	H	Not surveyed. 35" lean to N. Ivy and poison oak covering trunk. Within grading limits	Remove
132	Coast live oak	11	F	F	40N				Y	X	H	10" lean to N. Tag engulfed by trunk. Within grading limits	Remove
133	Coast live oak	14	G	F	40N-20NW				Y	X	H	10" lean to N. Within grading limits	Remove
134	Monterey pine	50	P	F	50	50	50	50	OM	X	M	Over mature tree, in declining years. Sparse canopy. Recommend removal. Less than 5 years of anticipated lifespan.	Remove
135	Coast redwood	18, 18, 10	F	G	20	20	20	20	M	X	H	Drought stressed; needs irrigation. Within grading limits.	Remove
135 A	Calif. Buckeye	6, 8, 11, 7, 7, 9, 11, 8	G	G	20	20	20	20	M		L	Within creek structure set back. ~3 trunk clusters treated as one.	Save
136	Silver dollar eucalyptus (*Eucalyptus cinerea*)	13, 16	F	F	25	15	10	0	M	X	H	Failed trunk. Within grading limits.	Remove

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
137	Coast live oak	40	G-F	P	35	35	35	35	M	X	M-H	Ivy covering trunk. Co-dominant stems at 4' with included bark. Grading just north of trunk proposed. Pull grade limits at least 15' from trunk in order to save tree.	Save If grading can be adjusted.
138	Valley oak	18	F	F	15	15	5	0	M	X	M-H	Ivy covering trunk. Grading just north of trunk. Recommend pulling grade limits at least 10' from trunk.	Save If grading can be adjusted
138 B	Buckeye	17, 12, 13, 14, 15, 13, 12, 10, 10, 13	F-P/P	F	20	20	20	20	M		L	In creek structure setback. Top dieback.	Save
139	Mimosa		Dead									Within grading limits.	Remove
140	Coast live oak	17	G	G	18	18	18	18	M	X	H	Within grading limits.	Remove
141	Coast live oak	9	G	G	10	10	10	10	Y	X	H	Tag embedded in trunk but readable. Within grading limits.	Remove
142	Coast live oak	19, 20	G	F	30	30	10	10	M	X	H	Co-dominant trunks. Within grading limits.	Remove
142 B	Coast live oak	20	G	F	30	0	0	20	M	X	H	In creek structure setback. Within grading limits.	Remove
142 C	Coast live oak	14	G	G	20	15	0	0	Y	X	H	Not surveyed.	
143	Valley oak	15	G-F	G	12	12	12	12	Y	X	H	Ivy on trunk. Within grading limits.	Remove
144	Valley oak	11	G	F	15SE				Y	X	H	Ivy on trunk. Understory tree. Within grading limits.	Remove
145	Coast live oak	22	G-F	G	25	20	18	20	M	X	H	Ivy on trunk. Within grading limits.	Remove
146	Coast live oak	18, 15	G	F	25	0	20	25	M	X	H	Co-dominant trunks. Within grading limits.	Remove
147	Fruiting plum		Dead							X	H	Within grading limits.	Remove
148	Persimmon	6, 7	G	P	6	15SE		5	M	X	H	Leaders poorly attached, breaking apart. Within grading limits.	Remove
149	Black Walnut	7, 6	G	F	8	15	15	0	Y	X	H	Within grading limits.	Remove

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
149 B	Valley oak	7	G	F	25NE				Y	X	H	Not surveyed. Within grading limits.	Remove
150	Coast live oak	19	G	F	0	25	20	20	M	X	H	One stem topped by PG&E, Poor location. Within grading limits.	Remove
151	Coast live oak	15	F-P	P	25N-NE		0	20	Y	X	H	Topped by PG&E. Sparse canopy and deadwood. Within proposed driveway	Remove
152	Coast live oak	15	G	F	10	15	0	0	Y	X	H	Sided by PG&E. Within proposed driveway.	Remove
153	Valley oak	20, 15	G	F	10	25	30	30	M	X	H	Somewhat lions tailed, branches elongated to S. Within grading and sewer easement.	Remove
154	Valley oak	13	G	G-F	10	0	20	20	Y	X	M-H	1' from existing gravel driveway. Trunk buried. At edge grading limits. Arborist on site for grading.	Save Arborist to pull fill back from base of tree.
155	Coast live oak	11	G	F	8	12	15	0	Y	X	H	Topped by PG&E. Within proposed driveway.	Remove
156	Coast live oak	9	G	F	6	8	6	0				Growing up under PG&E wires. Within proposed driveway.	Remove
157	Coast live oak	10	G	F	10	0	10	18	Y	X	L	Off-site. Trunk buried. 1.5' from existing gravel driveway. Grading at edge of dripline.	Save Arborist to pull fill back from base of tree.
158	Chinese pistache	12	F	F	15	12	0	10	M	X	H	Partially topped. Within grading for road.	Remove
159	Coast live oak	8	G	F-P	12NW				Y	X	L	Off-site. Trunk buried. Sided by PG&E. Grading at edge of dripline.	Save
160	Valley oak	7	G	F	8	8	0	0	Y	X	L	Off-site. Co-dominant stems at 7'. Topped by PG&E. Trunk buried. Grading at edge of dripline.	Save
160 B	Coast live oak	7	G	F	15N-NE				Y	X	L	Off-site; not surveyed. Lean to NE. 6" NW of #160. . Grading at edge of dripline.	Save
161	Iron bark euc.	11, 7										Previously removed .Suspect by PG&E (under wires)	N/A
162	Coast live oak	15, 11	G	P	15	15	15	15	M	X	L	Topped by PG&E, co-dominant stems. Grading for road at edge of dripline.	Save

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
163	Coast live oak	11	G	G	6	6	6	6	Y	X	L	Reduced by PG&E. Grading at edge of dripline	Save
164	Incense cedar	15	F	F	7	7	7	7	M	X	H	Sweeping S shaped trunk. Within proposed road.	Remove
165	Incense cedar											Removed.	N/A
166	Coast live oak	19, 20	G-F	F	30	30	30	0	M	X	H	Co-dominant stems. Moderate sycamore borer. Within grading limits.	Remove
166 B	Siberian elm	7, 11	F-P	P	18	0	0	18	M	X	H	Not surveyed. Co-dominant stems at 2'. Within grading limits.	Remove
166 C	Siberian elm	9, 8, 7	P	P	20	0	0	20	M	X	H	Not surveyed. Basal sprouts; decay. Within grading limits.	Remove
167	Black walnut	9, 4, 4	F	F	20	0	0	20	M	X	H	Within grading limits.	Remove
168	Black walnut	8	P	P	20NW				Y	X	H	Understory tree; no growth in past 14 years. Within grading limits.	Remove
169	Coast live oak	20	G	F	35	20	20	20	M	X	H	Within grading limits.	Remove
169 B	Coast live oak	9	G	F	30NW				Y	X	H	Not surveyed. Understory tree. 40° phototropic lean to NW. Within grading limits.	Remove
170	Coast live oak	14	G	G	8	8	8	8	Y	X	H	Trunk buried. Within grading limits.	Remove
171	Coast live oak	14	F-P	F	35N-NW				Y	X	H	Ivy around base, upper branches are damaged by a fungal canker at 15'. On creek bank well. Within grading limits.	Remove
171 B	Coast live oak	14	G	G	35NW				Y	X	H	In creek structure setback. 40° lean to NW. Within grading limits.	Remove
172	Monterey pine	48	F-P	F-P	30	30	30	30	OM	X	H	5° lean to N/W. Grading up to base of tree. Only 3-5 years of anticipated lifespan left.	Remove
173	Calif. Buckeye	14, 14, 8, 8, 8, 7, 7, 5	G	F	35	20	0	20	M	X	M-H	Low branching (trunks laying on ground). Grading limits well within N/W dripline. Pull grade limits back so 15' from trunk.	Save Assuming grade limits can be adjusted.
173 B	Calif. Buckeye	11, 12	G	F	10	10	10	10	M		L	In creek structure setback. Ivy covering tree.	Save

ARBORIST REPORT
TREE INVENTORY

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER EASTON C. McALLISTER No. 61148 EXP. 12/31/22 CIVIL STATE OF CALIFORNIA

EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING
45+ YEARS
811 SAN RAMON VALLEY BLVD #201
DANVILLE, CALIFORNIA 94526
(925) 837-3780 | DEBOLTCIVIL.COM

Date: 01/28/22
Scale: N.T.S.
By: EM/mm
Job No.: 19300

VTM-5

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
173 C	Coast live oak	8	F	P	25N				Y	X	L-M	Understory tree with heavy lean (trunk horizontal before correcting) to NW. Young tree with some dripline grading encroachment.	Save
174	Black walnut	23	F-P	F	20	20	20	25	M	X	H	Low branching, old mistletoe in canopy, dieback. Within grade limits.	Remove
175	Siberian elm	17, 17, 15	P	P	20	20	20	20	M	X	H	Tree in decline, poorly structured. Within grade limits.	Remove
176	Coast redwood	30	F/F-P	G	15	15	15	15	M	X	H	Drought-stressed. Within grade limits.	Remove
177	Coast redwood	26	F/F-P	G	15	15	15	15	M	X	H	Drought-stressed. Within grade limits.	Remove
177 B	Valley oak	11	G	G	8	8	8	8	Y	X	H	Not surveyed. Chain on trunk. Within grade limits.	Remove
178	Valley oak	14, 6	G	F	15	15	20	20	Y	X	H	Lean to SW. Within grade limits.	Remove
178 B	Valley oak	8	G	F	12	12	0	0	Y			Not surveyed. Within grade limits.	Remove
179	Calif. Buckeye	8, 7, 6	G	G	12	12	12	12	M	X	H	Within grade limits	Remove
180	Mulberry	18	P	P	0	10	10	0	OM	X	H	Previously topped. Within grade limits.	Remove
181	Valley oak	11	F	F	15NE-NW				Y		L	Grading just outside dripline.	Save
182	Valley oak	11	F	F	15S				Y	X	L-M	Grading at edge of dripline.	Save
183	Valley oak	13	F	F	20 NE	15	0	0	Y	X	L-M	Grading at edge of dripline.	Save
184	Black walnut	8, 8, 7	P	P	8	8	8	8	M	X	H	Declining health. Within grade limits.	Remove
185	Valley oak	11	F	F	18 NE	10	0	0	Y	X	L-M	S shaped trunk. Grading at edge of dripline.	Save

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
186	Calif. Buckeye	7, 7, 6, 6, 5, 5, 5	G	G	18	18	18	18	M	X	M	Tangled with mulberry, and walnut. Grading within dripline.	Save Arborist on site during grading.
187	Mulberry	18	P	P	15	15	15	15	M	X	H	Drought stressed, tangled with buckeye. Within grading limits.	Remove
188	Black walnut	9	F	F	20S				Y	X	H	Competing with buckeye, recommend removal. Within grade limits.	Remove
188 B	Coast live oak	11	F	G	12	12	12	12	Y	X	H	Not surveyed. Within storm treatment area.	Remove
188 C	Coast live oak	11	G	G	6	0	10	15	Y	X	H	Not surveyed. Within storm treatment area.	Remove
189	Calif. Buckeye	9, 9, 8, 7, 7, 5, 5, 5, 3, 3, 3	G	G	15	20	25	20	M	X	L-M	Grading limits at edge of dripline.	Save
190	Mulberry	16	Dead										Remove.
191	Coast live oak	14	G	G	10	10	10	10	Y		L	Grade limits just outside dripline.	Save
191 B	Coast live oak	11, 9	F	F	18NE-NW				M		L	Not surveyed. Lean over road.	Save
192	Mulberry	19	P	P	8	8	8	8	OM	X	H	Drought stressed. In decline. Within grade limits.	Remove
192 A	Coast live oak	17	G	F	18 NE	10	10	18 NW	M		L	In creek structure setback. Reduced by PG&E. By street, lifting asphalt curb.	Save
192 B	Willow	20, 20	P	P	15	0	0	0	OM		L	Outside northeast property corner along Grayson. Topped by PG&E; sparse canopy. Recommend removal	Remove
192 C	Willow	24	F	P	0	0	25	30 SW	OM		L	Outside northeast property corner along Grayson. Uprooted to S. Fallen tree.	Remove
193	Siberian elm	12, 12, 10, 5, 5, 4	P	P	8	8	8	8	M	X	H	Dying tree. Within grading limits	Remove

#	Species	DBH	Health	Structure	Dripline N	E	S	W	Age	DE	CI	Comments	Action
194	Siberian elm	12, 9, 4	P	P	0	15	15	15	M	X	H	Dying tree. Within grade limits.	Remove
194 B	Coast live oak	9	G	F	15N				Y	X	H	Not surveyed. Up against elm.	Remove
195	Siberian elm	13, 4	P	P	20N				M	X	H	Declining health. Within grade limits.	Remove
196	Coast live oak	19	G	F	20 NW	0	20	20	M		L	Sweeping trunk	Save
197	Bush eucalyptus	10, 8, 8	Dead						M		L	Dead/failed. Fire hazard.	Remove
198	Bush eucalyptus	15, 15	P	P	10N				M		L	Dying, fire hazard.	Remove
199	Blue gum euc.	50	F	F-P	25	20	20	20	M		L	10" branch failure to N in 2006; minor sprouting from failure. Prune for safety if targets within 50ft.	Save
200	Bush eucalyptus	18, 5, 6	F	P	15S				M		L	Declining health. Recent failures. Prune for safety.	Save
201	Monterey pine	24	F	P	20	20	20	20	OM		L	Over mature tree, badly included co-dominant stems. Anticipate short life span, recommend removal.	Remove
202	Monterey pine	22	P	P	0	20	20	0	OM		L	Over mature tree, declining health. Recommend removal.	Remove
203	Monterey pine											Removed.	N/A
204	Monterey pine	18	F	P	25E				M		L	Poorly tapered trunk; lean to E. Recommend removal.	Remove
205	Monterey pine											Removed.	N/A
206	Calif. Buckeye	15, 15, 10, 10	G	G	25	25	25	25	M		L	Healthy tree.	Save

ARBORIST REPORT
TREE INVENTORY

1024 & 1026 GRAYSON ROAD
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VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY

REGISTERED PROFESSIONAL ENGINEER EASTON C. McALLISTER No. 61148 EXP. 12/31/22 CIVIL STATE OF CALIFORNIA
CALIFORNIA

EASTON C McALLISTER - PE 61148 / PLS 9583
RENEWAL DATE: 12/31/22 (PE) 03/31/23 (PLS)

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Job No.: 19300

VTM-6

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY.

CONCEPTUAL BUILDING LAYOUT

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY

REGISTERED PROFESSIONAL ENGINEER
EASTON C. McALLISTER
No. 61148
EXP. 12/31/20
CIVIL
STATE OF CALIFORNIA
CALIFORNIA

EASTON C McALLISTER - R.C.E. 61148
RENEWAL DATE: 12/31/22

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Date: 03/25/22
Scale: 1" = 20'
By: EM
Job No.: 19300

VTM-7

Calibr Ventures c/o Andy Byde, (Applicant / Owner)

Mitigation Monitoring and Reporting Program
County File #CDSD20-09531

1024 and 1026 Grayson Rd
Pleasant Hill, CA 94523

April 2022

SECTION 1: AESTHETICS	
Potential Impact: The change in ambient nighttime light levels on the project site, and the extent to which project lighting would spill off the project site and affect adjacent light-sensitive areas, would determine whether the project could adversely affect nighttime views in the area. Project lighting could create a potentially significant adverse environmental impact due to substantial new light and glare on neighboring properties and Grayson Creek	
Mitigation Measures:	
Aesthetics 1: Thirty days prior to application for a building permit for subdivision improvements, the applicant shall submit a Lighting Plan for review and approval by the CDD. At a minimum, the plan shall include the following measures: **All outdoor lighting, including façade, yard, security, and street lights, shall be oriented down, onto the project site or road.** **Back shields or functionally similar design elements shall be installed on every lighting pole to reduce lighting from spilling off site, and to ensure that lighting remains within the project site.**	
Implementing Action:	COA
Timing of Verification:	At least 30 days prior to applying for building permits for the new residence.
Responsible Department, Agency, or Party:	Project Proponent and CDD Staff.
Compliance Verification:	Review and approval of construction drawings (e.g., site plan, floor plans, elevations and grading plans) by Department of Conservation and Development, Community Development Division (CDD) staff, to verify compliance with all mitigations and conditions of approval.
SECTION 2: AIR QUALITY	
Potential Impact: Grading and construction activities could have a potentially significant adverse environmental impact by exposing sensitive receptors to substantial pollutant concentrations.	
Mitigation Measures:	
Air Quality 1: The following Bay Area Air Quality Management District, Basic Construction Mitigation Measures shall be implemented during project construction and shall be included on all construction plans. **All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.** **All haul trucks transporting soil, sand, or other loose material off-site shall be covered.**	

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

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

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

Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Implementing Action:	COA
Timing Verification:	Prior to CDD issuance of a grading or building permit, all construction plan sets shall include Basic Construction measures.
Responsible Department or Agency:	Project proponent and CDD.
Compliance Verification:	CDD Plan Check review of plans prior to issuance of building or grading permit, and field verification by the Building Inspection Division.

Potential Impact: Grading and construction activities using diesel powered vehicles and equipment on the site could have a potentially significant adverse environmental impact by creating localized odors.

Mitigation Measures:

The Bay Area Air Quality Management District, Basic Construction Mitigation Measures outlined in Mitigation Measure **Air Quality 1** would reduce the impact to a less than significant level.

SECTION 3: BIOLOGICAL RESOURCES

Potential Impact: . Three of the birds listed above (red-tailed hawk, red-shouldered hawk, Cooper's hawk, sharp-skinned hawk, and destrel) were present, and observed foraging on the project site. Additionally, a Cooper's hawk was observed on the project site exhibiting nesting behaviors.

Mitigation Measures:

Biology 1: If project construction-related activities would take place during the nesting season (February 15 through August 31), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the project site and the large trees within the adjacent riparian area should be conducted by a qualified biologist no earlier than one week prior to the commencement of the tree removal or site grading activities. If any active nests are observed during surveys, a suitable avoidance buffer from the nests should be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors). These nests would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. The qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report should be submitted to the County's Department of Conservation and Development for review and approval prior to the time that buffers are removed.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: . CNDDB listed 5 occurrences of California red-legged frog (Rana draytonii) (CRLF) in the 5-mile radius of the project site. Additionally, during the April 2021 survey, the Project Biologist identified suitable habitat for the CRLF	
Mitigation Measures:	
Biology 2: Prior to construction activities, pre-construction surveys for CRLF shall be completed by a qualified biologist. The qualified biologist shall survey the project site for CRLF preceding the commencement of construction activities to verify absence/presence of the species. All ruts, holes, and burrows shall be inspected for CRLF prior to and during excavation or removal. The biological monitor shall precede initial grading equipment to look for and avoid amphibians that may be present on the project site. In the event a CRLF is encountered onsite, construction activities in the area shall cease until the animal has left the location on its own will and is no longer in danger. The Project Manager or Project Biologist will report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours. No one other than a USFWS-approved biologist is permitted to handle or capture CRLF, and CRLF will not be taken or harassed. **Exclusion fencing shall be installed along the entire length of Grayson Creek to prevent CRLF and Western Pond Turtle from migrating into work areas. No BMPs or other construction materials containing monofilament netting, or other plastic netting that could entangle reptiles or amphibians shall be used.**	
Implementing Action:	COA

Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: Five occurrences of western pond turtle (Actinemys marmorata) within the 5-mile radius of the project site. Water was present in Grayson Creek during the April 2021 survey. Therefore, western pond turtle could use the creek for foraging and aquatic dispersal.	
Mitigation Measures:	
Biology 3: A pre-construction survey for Western Pond Turtle shall be performed by a qualified biologist no more than 48 hours prior to ground disturbance or vegetation removal. Surveys shall determine the presence/absence of this species.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: based on habitat suitability, it was determined that bats have a moderate potential to utilize the site in a roosting and foraging capacity. These bat species include: Western red bat (Lasiurus blossevillii), hoary bat (Lasiurus cinereus) and Yuma myotis (Myotis yumanensis). Since project construction-related activities such as tree or structure removal would take place, impacts to these species is possible	
Mitigation Measures:	
Biology 4: To avoid impacts of special–status bats, the following mitigation measures shall be implemented prior to the removal of any existing trees or structures on the project site: **a) A bat habitat assessment shall be conducted by a qualified bat biologist no earlier than 15 days prior to commencement of construction activities, if construction occurs during seasonal periods of bat activity (February 15 to October 30), to determine suitability of each existing structure or tree to be removed as bat roost habitat.** **b) Structures found to have no suitable openings can be considered clear for project activities as long as they are maintained so that new openings do not occur. Structures found to provide suitable roosting habitat, but without evidence of use by bats, may be sealed until project activities occur, as recommended by the bat biologist. Structures with openings and exhibiting evidence of use by bats shall be scheduled for humane bat exclusion and eviction, conducted during appropriate seasons, and under supervision of a qualified bat biologist.**	

c) Bat exclusion and eviction shall only occur between February 15 and April 15, and from August 15 through October 30, in order to avoid take of non–volant (non–flying or inactive, either young, or seasonally torpid) individuals. If a maternity site is found, impacts to the tree or structure will be avoided until the young have reached independence.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the project site could adversely affect aquatic life within the adjacent water features.	
Mitigation Measures:	
Biology 5: Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the project site could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. A Storm Water Pollution Prevention Plan (SWPPP) and a SWMP shall be designed to ensure that best management practices (BMPs) are implemented so there are no impacts to water quality in Grayson Creek resulting from project construction or postconstruction storm water run-off.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: A riparian woodland corridor of approximately 1.5 acres occurs along Grayson Creek, a perennial creek, located in the southern portion of the project site. Given the proximity to project activities, an impact to the habitat could be expected	
Mitigation Measures:	
Biology 6. A permanent riparian setback shall be designated as shown on the Vesting Tentative Map as the Limit of Riparian Area (and further shown as Figure 11 of Biological Resources Report) as shown on the project site plan (Sheet 1). A permanent wildlife -friendly fence shall be	

constructed along the setback line to limit encroachment into the area. The riparian setback shall be protected via a permanent deed restriction that is recorded against the title of the property and that shall run with the title of land in perpetuity (subject to any pre-existing publicly owned easements). The deed restriction shall be recorded on the Final Map and shall include written documentation specifying allowed and prohibited uses within the setback. Any activities allowed within the setback shall inure to the benefit of the preserved creek and riparian corridor. No development of any kind, including roads or grading, shall be allowed in the deed restricted area. Implementation of these mitigation measures would reduce impacts to trees to a level considered less than significant.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: The project could impact adjacent state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	
Mitigation Measures:	
Biology 7: Grayson Creek shall be permanently protected from site development by the establishment of the Creek Structure setback (as shown on the Vesting Tentative Map). The Creek Structure setback shall be protected via a permanent deed restriction and dedication of development rights to the County and shall be recorded against the title of the property and shall run with the title of land in perpetuity.	
Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.
Potential Impact: The proposed project plans on the removal of approximately 83 trees including native species such as coast live oak, valley oak, black walnut, and buckeye. Native trees and all trees greater than 6.5 inches in diameter at breast height (dbh) are considered to be protected under the Contra Costa County Tree Protection and Preservation Ordinance.	
Mitigation Measures:	
Biology 8: To offset impacts resulting from the removal of trees, the project site shall be restored by planting replacement trees in all open areas within the project site. Mitigation numbers would be based on a 3: 1 replacement ratio for the native trees removed and a 1: 1 ratio for nonnative	

trees that are removed. Replacement trees would be native species of the same species composition as exists in the natural areas of the project site, and would be no larger than five gallon size.

At least 30 days prior to recording the Final Map, the applicant shall submit a tree preservation and management plan, to be reviewed and approved by the Zoning Administrator. The planting plan shall include a planting detail that specifies where all replacement trees would be planted on the project site. Adequate measures shall be established to minimize predation of planted trees by rodents including, but not limited to, pocket gophers and/or California ground squirrels. The landscape plan planting plan shall be installed prior to the acceptance of the subdivision.

Biology 9: During project implementation, the applicant shall implement the following Tree Preservation Guidelines, as detailed in the Revised Arborist Report Dated May 6, 2020 prepared by Traverso Tree Service, specially:

Pre- Grading Phase

a. Mulch from tree removals may be spread out under the driplines of trees that will be retained, keeping at least 12" away from the trunks.

b. Prior to construction or grading, contractor shall install protection fencing to construct a temporary Tree Protection Zone (TPZ) around each tree or grove of trees to be saved.

c. TPZ fencing shall encompass the driplines and be approved by the project arborist.

d. TPZ fencing shall remain in an upright sturdy manner from the start of grading until the completion of construction. Fencing shall not be adjusted or removed without consulting the project arborist.

Grading and Construction Phase

a. The project arborist shall be on-site during excavation/grading within driplines, especially trees: #'s 102, 137, 138, 154, 157, 159, 160, 160b, 162, 163, 173, 173c, 182, 183, 185, 186, 189.

b. Should roots > 2" be encountered, arborist shall cleanly prune roots with a handsaw or sawzall, and immediately re-cover. Irrigate as necessary.

c. If needed, canopy pruning shall be performed by personnel certified by the International Society of Arboriculture (ISA). All pruning shall adhere to ISA and American National Standards Institute (ANSI) Standards and Best Management Practices.

d. Project arborist to set guidelines prior to pruning.

e. Should Tree Protection Zone (TPZ) encroachment be necessary, the contractor shall contact the project arborist for consultation and recommendations.

f. Contractor shall keep TPZs free of all construction-related materials, debris, fill soil, equipment, etc. The only acceptable material is mulch spread out beneath the trees.

g. Should any damage to the trees occur, the contractor shall promptly notify the project Arborist to appropriately mitigate the damage.

Landscaping Phase

a. The Tree Protection Zone (TPZ) fencing shall remain in place with the same restrictions until landscape contractor notifies and meets with the project arborist.

b. Avoid all fill work, grade changes, and trenching within driplines unless it is performed by hand, and approved by the project arborist.

c. Pipes shall be threaded under or through large roots without damaging them.

d. Contractor shall avoid trenching and grade changes within driplines.

e. All planting and irrigation shall be kept a minimum of 10' away from native oaks. All irrigation within the driplines shall be targeted at specific plants, such as drip emitters or bubblers. No overhead irrigation shall occur within the driplines of native oaks.
f. All planting within oak driplines shall be compatible with oaks, consisting of plant material that requires little to no water after two years' establishment. A list of oak compatible plants can be found in a publication from the California Oak Foundation, available at: http://californiaoaks.org/wpcontent-/uploads/2016/04/CompatiblePlantsUnderAroundOaks.pdf

Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	CDD review.

SECTION 4: CULTURAL RESOURCES

Potential Impact: The project could cause a substantial adverse change in the significance of a historical resource as defined in California Environmental Quality Act Guidelines Section 15064.5. Subsurface construction activities have the potential to damage or destroy previously undiscovered historic and prehistoric resources. Historic resources can include wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. If during project construction, subsurface construction activities damaged previously undiscovered historic and prehistoric resources, there could be a potentially significant impact.

Mitigation Measures:

Cultural Resources 1: Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archeological Materials

An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology should inspect the site once grubbing and clearing are complete, and prior to any grading or trenching into previously undisturbed soils. This will be followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the Contra Costa County Department of Conservation and Development for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an Archaeologist has evaluated the situation. The applicant for the proposed project shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction

within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the Contra Costa County Department of Conservation and Development, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.

Cultural Resources 2: In the event of accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 shall be followed. If during the course of construction activities there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98.

2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:

- **The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.**
- **The descendant identified fails to make a recommendation.**
- **The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.**

Implementing Action:	COA
Timing of Verification:	During initial review of construction plan sets and throughout project.
Responsible Department, Agency, or Party:	Project proponent and CDD.
Compliance Verification:	Include on plan sets during plan check and submittal of archaeologist report in the event of a find, for CDD review.

SECTION 5: GEOLOGY AND SOILS	
Potential Impact: The project could significantly impact the potential for increased exposure to adverse effects, including the risk of loss, injury or death from seismic-related ground failure, including liquefaction.	
Mitigation Measures:	
Geology 1: Incorporation of and Compliance with the Recommendations in the Geotechnical Investigation. All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical report on the proposed project site that has been prepared by ENGEO, titled Preliminary Geotechnical Exploration, (October 2019). Design, grading, and construction shall be performed in accordance with the requirements of the Contra Costa County Building Code and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the County Public Works Department, or designee, prior to commencement of grading activities.	
Implementing Action:	COA #15.
Timing of Verification:	Prior to issuance of a grading or building permit.
Responsible Department, Agency, or Party:	Project proponent, project geologist, peer review geologist, and CDD.
Compliance Verification:	CDD and peer review geologist review of investigation report by project geologist.
Geology 2: Prior to recordation of the Parcel Map the applicant shall submit a draft deed disclosure statement advising prospective buyers and owners of both parcels of the risk of liquefaction, and of the requirement for a geotechnical investigation prior to issuance of a building permit for a residence.	
Implementing Action:	COA #16.
Timing of Verification:	Project proponent and CDD.
Responsible Department, Agency, or Party:	CDD.
Compliance Verification:	Prior to recordation of the Final Parcel Map.
Potential Impact: The project could be located on 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	
Mitigation Measures:	
Mitigation Measures **Geology 1** would reduce the impacts of unstable soil to a less than significant level.	

SECTION 9: TRIBAL CULTURAL RESOURCES
Potential Impact: The project could 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, 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 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). The expected construction and grading could cause ground disturbance which may impact heretofore undocumented cultural resources.
Mitigation Measures:
Implementation of mitigations measure **Cultural Resources 1** would reduce the impact on archeological resources during project related work.
Potential Impact: The project could 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, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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. The expected construction and grading could cause ground disturbance which may impact heretofore undocumented cultural resources.
Mitigation Measures:
Implementation of mitigations measure **Cultural Resources 1** would reduce the impact on archeological resources during project related work.
SECTION 10: MANDATORY FINDINGS OF SIGNIFICANCE
Potential Impact: As discussed in individual sections of the Initial Study, the project to create two parcels from the site may impact the quality of the environment (Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Tribal Cultural Resources).
Mitigation Measures:
The impact would be reduced to a less than significant level with the adoption of the recommended Mitigation Measures that are specified in the respective sections of the Initial Study.

BIOLOGICAL RESOURCES ANALYSIS REPORT

FOR THE

GRAYSON ROAD PROPERTY

CONTRA COSTA COUNTY, CALIFORNIA

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LIST OF ATTACHMENTS

SUMMARY

On April 6, 2021, Olberding Environmental, Inc. conducted a field reconnaissance survey of the Grayson Road Property (Property) for the purpose of identifying sensitive plant and wildlife species and sensitive habitats potentially occurring on the Property. The Property surveyed is comprised of approximately 3.05 acres located in unincorporated Contra Costa County, California (Attachment 1, Figures 1-2).

Results of the initial reconnaissance survey indicate that the Property contains waters that might be considered jurisdictional by the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish and Wildlife (CDFW). The southern boundary of the Property is bordered by Grayson Creek, a perennial creek that flows northeast from its origin in Briones Regional Park. The creek flows through a riparian woodland corridor located on the southern portion of the Property. Water was present in the entire length of Grayson Creek bordering the Property during the April 2021 survey. The Project as proposed does not include any improvements within Grayson Creek, and the residential development will be set back from the creek in accordance with the Contra Costa County Creek Setback Ordinance (Title 9, Chapter 914).

A query of the California Natural Diversity Database (CNDDB) showed that four special-status plant species have a potential to occur on the Property. Congdon's tarplant (*Centromadia parryi ssp. congdonii*), Diablo helianthella (*Helianthella castanea*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), and bent-flowered fiddleneck (*Amsinckia lunaris*) were identified as having a potential to occur on the Property based on the presence of suitable habitat for these species and CNDDB occurrences located within the vicinity of the Property. The April 2021 survey of the Property performed during the blooming period for three of these species (Diablo helianthella, Mount Diablo fairy lantern, bent-flowered fiddleneck) did not find any of these species present on the Property and they are presumed absent from the Property. Although the April 2021 survey was performed outside of the identified blooming period for Congdon's tarplant (June-November), remnant plants would have been observed if they were present. For these reasons Congdon's tarplant is presumed absent from the Property.

A total of five bird species were identified to have a moderate to high potential to occur on the Property in a nesting or foraging capacity. The red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), and Cooper's hawk (*Accipiter cooperii*) all have a high potential to occur in a nesting and foraging capacity. The sharp-shinned hawk (*Accipiter striatus*) and American kestrel (*Falco sparverius*) have a moderate potential to occur in a nesting and foraging capacity. Three of the birds listed above (red-tailed hawk, red-shouldered hawk, Cooper's hawk) were present, and observed foraging on the Property. Additionally, a Cooper's hawk was observed

on the Property exhibiting nesting behaviors. Mitigation measures, including preconstruction surveys for nesting passerine birds and raptors prior to performing any construction-related activities such as tree and vegetation removal or grading during the avian nesting season (February through August), will reduce the potential impacts to sensitive bird species to less-than-significant.

CNDDB listed 5 occurrences of California red-legged frog (*Rana draytonii*) (CRLF) in the 5-mile radius of the Property. Water was present in Grayson creek during the April 2021 survey which offers suitable habitat for foraging and aquatic dispersal within the creek channel. Various vegetative debris located throughout the riparian corridor habitat provide suitable upland refuge. USFWS designated CRLF critical habitat is located approximately 1.3 miles west of the Property. For these reasons, CRLF has a moderate potential to occur on the Property within the creek channel and riparian habitat in a foraging and dispersal capacity, and the proposed project may have a potentially significant impact on CRLF. However, with the proposed mitigation measures, the project will reduce any potential impacts to less-than-significant.

CNDDB listed four occurrences of California tiger salamander (*Ambystoma californiense*) (CTS) within five miles of the Property. However, all of these occurrences are historical and the species is considered to be extirpated within this area. The Property lacks vernal pools or ponds required for breeding, and is not within dispersal distance of any known or potential breeding habitat. For these reasons, CTS is presumed absent from the Property and the proposed project will not result in any potentially significant impacts to the species.

CNDDB listed 13 occurrences of Alameda whipsnake (*Masticophis lateralis euryxanthus*) within the 5-mile radius of the Property. Due to the sensitivity of these species, the exact locations of these occurrences are unknown. The Property does not support shrub or rocky outcrop habitat that the whipsnake prefers; thus, making it unlikely that the whipsnake would breed or permanently reside within the Property boundaries. Suitable whipsnake habitat is, however, located within USFWS designated critical habitat for Alameda Whipsnake approximately 0.9 west in Briones Regional Park and the surrounding open space. Although the Property is surrounded by residential development, this would not preclude whipsnake from dispersing through the Property, as areas of open space are also present within the vicinity of the Property. Therefore, Alameda whipsnake could disperse through the Property as it moves to more suitable habitat. For these reasons, there is potential for Alameda whipsnake to occur on the Property, albeit low, in a dispersal capacity only. The mitigation measures presented in section 8.0 will reduce any potential impacts to this species to less-than-significant.

CNDDB listed 5 occurrences of western pond turtle (*Actinemys marmorata*) within the 5-mile radius of the Property. Water was present in Grayson Creek during the April 2021 survey. Therefore, western pond turtle could use the creek channel for foraging and aquatic dispersal and

the riparian corridor for terrestrial dispersal. For these reasons, western pond turtle has a moderate potential to occur in the creek channel and riparian habitat in a dispersal capacity only, and the proposed project may have a potentially significant impact on western pond turtle. However, with the proposed mitigation measures, the project will reduce any potential impacts to less-than-significant.

No sign of bat use was observed on the Property during the April 2021 survey; however, based on habitat suitability, it was determined that bats have a moderate potential to utilize the developed, mixed woodland, and riparian woodland habitats located within the site in a roosting and foraging capacity. These bat species include: Western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus)* and Yuma myotis (*Myotis yumanensis*). Mitigation measures, including a preconstruction survey for bats in areas with suitable habitat prior to performing any construction-related activities or timing construction to minimize impacts to bats, will reduce the potential impacts to bat species to less-than-significant.

1.0 INTRODUCTION

Olberding Environmental, Inc. prepared this biological resources analysis of the proposed Grayson Road project, located in unincorporated Contra Costa County, California (Figure 1). The purpose of this analysis is to provide a description of existing biological resources on the Property and to identify potentially significant impacts that could occur to sensitive biological resources from the proposed residential development of the Property.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and the California Native Plant Society (CNPS). Biological resources also include "waters of the United States" and "waters of the State", as regulated by the U.S. Army Corps of Engineers (Corps) and California State Water Resource Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). This analysis included a review of pertinent literature on relevant background information and habitat characteristics of the site. Our review included researching existing information in the California Natural Diversity Database (CNDDB) maintained by the CDFW and the CNPS *Inventory of Rare and Endangered Vascular Plants of California*. Also included was a review of information related to species of plants and animals that could potentially utilize the described habitats identified on and immediately surrounding the Property. To assist in the assessment, a field reconnaissance investigation of the Property was conducted on April 6, 2021.

This report documents the methods, results, and conclusions for the reconnaissance-level survey associated with the biological resources analysis for the Property, and identifies "potentially

significant" and "significant impacts" as defined by the California Environmental Quality Act (CEQA) that could occur to biological resources. Mitigation measures have been developed for all identified significant or potentially significant impacts, and upon implementation would reduce the effects of such impacts to levels regarded as "less than significant" pursuant to CEQA.

2.0 LOCATION

The Property is located approximately 3.4 miles north of CA-24 and approximately 2.0 miles west of I-680, on Grayson Road just outside the city limits of Pleasant Hill in unincorporated Contra Costa County, California. Attachment 1, Figure 1 depicts the regional location of the Property in Contra Costa County, and Attachment 1, Figure 2 illustrates the vicinity of the Property in relationship to the City of Pleasant Hill. Attachment 1, Figure 3 identifies the location of the Property on the USGS 7.5 Quadrangle Map for Walnut Creek. An aerial photograph of the Property has been included as Attachment 1, Figure 4.

3.0 PROPERTY DESCRIPTION AND SETTING

The Property encompasses approximately 3.05 acres in an irregular shape and supports four habitat types; mixed woodland, perennial creek, riparian woodland and developed (Attachment 1, Figure 10). Characteristic vegetation of these habitats includes wild oat (*Avena fatua*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), buckeye (*Aesculus californica*) and California bay laurel (*Umbellularia californica*) trees.

The Property has two existing residential structures on site which are surrounded by ornamental and fruit trees including but not limited to black walnut (*Juglans nigra*) and Siberian elm *(Ulmus pumila)*. Coast live oak trees are also present around the residential homes. The two-story residence is located in the northern portion of the site, while a one-story house is located in the center of the Property.

Grayson Creek, a perennial creek flows along the southern boundary of the Property from west to east through a riparian corridor.

The topography of the Property consists of relatively flat landscape that slightly slopes from west to east. Elevations of the Property range between 160 feet above sea level near the northeastern boundary and 188 feet above sea level along western boundary.

The Property is immediately surrounded by residential development to the north, south, east, and west. Grayson Road exists along the northern boundary of the Property. Briones Regional Park

lies approximately 0.9 miles south and west of the Property. Oakmont Memorial Park exists approximately 0.4 miles west of the Property. Dinosaur Hill Park exists approximately 1 mile south of the Property. Grayson Woods Golf Course lies just northwest of the Property on the north side of Grayson Road.

4.0 PROPOSED PROJECT

The proposed project is a 10-unit housing development on the approximately 3.05 acre Property as shown on Attachment 2. The project includes a new access road across the site that would provide access to all lots. A stormwater detention basin will be constructed in the northeast portion of the project site. Treated stormwater will be discharged from the basin into a Contra Costa County maintained stormwater drainage system that currently exists under Grayson Road. Infrastructure utilities (water, sewer, cable, electrical, etc.) will also be installed for the residential units. Construction of the proposed project would remove 84 trees. The proposed project plans do not anticipate placing any development or infrastructure in Grayson Creek or the associated riparian corridor. A riparian setback between the projects grading limits and Grayson Creek will be set and adhered to as shown on Attachment 2.

5.0 REGULATORY SETTING

This section provides a discussion of laws and regulations that regulate native wildlife, fish, plants and aquatic resources.

5.1 Federal Regulatory Setting

5.1.1 Plants and Wildlife

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq., as amended) regulates native plant and animal species, and the listed as Threatened or Endangered under the ESA and designated "critical habitat" for listed species. Listed species are taxa for which proposed and final rules have been published in the Federal Register (U.S. Fish and Wildlife Service [USFWS] 2020). Federal Proposed species (USFWS, 2019) are species for which a proposed listing as Threatened or Endangered under ESA has been published in the Federal Register. Federal Candidate species are defined as "those taxa for which we have on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by other higher priority listing actions" (USFWS, 2019). Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning.

The pertinent sections of the ESA are:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit in connection with the approval of a habitat conservation plan (HCP).

The NMFS has jurisdiction over listed marine mammals and anadromous fish, and the USFWS implements the ESA for listed terrestrial species and no anadromous fish species. Below, Sections 9, 7, and 10 of ESA are discussed.

Section 9 of ESA as amended, prohibits the "take" of any fish or wildlife species listed under the ESA as endangered. Under federal regulation, "take" of fish or wildlife species listed by the USFWS prior to 2020, or through a special "Section 4(d)" finding for species listed since 2020 or by NMFS as threatened is also prohibited unless otherwise authorized. "Take," as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" is further defined to include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeal in *Arizona Cattle Growers' Association* ruled that the USFWS must show that a threatened or endangered species is present on a site and that it would be taken by the project activities.

If "take" of a listed species may occur during the course of an otherwise lawful activity, the USFWS and NMFS may authorize take through a Section 7 consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency such as the Corps), or through Section 10 of ESA which requires preparation of a HCP (for state and local agencies, or individuals, and projects without a federal "nexus"; for example, projects that do not need a Corps permit).

Section 7(a)(2) of the ESA requires that each federal agency consult with the USFWS or NMFS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat for listed species. The Section 7 consultation process is triggered by a

determination made by the federal "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the federal action and any interrelated or interdependent actions "may affect" a listed species or designated critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required, and the USFWS/NMFS will issue a formal biological opinion assessing whether the proposed action is likely to result in "jeopardy" to a listed species or adversely modify designated critical habitat. If the USFWS/NMFS concludes that a proposed project would not jeopardize a listed species or result in adverse modification of critical habitat, the agency will issue an incidental take statement that allows incidental take of federally listed species.

For non-federal entities, for example private parties, cities, counties whose activity does not have a federal nexus (such as a Corps permit) Section 10 provides the mechanism for obtaining take authorization. Under Section 10, a non-federal applicant may obtain an "incidental take permit" from the USFWS or NMFS by preparing an HCP that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps.

5.1.2 Wetlands/Waters

The federal government, acting through the Corps and the Environmental Protection Agency (EPA), has jurisdiction over all "waters of the United States" as authorized by §404 of the Clean Water Act (CWA) and §10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Activities that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Discharges that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Waters of the United States are defined as territorial seas and traditionally navigable waters, tributaries, lakes and ponds, and impoundments of jurisdictional waters, and adjacent wetlands. Under federal regulation, wetlands are defined as areas that are inundated or saturated by surface of groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (33 CFR Part 328.3(c)(16)). Wetlands generally include swamps, marshes, bogs, and similar areas. In addition, portions of the riparian habitat along a river or stream may be a wetland

where the riparian vegetation is at or below the ordinary high water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including the open ocean, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high water mark. "Other waters" refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The Corps regulates other waters to the outward limit of the ordinary high water mark. Streams should exhibit a defined channel, bed and banks to be delineated as other waters.

The Corps does not generally consider "non-tidal drainage and irrigation ditches excavated on dry land" to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the Corps (33 CFR Parts 320-330, November 13, 1986). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states "the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories" can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

5.1.3 Migratory Bird Treaty Act

Raptors are migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21).

5.1.4 Federal Bald and Golden Eagle Protection Act

Enacted in 1940, the Bald and Golden Eagle Protection Act (BGEPA) provides protection for the bald and golden eagle by "prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit" (16 U.S.C. 668(a); 50 CFR 22). The BGEPA defines the term "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" if the action is done "knowingly, or with wanton disregard for the consequences" of the action (16 USC 668a,c; 50 CFR 22.3). "Disturb" is defined in 50 CFR 22.3 regulations as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

5.2 State Regulatory Setting

5.2.1 Plants and Wildlife

In 1984, California enacted the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats, and prohibits the unauthorized "take" of CESA listed species and candidates for listing under CESA. The California Code of Regulations (Title 14, §670.5) lists animal species listed as endangered or threatened under CESA. "Take" is defined by Section 86 of the California Fish and Game Code and means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Because take under CESA does not include "harm" (see discussion of ESA, above), only activities that would result in the direct take of a CESA-listed species, (e.g., species mortality) is subject to CESA. If an activity will result in take of a state-listed species or state candidate species incidental to an otherwise lawful activity, CDFW may issue an "incidental take" permit pursuant to §2081 of the Fish and Game Code.

The CDFW may not issue an incidental take permit for species that are "fully protected" under the fish and game code. These include species protected by the state prior to enacting CESA. See California Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517.

The CDFW also maintains a list of animal species of special concern (CDFW 2021), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends considering them during analysis of proposed

property impacts to protect declining populations and avoid the need to list them as endangered in the future.

Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that Property-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (generally February 1 – September 1, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend, is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

5.2.2 Wetlands/Waters

The SWRCB and RWQCBs regulate the discharge of pollutants to wetlands and other waters through §401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Section 401 requires a state water quality certification of permits issued by federal agencies, such as the Corps. Water quality certifications require the SWRCB or applicable RWQCB to find that the activities permitted by the federal permit will not violate state water quality standards individually or cumulatively over the term of the permit, and that the federal permit will not (the term is typically for five years).

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge with the SWRCB or applicable RWQCB through an application for waste discharge (Water Code Section 13260(a)(1). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code §13050(e)), and may include "isolated wetlands," or those wetlands considered to be outside of the Corps' jurisdiction. Placing fill material into a water of the State generally constitutes "pollution". Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (Water Code §13050(1)).

California Fish and Game Code §§1600-1607 require the CDFW be notified of any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Upon notification, the CDFW may require a Streambed Alteration Agreement. The CDFW defines a stream as follows:

"... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation."

(Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any "blue line" stream shown on a USGS topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

5.2.3 California Environmental Quality Act

According to Appendix G of the CEQA (CEQA 2021) Guidelines, a proposed project would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW and USFWS?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.2.4 Contra Costa County Tree Ordinance – Chapter 816-6 - Tree Protection and Preservation Ordinance

According to the Contra Costa County tree ordinance, a "protected tree" is defined as the following:

(1) On all properties within the unincorporated area of the county:

(A) Where the tree to be cut down, destroyed or trimmed by topping is adjacent to or part of a riparian, foothill woodland or oak savanna area, or part of a stand of four or more trees, measures twenty inches or larger in circumference (approximately 6.5 inches in diameter) as measured four and one-half feet from ground level, and is included in the following list of indigenous trees: Acer macrophyllum (Bigleaf Maple), Acer negundo (Box Elder), Aesculus californica (California Buckeye), Alnus Rhombifolia (White Alder), Arbutus menziesii (Madrone), Heteromeles arbutifolia (Toyon), Juglans Hindsii (California Black Walnut), Juniperus californica (California Juniper), Lithocarpus densiflora (Tanoak or Tanbark Oak), Pinus attenuata (Knobcone Pine), Pinus sabiniana (Digger Pine), Platanus Racemosa (California Sycamore), Populus fremontii (Fremont Cottonwood), Populus trichocarpa (Black Cottonwood), Quercus agrifolia (California or Coast Live Oak), Quercus chrysolepis (Canyon Live Oak), Quercus douglasii (Blue Oak), Quercus kelloggii (California Black Oak), Quercus lobata (Valley Oak), Quercus wislizenii (Interior Live Oak), Salix lasiandra (Yellow Willow), Salix laevigata (Red Willow), Salix lasiolepis (Arroyo Willow), Sambucus callicarpa (Coast Red Elderberry), Sequoia sempervirens (Coast Redwood), Umbellularia californica (California Bay or Laurel);

(B) Any tree shown to be preserved on an approved tentative map, development or site plan or required to be retained as a condition of approval;

(C) Any tree required to be planted as a replacement for an unlawfully removed tree.

(2) On any of the properties specified in subsection (3) of this section:

(A) Any tree measuring twenty inches or larger in circumference (approximately six and one-half inches diameter), measured four and one-half feet from ground level including the oak trees listed above;

(B) Any multistemmed tree with the sum of the circumferences measuring forty inches or larger, measured four and one-half feet from ground level;

(C) And any significant grouping of trees, including groves of four or more trees.

(3) Specified properties referred to in subsection (2) of this section includes:

(A) Any developed property within any commercial, professional office or industrial district;

(B) Any undeveloped property within any district;

(C) Any area designated on the general plan for recreational purposes or open space;

(D) Any area designated in the county general plan open space element as visually significant riparian or ridge line vegetation and where the tree is adjacent to or part of a riparian, foothill woodland or oak savanna area. (Ords. 94-59, 94-22).

Any person proposing to trench, grade or fill within the dripline of any protected tree or cut down, destroy, trim by topping or remove any protected tree shall apply to the department for a tree permit, not less than ten days prior to the proposed tree removal or tree alterations. Persons who would be eligible to apply for three or more individual tree permits under provisions of this chapter may apply for a collective tree permit for the site. (Ords. 94-59, 94-22).

If the reasons for alteration or removal relate to the health of the tree or if grading, trenching or filling is proposed under the dripline of an existing tree, or the review is of a collective tree permit and the director determines that more technical expertise is necessary to make the decision, a report prepared by an arborist may be required, to be paid for by the applicant. (Ords. 94-59, 94-22).

5.2.5 Contra Costa County Creek Setback Ordinance – Chapter 914 – Rights-of-Ways and Setbacks

No permanent structures of any kind may be built within the structure setback area. Creek structure setback requirements are outlined in Title 9, Division 914, (Sections 914-14.010, .012, .014) of the Contra Costa County Ordinance Code and are described as follows:

No permanent structures of any kind other than drainage structures may be constructed within or over any easement described in this chapter. Encroachments such as filled slopes, retaining walls, fencing and landscaping shall not be permitted. Public utilities may be installed within easements upon approval by the public works department. (Ords. 89-28, 8540 § 4, 78-5).

(a) "Structure setback line" means the line separating the structure setback area from the remainder of the lot. For unimproved earth channels within the subdivision, a structure setback line shall be shown on the final map or parcel map as follows: The thread of the channel shall be shown as accurately as possible, and a dashed line shall indicate the appropriate setback with a note describing the method used to determine the top of bank, selected from those set forth herein. The development rights for that portion of the lot on the creek side of the setback line, which is defined

as the "structure setback area," shall be offered for dedication to Contra Costa County by separate instrument.

(b) "Top of bank" means the point where the water surface plus sufficient freeboard for the design average recurrence interval runoff intersects the existing ground, or the point where a line with a slope of 2.5 horizontal to 1 vertical extending from the toe of the channel intersects the existing ground, whichever point is the greatest vertical distance above the channel invert. A separate top of bank shall be determined for each side of the channel.

(c) The structure setback line for unimproved channels shall be determined by measuring the following horizontal distance away from the top of bank on each side of the watercourse:

Height of top of bank above channel invert	Horizontal distance between top of bank and setback line
less than 20'	30'
20' - 29.99'	35'
30' - 39.99'	40'
40' - 49.99'	45'
50' and greater	50'

(d) Where significant riparian vegetation exists beyond the limits required above, the advisory agency may extend the setback line to include such areas. (Chapter 914-14, Ords. 89-28, 85-40 § 6, 78-5, Contra Costa County Code).

6.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES

A special-status plant and wildlife species database search and review was conducted using the CNDDB and other sources. An additional search was conducted for special-status plants using CNPS *Inventory* on-line. Special-status species reports were accessed by searching the CNDDB database for the Walnut Creek, Benicia, Vine Hill, Honker Bay, Briones Valley, Clayton, Oakland East, Las Trampas Ridge, Diablo USGS 7.5-minute quadrangles which surround the Property, and by examining those species that have been identified in the vicinity of the Property. These quadrangles will be henceforth noted as surrounding quads. The database report identified special-status species known to occur in the region or those that have the potential to occur in the vicinity

of the Property. The CNDDB report was used to focus special-status species analysis of the site prior to the reconnaissance surveys.

An Olberding Environmental biologist conducted a reconnaissance-level survey of the Property on April 6, 2021. The survey consisted of walking throughout the Property and evaluating the site and adjacent lands for potential biological resources. Existing conditions observed plants and wildlife, adjacent land use, soils and potential biological resources were recorded during the visit. Plant and wildlife species observed within and adjacent to the Property during the reconnaissance survey are listed in Attachment 2, Table 1. Site photographs are provided in Attachment 3 of this document. Attachment 1, Figure 9 shows where each site photo was taken.

The objectives of the field survey were to determine the potential presence or absence of special-status species habitat listed in the CNDDB database report and to identify any wetland areas that could be potentially regulated by the Corps, RWQCB, and/or CDFW (CNDDB 2021). In addition, the Olberding Environmental biologist looked for other potential sensitive species or habitats that may not have been obvious from background database reports or research. Surveys conducted after the growing season or conducted outside of the specific flowering period for a special-status plant cannot conclusively determine the presence or absence of such plant species; therefore, site conditions and habitat type were used to determine potential for occurrence. When suitable habitat was observed to support a special-status plant or animal species, it was noted in the discussion for that particular species. Regulatory agencies evaluate the possibility of occurrence based on habitats observed on-site and the degree of connectivity with other special-status animal habitats in the vicinity of the Property. These factors are discussed in each special-status plant or animal section. This report also identifies the potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA Guidelines. Additionally, this report identifies potential impacts to sensitive biological resources and provides mitigation recommendations to reduce impacts to a less than significant level. Potential for occurrence of each special-status or protected plant and animal species was evaluated using the following criteria.

- **Present**: The species has been recorded by CNDDB or other literature as occurring on the Property and/or was observed on the Property during the reconnaissance survey or protocol surveys.

- **May Occur**: The species has been recorded by CNDDB or other literature as occurring within five miles of the Property, and/or was observed within five miles of the Property, and/or suitable habitat for the species is present on the Property or its immediate vicinity.

- **Not Likely to Occur**: The species has historically occurred on or within five miles of the Property but has no current records. The species occurs within five miles of the Property

but only marginally suitable habitat conditions are present. The Property is likely to be used only as incidental foraging habitat or as an occasional migratory corridor.

- **Presumed Absent**: The species will not occur on the Property due to the absence of suitable habitat conditions, and/or the lack of current occurrences. Alternatively, if directed or protocol-level surveys were done during the proper occurrence period and the species was not found, it is presumed absent.

Sources consulted for agency status information include USFWS (2020) for federally listed species and CDFW (2021) for State of California listed species. Based on information from the above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Property (Attachment 2, Table 2).

6.1 Soils Evaluation

The soils present on a property may determine if habitat on the site is suitable for certain special-status plants and animals. The host plants of some special-status invertebrates may also require specific soil conditions. In the absence of suitable soil conditions, special-status plants or animals requiring those conditions would be presumed absent. Information regarding soil characteristics for the Property was obtained by viewing the Natural Resources Conservation Service (NRCS) Web Soil Survey report for the Property (NRCS 2019).

6.2 Plant Survey Methods

The purposes of the botanical surveys were (1) to characterize the habitat types (plant communities) of the study area; (2) to determine whether any suitable habitat for any special-status plant species occurs within the study area; and (3) to determine whether any sensitive habitat types (wetlands) occur within the study area. Site conditions and plant habitat surveys are important tools in determining the potential occurrence of plants not recorded during surveys (e.g., special-status plants) because presence cannot conclusively be determined if field surveys are conducted after the growing season or conducted outside a specific flowering period.

6.2.1 Review of Literature and Data Sources

The biologist conducted focused surveys of literature and special-status species databases in order to identify special-status plant species and sensitive habitat types with potential to occur in the study area. Sources reviewed included the CNDDB occurrence records (CNDDB 2021) and CNPS *Inventory* (Skinner and Pavlik 1994) for the surrounding quads; and standard flora (The Jepson

Manual 2012). From the above sources, a list of special-status plant species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

6.2.2 Field Surveys

A biologist from Olberding Environmental conducted a reconnaissance-level survey to determine habitat types and the potential for special-status plants based on the observed habitat types. All vascular plant species that were identifiable at the time of the survey were recorded and identified using keys and descriptions in The Jepson Manual (2012).

The habitat types occurring on the Property were characterized according to pre-established categories. In classifying the habitat types on the site, the generalized plant community classification schemes of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens 2009) were consulted. The final classification and characterization of the habitat types of the study area were based on field observations.

6.3 Wildlife Survey Methods

The purposes of the wildlife survey were to identify special-status wildlife species and/or potential special-status wildlife habitats within the study area.

6.3.1 Review of Literature and Data Sources

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species had potential to occur in the vicinity of the Property. Current agency status information was obtained from USFWS (2020) for species listed as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA; and from CDFW (2021b, 2021) for species listed as Threatened or Endangered by the state of California under the CESA or listed as "species of special concern" by CDFW. From the above sources, a list of special-status wildlife species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

6.3.2 Field Surveys

General Wildlife Survey – An Olberding Environmental biologist conducted a survey of species habitat within the entire study area, including visible portions of the adjacent properties. The purpose of the habitat survey was to evaluate wildlife habitats and the potential for any protected species to occur on or adjacent to the Property.

Reconnaissance-Level Raptor Survey – A reconnaissance-level raptor survey was conducted on the Property. Observation points were established on the periphery of the site to view raptor activity over a fifteen- to thirty-minute time period. This survey was conducted with the use of binoculars and notes were taken for each species occurrence. Additionally, utility poles and perch sites in the vicinity of the Property were observed. All raptor activity within and adjacent to the Property was recorded during the reconnaissance-level observation period.

Reconnaissance-Level Burrowing Owl (Athene cunicularia) Survey – A reconnaissance-level burrowing owl (*Athene cunicularia*) survey was also conducted on the Property to identify potential burrow sites or burrowing owl use of on-site habitat. The general presence and density of suitable burrow sites (e.g., rodent burrows) was evaluated for the Property.

7.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES

The search and review of the CNDDB database reports revealed the occurrence of special-status plant and wildlife species that occur in the habitats found within the Property boundaries (CNDDB 2021). The CNDDB database and background data were reviewed for the surrounding quads. Animal occurrences shown on Attachment 1, Figure 5 and plant occurrences shown on Attachment 1, Figure 6 are located within 5 miles of the Property and were reviewed for their potential to occur on the Property based on general habitat types. Results of the species review is tabulated on Attachment 2, Table 2. Critical habitat within the surrounding quads is shown on Attachment 1, Figure 7.

7.1 Soil Evaluation Results

The NRCS (2019) reports two soil types within the Property. A map of this soil type can be found in Attachment 1, Figure 8. The soil type mapped included the following:

- **TaD: Tierra loam, 9 to 15 percent slopes –** Tierra soils are gently sloping to steep and are on dissected terraces and low hills at elevations of 100 to 1,200 feet. The composition of this soil type within the Property consists of 85 percent Tierra and similar soils and 10 percent of minor components including Los Osos (5%) and Millsholm (5%).

  The Tierra series consists of deep, moderately well drained soils that formed in alluvial materials from sedimentary rocks. Typically, Tierra soils exhibit slow to rapid runoff and very slow permeability. These soils are used mainly for grazing and growing small grains and small areas of large number of crops. Many cultivated areas have reverted to grass. Vegetation dominantly is annual grasses and forbs. This series shows no frequency of ponding or flooding and is nonsaline. Its stratified layers consist of the

following (colors are for dry soil unless otherwise stated):

Ap--0 to 7 inches; grayish brown loam, very dark grayish brown moist; hard, friable, slightly sticky; strongly acid (pH 5.5).

A12--7 to 11 inches; gray loam, very dark gray moist; hard, friable, slightly sticky; medium acid (pH 6.0).

B21t--12 to 16 inches; very dark grayish brown clay, very dark brown moist; very hard, very firm, very sticky; slightly acid (pH 6.5).

B22t--16 to 25 inches; dark brown clay, dark brown moist; very hard, very firm, very sticky; slightly acid (pH 6.5).

B3t--25 to 43 inches; light brownish gray heavy clay loam, grayish brown moist; very hard, firm, sticky; moderately alkaline (pH 8.0).

C--43 to 62 inches; pale brown clay loam, dark brown moist; very hard, firm, sticky; mildly alkaline (pH 7.5).

- **CeA: Conejo Clay Loam, 0-2 percent slopes –** The Conejo series consists of very deep, well drained soils with a parent material of alluvium derived from sedimentary rock. These soils are found within valleys at elevation of 10 to 1,000 feet above sea level. The composition of this soil type within the Property consists of 85 percent Conejo and similar soils and 15 percent of minor components including unnamed (5%), Botella (5%), Clear Lake (3%), and Garretson (2%).

  Ap--0 to 5 inches, (0 to 13 cm); dark gray (10YR 4/1) clay loam, very dark gray (10YR 3/1) moist; 31 percent clay, moderate medium and coarse subangular blocky and strong medium granular structure; very hard, friable, moderately sticky and moderately plastic; many fine and medium irregular pores; slightly alkaline, (pH 7.5)

  A1--5 to 19 inches, (13 to 48 cm); very dark grayish brown (10YR 3/2) clay loam, very dark brown (10YR 2/2) moist; 31 percent clay, moderate coarse subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine and fine tubular and many fine irregular pores; slightly alkaline (pH 7.5).

A2--19 to 30 inches, (48 to 76 cm); very dark grayish brown (10YR 3/2) clay loam, very dark grayish brown (10YR 3/2) moist; 31 percent clay, moderate medium subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine and few fine tubular pores; few pressure faces; common fine iron-manganese nodules about l mm diameter; 1 percent gravel; slightly alkaline (pH 7.5).

Bw1--30 to 48 inches, (76 to 122 cm); dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; 29 percent clay; moderate coarse subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine and fine tubular and many fine irregular pores; many pressure faces; few fine iron-manganese nodules about 1 mm diameter; 2 percent gravel; slightly alkaline (pH 7.5).

Bw2--48 to 70 inches, (122 to 178 cm); brown (10YR 5/3) loam, dark yellowish brown (10YR 4/4) moist; 19 percent clay, weak fine and medium subangular blocky structure; slightly hard, weakly brittle but friable, nonsticky and slightly plastic; common very fine roots; many very fine and few fine and medium tubular pores; slightly effervescent in seams; common medium oxidized iron masses; 1 percent gravel; moderately alkaline (pH 8.0).

7.2 Plant Survey Results

7.2.1 Floristic Inventory and Habitat Characterization

The Property supports four habitat types consisting of developed, mixed woodland, perennial creek, and riparian woodland. In classifying the habitat types on the Property, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat type of the Property was based on field observations. Plant species that occurred within 5 miles of the Property are shown in Attachment 1, Figure 6.

The habitat type and a description of the plant species present within the habitat type are provided below. The habitats found on the Property are mapped on Attachment 1, Figure 10. Dominant plant species are also noted. A complete list of plant species observed on the Property can be found within Attachment 2, Table 1.

Mixed Woodland

A substantial portion of the 3.05-acre Property, 1.35 acres, is dominated by mixed woodland habitat. Mixed woodland habitat exists in the northern, eastern and western portions of the Property. Dominant vegetation observed within this habitat type includes but is not limited to wild oat, Italian ryegrass, ripgut brome, common vetch (Vicia sativa), cleavers (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*) and Bermuda buttercup (*Oxalis pes-caprae*). Valley and coast live oaks are present in the central portion of the western mixed woodland habitat. Black walnut and elm trees are located centrally in the eastern portion of the woodland habitat. Monterey pine (*Pinus radiata*), coast redwood (*Sequoia sempervirens*), and blue gum (*Eucalyptus globulus*) are also present throughout the mixed woodland habitat.

Developed

The Property contains two existing residential homes that, combined, encompass approximately 0.22 acres. A two-story home is located on the northwestern boundary along Grayson Road while the other home (one-story) is located centrally near the southern boundary of the Property. The northern residential home is immediately surrounded by mixed woodland habitat to the north in which a large cedar tree is present, coast live oak trees and additional structures including a shed and chicken coop to the south, and black walnut and elm trees to the east. A graded driveway starting at Grayson Road, runs south along the western side of the northern residential home to the southern residential home. The southern home is immediately surrounded by mixed woodland habitat to the north, south and west and woodland riparian habitat to the east. A large coast live oak tree exists at the northeast corner of the residential structure.

Perennial Creek

Running southwest to northeast along the southern boundary of the property is Grayson Creek, a perennial creek originating in Briones Regional Park. Grayson Creek encompasses approximately 0.06 acres (755 linear feet) of the Property. Approximately 4.6 miles northeast of the Property, Grayson Creek drains into Pacheco Slough, which in turn drains into Suisun Bay, approximately 3.75 miles further north.

Dominant vegetation along the banks of Grayson Creek include but are not limited to English ivy (*Hedera helix*), cleavers and Bermuda buttercup. An oak woodland corridor exists adjacent to Grayson Creek within the Property.

Riparian Woodland

A riparian woodland corridor of approximately 1.50 acres occurs along Grayson Creek in the southern portion of the Property. Native species found in the riparian habitat include coast live oak, willow (*Salix spp.*), California buckeye (*Aesculus californica*) and California bay laurel (*Umbellularia californica*). Non-native species present in the riparian woodland include blue gum (*Eucalyptus globulus*) and tree of heaven (*Ailanthus altissima*). Dominant understory plants include English ivy, Bermuda buttercup, periwinkle (*Vinca major*) and poison oak (*Toxicodendron diversilobum*).

Special-Status Plant Species

Special-status plant species include species listed as Rare, Threatened, or Endangered by the USFWS (2020) or by the State of California (CDFW 2021b). Federal Proposed and Candidate species (USFWS, 2019) are also special-status species. Special-status species also include species listed on List 1A, List 1B, or List 2 of the CNPS Inventory (Skinner and Pavlik, 1994; CNPS 2021). All species in the above categories fall under state regulatory authority under the provisions of CEQA and may also fall under federal regulatory authority. Considered special-status species are species included on List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*. These species are considered to be of lower sensitivity and generally do not fall under specific state or federal regulatory authority. Specific mitigation considerations are not generally required for List 3 and List 4 species.

Attachment 2, Table 2 includes a list of special-status plants with the potential to occur within or in the immediate vicinity of the Property based on a review of the surrounding quads. The special-status plant species identified by the CNDDB as potentially occurring on the Property are known to grow only from specific habitat types. The specific habitats or "micro-climate" necessary for many of the plant species to occur are not found within the boundaries of the Property. The habitats necessary for the CNDDB reported plant species consist of valley and foothill grassland, cismontane woodlands, chaparral, playas, chenopod scrub, adobe clay soils, alkaline soils, serpentine soils, sandy soils, gravelly soils, coastal prairie, coastal scrub, coastal dunes, coastal bluff scrub, coastal salt marsh, vernal pools, seeps, meadows and sinks, marshes or swamps, riparian woodlands, on slopes near drainages, closed cone coniferous forest, north coast coniferous forest, redwood forest, lower montane coniferous forest, and broad-leafed upland forest.

Occurrences of special-status plants within a five-mile radius of the point roughly representing the center of the Property are described in detail. Occurrence distance from the Property is estimated from this center point (Attachment 1, Figure 6).

Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*). CNPS List 1B.

Congdon's tarplant is a member of the genus *Hemizonia* in the sunflower family (*Asteraceae*). It is one of four subspecies of Parry's tarplant (*Hemizonia parryi*). Congdon's tarplant is a prostrate to erect, annual herb with rigidly spine-tipped leaves and yellow ray- and disk-flowers (head). It occurs in valley and foothill grasslands in moist alkaline soils and blooms between June and November. Historically, Congdon's tarplant was distributed from Solano County south to San Luis Obispo County.

Four CNDDB occurrences of this species have occurred within five miles of the Property. The closest occurrence (Occurrence #2) was located approximately 1.2 miles southeast of the Property. A survey completed in 1998 observed that the population previously seen in this location is considered extirpated. Suitable habitat for Congdon's tarplant exists within the mixed woodland habitat of the Property; however, no plants were present at the time of the survey. The survey performed for this report consisted of a reconnaissance survey performed outside of the identified blooming period of this species (June-November), however remnant plants would have been observed if they were present. For these reasons Congdon's tarplant is presumed absent from the property. As a result, no significant impact is identified to Congdon's Tarplant.

Diablo Helianthella (*Helianthella castanea*). CNPS List 1B.

Diablo helianthella is a perennial that exhibits yellow sunflowers that bloom between April and June. The plant has simple broad leaves that are attached at the base of the stem and grows up to two feet in height. The Diablo helianthella is known to grow on open grassy sites in cismontane woodland and closed-cone coniferous forests.

Eleven CNDDB occurrences of this species have occurred within five miles of the Property. The closest occurrence (Occurrence #46) was located approximately 1.5 miles southwest of the Property in Briones Regional Park. This occurrence involved the observation of 25 plants in 2004. Potentially suitable habitat exists in the understory of the riparian woodland habitat and the mixed woodland habitat. However, the April 2021 survey occurred during the blooming period for Diablo Helianthella and this species was not observed. Therefore, this species has a low potential to occur on site and is presumed absent from the Property. As a result, no significant impact is identified to Diablo helianthella.

Mount Diablo Fairy-Lantern (*Calochortus pulchellus*). CNPS List 1B.

Mount Diablo fairy-lantern is a spring blooming bulb that is in flower between April and June. This species exhibits light yellow globe-shaped flowers that turn down as if nodding. The plant grows to approximately one and a half feet tall and has between one to several flowers on the stem

and long, narrow, pointed leaves. This bulb specifically grows on wooded slopes in chaparral and in valley and foothill grassland habitat.

CNDDB listed six occurrences of this species within five miles of the Property. The closest and most recent occurrence (Occurrence #23) was located approximately 1.5 miles west of the Property in Briones Regional Park. This occurrence involved the observation of 52 plants along Spengler Trail in 2006. The wooded slopes of the oak woodland habitat and the mixed woodland areas of the Property offer potentially suitable habitat for the Mount Diablo fairy-lantern. However, the April 2021 survey coincided with the blooming period for Mount Diablo fairy-lantern and this species was not observed. Therefore, Mount Diablo fairy-lantern has a low potential to occur on site and is presumed absent from the Property. As a result, no significant impact is identified to Mount Diablo fairy-lantern.

Bent-Flowered Fiddleneck (*Amsinckia lunaris*). CNPS List 1B.

Bent-flowered fiddleneck is an annual of the family *Boraginaceae*. The inflorescence is a scorpiod-cyme and coiled at the tip with multiple small orange flowers. It is distributed throughout the inner north coast ranges of California, in the west Central Valley, and the San Francisco Bay Area. Habitat consists of coastal bluff scrub, cismontane woodlands, and valley and foothill grasslands. The blooming period is between March and June.

CNDDB listed four occurrences (Occurrence #75, #41, #30, #43) of this species within five miles of the Property. All occurrences were located within Briones Hills in Briones Regional Park. Although potentially suitable habitat occurs within the mixed woodland habitat, the April 2021 survey of the Property occurred during the blooming period for bent-flowered fiddleneck and this species was not observed. Therefore, bent-flowered fiddleneck has a low potential to occur on site, and is presumed absent from the Property. As a result, no significant impact is identified to bent-flowered fiddleneck.

7.3 Wildlife Survey Results

7.3.1 General Wildlife Species and Habitats

A complete list of wildlife species observed within the Property can be found in Attachment 2, Table 1. Wildlife species commonly occurring within habitat types present on the Property are discussed below:

Mixed Woodland

The mixed woodland habitat provides many foraging opportunities for a wide range of species. Passerine species observed during the survey include dark-eyed junco (*Junco hyemalis*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), spotted towhee (*Pipilo maculatus*), and white-crowned sparrow (*Zonotrichia leucophrys*). Other avian species observed include American crow (*Corvus bracyrynchos*), acorn woodpecker (*Melanerpes formicivorus*), Anna's hummingbird (*Calypte anna*) and turkey vulture (*Cathartes aura*).

Raptor species observed foraging during the survey included red-tailed hawk, red-shouldered hawk, and Cooper's hawk. However, the mixed woodland habit could potentially be utilized for foraging by other species including sharp-shinned hawk and American kestrel.

Scattered burrow colonies created by small mammals including but not limited to Botta's pocket gopher (*Thomomys bottae*) and various vole species (*Microtus spp.*) were observed along the southern edge of the mixed woodland habitat adjacent to the riparian woodland.

The cover from the grasses throughout the mixed woodland habitat and the small mammal burrows present offer suitable habitat for various reptile species. Numerous western fence lizards (*Sceloporus occidentalis*) were observed throughout the Property. Other reptile species including Pacific gopher snake (*Pituophis catenifer catenifer*) and California king snake (*Lampropeltis californiae*) may also occur.

Developed

The existing structures and adjacent mature oak, cedar and ornamental trees provide suitable habitat for numerous bird species and potentially some bats. Avian species observed in the developed area include acorn woodpecker, western scrub jay (*Aphelocoma californica*), Steller's jay (*Cyanocitta stelleri*), hermit thrush (*Catharus guttatus*) and dark-eyed junco. Bat species that could utilize this habitat for roosting include hoary bat (*Lasiurus cinereus*), Yuma myotis (*Myotis yumanensis*), and Western red bat.

Perennial Creek

Grayson Creek offers suitable foraging opportunities for various insectivorous avian species such as black phoebe and mammalian species such as hoary bat and Yuma myotis.

The creek could offer suitable foraging and dispersal habitat for western pond turtle and many amphibian species including, California red-legged frog, Sierran tree frog (*Pseudacris sierra*), and western toad (*Anaxyrus boreas*).

Riparian Woodland

The riparian woodland corridor running adjacent to Grayson Creek has the most chance to provide nesting habitat for passerine and raptor avian species as well as provide roosting habitat for bats including potentially sensitive species like the Western red bat.

Numerous avian species were observed in the woodland habitat including spotted towhee, dark-eyed junco, and Steller's jay. Additionally, a Cooper's hawk was observed displaying territorial behavior towards a red-tailed hawk which may be indicative of defensive behavior of a nesting site. Pacific tree frog and other amphibian species may also use the area for foraging and breeding.

BIRDS

Red-shouldered Hawk (*Buteo lineatus*). MBTA.

The red-shouldered hawk is a medium-sized, slender *Buteo* with long legs and a long tail and is smaller than the red-tailed hawk. Upperparts are dark with pale spotting, and rusty-reddish feathers on the wing create the distinctive shoulder patch. The tail has several wide, dark bars; the intervening narrow stripes and the tip of the tail are white, and there is variation in the number of tail bars among adults and juveniles.

The habitat that the red-shouldered hawk prefers varies from bottomland hardwoods and riparian areas to upland deciduous or mixed deciduous-conifer forest, and almost always includes some form of water, such as a swamp, marsh, river, or pond. In the west, the red-shouldered hawk sometimes occurs in coniferous forests, and has been expanding its range of occupied habitats to include various woodlands, including stands of eucalyptus trees amid urban sprawl. They typically place their nests in a broad-leaved tree (occasionally in a conifer), below the forest canopy but toward the tree top, usually in the crotch of the main trunk. Nest trees are often near a pond, stream, or swamp, and can be in suburban neighborhoods or parks. These hawks eat mostly small mammals, lizards, snakes, and amphibians. They also eat toads, snakes, and crayfish. They occasionally eat birds, sometimes from bird feeders; recorded prey includes sparrows, starlings, and doves.

The CNDDB does not track occurrences of red-shouldered hawk. However, two red-shouldered hawks were observed foraging and pair bonding on the Property during the survey. The large trees present within the mixed woodland area, and those found along the riparian corridor offer suitable

nesting habitat. In addition, foraging opportunities occur throughout the Property in the mixed woodland habitat. Given the information above the red-shouldered hawk has high potential to occur on the Property in a nesting capacity and was present in a foraging capacity.

Red-Tailed Hawk (*Buteo jamaicensis*). MBTA.

The red-tailed hawk is a large *Buteo* that is distinct due to the red color of its tail feathers in contrast to the brown color of its body. Not all red-tailed hawks exhibit the distinct coloration on their tail and gradations may occur especially in young birds. Red-tailed hawks hunt rodents by soaring over grassland habitat. Nest trees for red-tailed hawks are usually tall trees with a well-developed canopy that includes a strong branching structure on which to build a nest.

The CNDDB does not track occurrences of red-tailed hawk. However, red-tailed hawks were observed foraging on the Property during the April 2021 survey. The large trees present within and around the Property offer suitable nesting habitat. In addition, foraging opportunities occur throughout the Property. Given the information above the red-tailed hawk has high potential to occur on the Property in a nesting capacity and was present in a foraging capacity.

Cooper's Hawk (*Accipiter cooperii*). MBTA.

Coopers' hawk is a medium to large-size raptor, reaching an average of 28-34 in wingspan. They are distinctive for the black and white horizontal banding on the elongated tail, blue gray head, back and upper wings. Additional markings include rusty red horizontal barring on a white breast, a large square head, and long yellow legs and feet. The diet of Cooper's hawk consists mainly of small to medium-sized birds which they ambush by surprise, but they will also consume squirrels and other small mammals.

CNDDB did not list any occurrences of Cooper's hawk. The large trees present within the riparian habitat on the Property offer suitable nesting habitat. A Cooper's hawk was observed foraging on the Property and displaying territorial behavior towards a red-tailed hawk during the April 2021 survey. This display may indicate defensive behavior of a nesting site. Given the information above, the Cooper's hawk has high potential to occur on the Property in a nesting capacity and was present in a foraging capacity.

Sharp-Shinned Hawk (Accipiter striatus). MBTA.

The sharp-shinned hawk is a small raptor with short, rounded wings, and has an average wingspan of 17" to 23". This hawk has a long tail that is squared-off at tip with prominent corners. This raptor typically flies with several quick, snappy wing beats and a short glide, but also soars. Its small, rounded head does not project far beyond the wings when soaring. The adult sharp-shinned

hawk exhibits a red eye, black cap, and a blue-gray back and upper wings. The white breast, belly and under wing coverts are marked by fine, thin, reddish bars.

Sharp-shinned hawks specialize in hunting avian prey with songbirds making up 90 percent of its diet. These hawks will occasionally eat small rodents, such as mice and voles, and even some insects. Throughout their range, sharp-shinned hawks favor conifer trees (pine, spruce, or fir) as nesting sites, but may also use aspens and hardwood trees. The nest is always placed under dense forest cover, usually toward the top of a tall tree, but well under the canopy. Most nests are anchored between horizontal limbs and the tree trunk.

CNDDB did not list any occurrences of sharp-shinned hawk. However, the large trees present within the riparian habitat on the Property offer suitable nesting habitat. Additionally, foraging opportunities are present in the woodland habitats with the number of passerine bird species observed during the April 2021 survey. Given the information above, sharp-shinned hawk has a moderate potential to occur on the Property in a nesting and foraging capacity and may occur.

American Kestrel (Falco sparverius). MBTA.

The American kestrel is the smallest of raptor species and is distinct due to the black barring on its face. The female kestrel is slightly larger than the male bird and is differentiated by its brown and red coloration. The male kestrel is slightly smaller than the female and has gray wing patches near the top of the wing.

Kestrels favor open areas with short ground vegetation and sparse trees. They are generally found in meadows, grasslands, deserts, parks, farm fields, cities, and suburbs, and are attracted to many habitats modified by humans. Kestrels utilize cavities in trees and structures for nesting. They're diet consists mostly of insects and other invertebrates, but they also hunt small rodents, birds, and reptiles.

CNDDB did not list any occurrences of American kestrel. However, cavities within the large trees present on the Property offer suitable nesting habitat. Additionally, foraging opportunities are present in the woodland habitats with the number of insects, lizards, and passerine bird species observed during the April 2021 survey. Given the information above, American kestrel has a moderate potential to occur on the Property in a nesting and foraging capacity and may occur.

Burrowing Owl (*Athene cunicularia*). Federal Species of Special Concern, California Species of Special Concern.

The U.S. Fish and Wildlife Service has identified the burrowing owl is as a "candidate" species. Candidate species are animals and plants that may warrant official listing as threatened or

endangered, but there is no conclusive data to give them this protection at the present time. As a candidate species, burrowing owls receive no legal protection under the Endangered Species Act (ESA). However, this species does receive some legal protection from the U.S. through the Migratory Bird Treaty Act, which forbids the destruction of the birds and active nests. In California, the burrowing owl considered a "species of special concern."

Burrowing owls are ground dwelling members of the owl family and are small brown to tan colored birds with bold spots and barring. Burrowing owls generally require open annual grassland habitats in which to nest, but can be found on abandoned lots, roads, airports, and other urban areas. Burrowing owls generally use abandoned California ground squirrel holes for their nesting burrow but are also known to use pipes or other debris for nesting purposes. Burrowing owls prefer annual grassland habitats with low vegetative cover. The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old.

CNDDB listed two occurrences of burrowing owl within five miles of the Property. The closest occurrence (Occurrence #1164) was observed approximately 3.0 miles northeast of the Property in Buchanan Field Airport in the City of Concord. During this observation, two unpaired adults were observed along the runway in January 2008. The Property does not have suitable grassland habitat for burrowing owl. Additionally, no ground squirrel burrows were observed on site. A few mammal burrows were present on site however these burrows were most likely constructed by smaller mammals such as pocket gophers and voles, which are inadequate for burrowing owls. Additionally, high vegetative cover is present in the woodland habitat which is a characteristic that burrowing owl do not generally prefer. For these reasons the burrowing owl has a low potential to occur on the Property in nesting and foraging capacity and is not likely to occur.

MAMMALS

Special-status Bats

Bats (Order - *Chiroptera*) are the only mammals capable of "true" flight. They are nocturnal feeders and locate their prey, which consists of small to medium sized insects by echolocation. Bats consume vast amounts of insects making them very effective pest control agents. They may eat as much as their weight in insects per day. Maternity roosts comprised of only females, may be found in buildings or mine shafts with temperatures up to 40 degrees Celsius and a high percentage of humidity to ensure rapid growth in the young. Female bats give birth to only one or

two young annually and roost in small or large numbers. Males may live singly or in small groups, but scientists are still unsure of the whereabouts of most males in summer.

Special-status bats with the potential to occur on the Property are listed below:

- Western Red Bat (*Lasiurus blossevillii)*
- Hoary Bat (*Lasiurus cinereus*)
- Yuma myotis (*Myotis yumanensis*)

CNDDB listed the hoary bat (Occurrence #20) as occurring within the 5-mile radius of the Property. This occurrence was recorded approximately 2.0 miles east of the Property. The large oak and redwood trees and the existing residential homes could potentially offer roosting sites for multiple bat species. The woodland habitat and Grayson Creek provide an array of insects, allowing for abundant foraging opportunities. Given the above information, multiple species of bats have a moderate potential to occur on the Property in roosting and foraging capacity.

AMPHIBIANS

California Red-Legged Frog (*Rana draytonii*). Federally Threatened, California Species of Special Concern.

California red-legged frog (CRLF) was listed as a Federal threatened species on May 31, 1996 (61 FR 25813) and is considered threatened throughout its range. If a proposed federal action may affect, and is likely to adversely affect, a listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. On April 13, 2006, USFWS designated critical habitat for the CRLF under the ESA. In total, approximately 450,288 acres fell within the boundaries of critical habitat designation. A new ruling by the USFWS on March 17, 2010, revised the designation of critical habitat for CRLF (75 FR 12815 12959). In total, approximately 1,636,609 acres of critical habitat in 27 California counties fall within the boundaries of the final revised critical habitat designation. This rule became effective on April 16, 2010.

The CRLF is a rather large frog, measuring one and a half to five inches in length. They are reddish-brown to gray in color, with many poorly defined dark specks and blotches. Dorsolateral folds are present. The underside of the CRLF is washed with red on the lower abdomen and hind legs. The CRLF has a dark mask bordered by a light stripe on the jaw, smooth eardrums, and not fully webbed toes. The male has enlarged forearms and swollen thumbs. Its vocals consist of a series of

weak throaty notes, rather harsh, and lasting two to three seconds. Breeding occurs from December to March with egg masses laid in permanent bodies of water.

The CRLF is found in lowlands, foothill woodland and grasslands, near marshes, lakes, ponds or other water sources. These amphibians require dense shrubby or emergent vegetation closely associated with deep still or slow-moving water. Generally, these frogs favor intermittent streams with water at least two and a half feet deep and where the shoreline has relatively intact emergent or shoreline vegetation. CRLF is known from streams with relatively low gradients and those waters where introduced fish and bullfrogs are absent. CRLF are known to take refuge upland in small mammal burrows during periods of high-water flow. CRLF occurs west of the Sierra Nevada-Cascade and in the Coast Ranges along the entire length of the state. Historically, they occurred throughout the Central Valley and Sierra Nevada foothills south to northern Baja California. Now they are found from Sonoma and Butte Counties south to Riverside County, but mainly in Monterey, San Luis Obispo, and Santa Barbara Counties.

CNDDB listed 5 occurrences of CRLF occurring within five miles of the Property. The closest occurrence (#158) observed in 2004 was located approximately 2 miles west of the Property. During this occurrence, 3 adult CRLF were observed in two permanent freshwater ponds located within Briones Regional Park. The Property is located approximately 1.3 miles east from USFWS-designated critical habitat for CRLF (Unit ALA-1B)(Attachment 1, Figure 7). Although deep plunge pools are not present within the portion of Grayson Creek that borders the Property, water was present in the entire length of the creek bordering the Property during the April 2021 survey. Vegetative debris throughout the riparian woodland corridor offers suitable upland refugial habitat for CRLF. Therefore, Grayson Creek could offer potential aquatic dispersal and foraging opportunities for CRLF, and the surrounding riparian habitat could offer terrestrial dispersal habitat. For these reasons CRLF has a moderate potential to occur on site in the creek channel and riparian wood habitats in a dispersal capacity only (see Table 2).

California Tiger Salamander (*Ambystoma californiense*). Federally Threatened, State Threatened.

Adult California tiger salamanders (CTS) inhabit rolling grassland and oak savannah. Adults spend most of the year in subterranean retreats such as rodent burrows but may be found on the surface during dispersal to and from breeding sites. The preferred breeding sites are vernal pools and other temporary ponds. However, CTS may use permanent manmade ponds as breeding habitat. CTS adults begin migrating to ponds after the first heavy rains of fall and can be found in or around the breeding ponds during and after winter rainstorm events. In extremely dry years, CTS may not reproduce.

After mating, females lay several small clusters of eggs, which contain from one to over 100 eggs. The eggs are deposited on both emergent and submerged vegetation, as well as submerged detritus. A minimum of ten weeks is required to complete larval development through metamorphosis, at which time the larvae will normally weigh about ten grams. Larvae remaining in pools for a longer time period can grow to much larger sizes. Upon metamorphosis, juvenile CTS migrate in large masses at night from the drying breeding sites to refuge sites. Prior to this migration, the juveniles spend anywhere from a few hours to a few days near the pond margin. Adult CTS are largely opportunistic feeders, preying upon arthropod and annelid species that occur in burrow systems, as well as aquatic invertebrates found within seasonal pools. The larvae feed on aquatic invertebrates and insects, showing a distinct preference for larvae of the Pacific tree frog.

On August 4, 2004, the USFWS announced the listing of the CTS as threatened throughout its range with the exception of the Sonoma and Santa Barbara County populations which are listed as endangered (USFWS 2004). On March 3, 2010, the California Fish and Game Commission designated CTS as threatened under the California Endangered Species Act. On August 23, 2005, the Service designated 199,109 acres of critical habitat in 19 counties for the central California population of the CTS. On August 2, 2005, they proposed 74,223 acres of critical habitat for CTS in Sonoma County, California. This habitat is located in the Santa Rosa Plain in central Sonoma and includes lands bordered on the west by Laguna de Santa Rosa, to the south by Skillman Road, northwest of Petaluma, to the east by foothills, and to the north by Windsor Creek. On December 14, 2005, in a final decision, USFWS designated and excluded 17,418 acres of critical habitat for CTS, so that no critical habitat is being designated for the Sonoma County population.

CNDDB has listed four occurrences (Occurrence #413, #43, #582, #418) of CTS occurring within five miles of the Property. All four of these occurrences are considered to be historical with the most recent occurrence (Occurrence #418) observed in 1954 and the sites are considered to be extirpated. The Property lacks vernal pools or other ponds suitable for breeding habitat. For these reasons there is a low potential for CTS to occur on the Property and CTS is presumed absent.

REPTILES

Alameda Whipsnake (*Masticophis lateralis euryxanthus*). Federally Threatened, State Threatened.

The Alameda whipsnake is one of two subspecies of the California whipsnake. It is distinguished from the chaparral whipsnake (*M. l. lateralis*) by the broad orange striping on its sides. Adults reach approximately three to five feet in length and show a sooty black to dark brown back, cream colored undersides and pinkish tail. This species is typically found in chaparral, northern coastal sage scrub, and coastal sage habitats; however, annual grasslands, oak woodlands, and oak

savannah serve as habitat during the breeding season. Egg-laying occurs near scrub habitat on ungrazed grasslands with scattered shrub cover. The known distribution for Alameda whipsnake includes Sobrante Ridge, Oakland Hills, Mount Diablo, the Black Hills, and Wauhab Ridge.

Male and female snakes are active from April to November finding mates. During the breeding season from late March through mid-June, male snakes exhibit more movement throughout their home range, while female snakes remain sedentary from March until egg laying. Females lay a clutch of 6 to 11 eggs, usually in loose soil or under logs or rocks.

CNDDB listed 13 occurrences of the Alameda whipsnake within the vicinity of the Property. The exact locations of these collections were not recorded in the CNDDB due to the sensitivity of this species. Refer to Attachment 1 Figure 5 to see approximate range of listed occurrences. The Property is located approximately 0.9 miles from USFWS designated critical habitat in Briones Regional Park (unit: 3) (See Attachment 1 Figure 7). The most recent occurrence (# 180) occurred approximately 3.5 miles in 2018. During this occurrence, two Alameda whipsnake were detected in April 2018 on Mount Wanda in Martinez. The closest occurrence (# 62) involved the observation of 1 adult whipsnake in coyote brush scrub in August 2002. This occurrence was located approximately 1.2 miles southwest just outside Briones Regional Park. The Property does not support scrub or rocky outcrop habitat which the Alameda whipsnake prefers. Residential development surrounds the Property which may discourage Alameda whipsnake from using the Property. However, open space parks are also present within the vicinity of the Property; thus, whipsnake could disperse through the Property as it moves to more suitable habitat. For these reasons, Alameda whipsnake has a low potential to occur on the Property in a dispersal capacity only.

Western Pond Turtle (*Emys marmorata*). California Species of Special Concern.

The western pond turtle is a thoroughly aquatic turtle that may be found in marshes, ponds, streams and irrigation ditches where aquatic vegetation is present. The turtles, which range from nine to ten inches in size, require basking sites and suitable upland habitat for egg laying. Suitable breeding upland habitats may consist of sandy banks or grassy open fields. The western pond turtle has a dark brown to olive-colored carapace with hexagonal scales that lack prominent markings.

Nesting and incubation occur from April to September, with a peak time for mating and egg laying occurring from March to May. After a 73 to 80-day gestation or incubation period, 5 to 13 eggs will be laid from July to October. Eggs are produced either once or twice a year. Females may travel some distance from water for egg-laying, moving as much as 0.8 kilometers (a half mile) away from and up to 90 meters (300 feet) above the nearest source of water. Most nests are within

90 meters (300 feet) of water. The female usually leaves the water in the evening and may wander far before selecting a nest site, often in an open area of sand or hardpan that is facing southwards. The nest is flask-shaped with an opening of about five centimeters (two inches). Females spend considerable time covering up the nest with soil and adjacent low vegetation, making it difficult for a person to find unless it has been disturbed by a predator.

Activity slows from November to February. During the winter when water and air temperatures cool, usually from September to March, the turtles begin to hibernate. During hibernation, turtles either bury themselves in the mud at the bottom of ponds or will bury themselves on land in duff (top layer of decomposing vegetation and soil). Some turtles travel more than a half mile to over-winter on land, though many select the nearest wooded or shrubby area they can bury in. Turtles then emerge from hibernation in the spring to start the yearly cycle again.

CNDDB listed 5 occurrences of the western pond turtle within the vicinity of the Property. The closest occurrence (Occurrence #1360) was located approximately 4 miles northeast of the Property. During this occurrence one adult was observed during a survey of the Clayton Valley drain prior to routine maintenance. The portion of Grayson Creek bordering the Property lacks basking pools and is mostly shaded, however water was present in the creek during the April 2021 survey. Therefore, western pond turtle could potentially use the creek channel and the surrounding riparian woodland corridor as dispersal habitat. Given the information above, western pond turtle has a moderate potential to occur on the Property and may occur in a dispersal capacity only.

7.0 CONCLUSIONS AND IMPACT ANALYSIS

7.1 Waters

Results of the biological resource analysis survey conducted by Olberding Environmental indicate that the Property contains waters that may be considered jurisdictional by the Army Corps of Engineers, RWQCB or CDFW. Grayson Creek runs along the southern boundary of the Property. Although the proposed project does not include conducting any activities within Grayson Creek or the associated riparian corridor, the waters mitigation presented in Section 8.0 would reduce any potential impacts to less-than-significant levels.

7.2 Riparian Habitat

The proposed project plans on the removal of approximately 84 trees including native species such as coast live oak, valley oak, black walnut, and buckeye. Native trees that are part of or adjacent to a riparian area, and measure greater than 6.5 inches in diameter at breast height (dbh) are

considered protected under the Contra Costa County Tree Protection and Preservation Ordinance (Chapter 816-6, Ordinances 94-59, 94-22, Contra Costa County Code). Adherence to County ordinances that pertain to riparian habitat protection including the Tree Protection and Preservation Ordinance described above and the Contra Costa County Creek Setback Ordinance (Chapter 914) (Attachment 1, Figure 11), and implementation of the mitigation measures presented in Section 8.0 would reduce any potential impacts to less-than-significant levels.

7.3 Special-status Plants

No special-status plant species were determined to have a potential to occur on the Property. The April 2021 survey coincided with the blooming period of three special-status plants (Diablo helianthella, Mt. Diablo fairy-lantern, bent-flowered fiddleneck) that may have had the potential to occur on the Property and these plants were not observed. Although the survey occurred outside the blooming period for Congdon's tarplant, remnant plants were not observed. The proposed project will not have an impact to special status plants and no further measures related to protection of special-status plants are recommended.

7.4 Special-status Wildlife

Foraging or Nesting Raptor/Passerine Species – A total of five raptor species were identified as having potential to occur on the Property. Three species including red-shouldered hawk, red-tailed hawk, and Cooper's hawk had a high potential to occur in a foraging and nesting capacity and were present in a foraging capacity. The sharp-shinned hawk and American kestrel had a moderate potential to occur in a foraging and nesting capacity. Implementation of the special-status wildlife mitigation measures presented in Section 8.0 below would reduce any potential impacts to nesting avian species protected under the MBTA to less-than-significant levels.

Special-Status Mammals – Given the presence of suitable onsite habitat; the Western red bat, hoary bat and Yuma myotis have a moderate potential to occur on the Property in a foraging and roosting capacity. No immediate signs were present during the initial survey; however, large trees throughout the riparian and mixed woodland habitats, and the existing residential structures could provide roosting sites. Implementation of the special-status wildlife mitigation measures presented in Section 8.0 below would reduce any potential impacts to bat species to less-than-significant levels.

Special-Status Amphibians – One amphibian species, CRLF, has been identified as having a moderate potential to occur on the Property in a dispersal capacity. Multiple CNDDB occurrences and USFWS designated critical habitat of CRLF are recorded in the vicinity of the Property. The Property contains suitable aquatic dispersal habitat and foraging opportunities in Grayson Creek

and suitable upland habitat in the riparian corridor. For these reasons CRLF has a moderate potential to occur in a foraging and dispersal capacity throughout the creek channel and associated riparian woodland corridor. Implementation of the special-status wildlife mitigation measures presented in Section 8.0 below would reduce any potential impacts to CRLF to less-than-significant levels.

Special-Status Reptiles – The Alameda whipsnake and western pond turtle were identified by the CNDDB as occurring in the vicinity of the Property. An assessment of the Property concluded that the Property does not support the shrub and rock outcrop habitat that Alameda whipsnake prefers. More suitable habitat is located west and north of the Property in Briones Regional Park and the surrounding open space. Thus, Alameda whipsnake is not likely to occur on the Property in a breeding capacity or as a permanent resident. The Property is essentially surrounded by residential development; however, areas of open space do occur within the vicinity of the Property. Whipsnake could disperse through the riparian and mixed woodland habitat present within the Property as it migrates through to more suitable habitat. Therefore, Alameda whipsnake has a low potential to occur on the Property in a dispersal capacity only. Western pond turtle could utilize Grayson Creek for aquatic dispersal and the surrounding riparian woodland corridor as terrestrial dispersal. Therefore, western pond turtle has a moderate potential to occur on the Property in a dispersal capacity only. Implementation of the special-status wildlife mitigation measures presented in Section 8.0 below would reduce any potential impacts to western pond turtle or Alameda whipsnake to less-than-significant levels.

8.0 RECOMMENDED MITIGATION MEASURES

Implementation of the following mitigation measures will reduce potential Project impacts, listed in Section 4.3.2 (California Environmental Quality Act) of this report, to less than significant levels for the biological resources discussed below.

Corps and State Regulated Waters - With implementation of the mitigation measure (MM #1) provided below, the Project would have a less than significant adverse effect on federally protected waters as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

> **MM #1) Corps and State Regulated Waters** – Jurisdictional waters potentially regulated under the authority of the Corps, RWQCB, and CDFW are present on the Property. The proposed project shall implement all County ordinances that require a setback from Grayson Creek to prevent the fill of waters or impacts to Grayson Creek or the bed or bank of the creek.

Riparian Habitat - If removal of any trees deemed "protected" by the Contra Costa County Tree Ordinance (Chapter 816-6) from the riparian habitat during project activities is to occur, the above tree ordinance and the Contra Costa County Creek Setback Ordinance (Chapter 914) must be adhered to. With implementation of the mitigation measure (MM #2) provided below, the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS.

> **MM #2) Trees** – For all riparian associated trees that are removed from the Property, a 3:1 replacement ratio for all native trees and a 1:1 replacement ratio for all non-native trees (with native species) is recommended by Olberding Environmental.

Special-Status Wildlife Species - With implementation of the mitigation measures (MM #3; MM #4; MM #5; MM #6; MM #7; and MM #8) provided below, the Project is not expected to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW and USFWS.

Wildlife corridors and native nurseries - With implementation of the mitigation measures (MM #3; MM #4; MM #5; MM #6; and MM #7) provided below, the Project would not 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.

> **MM #3) Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the Property and the large trees within the adjacent riparian area should be conducted by a qualified biologist 14 days prior to the commencement of the tree removal or site grading activities. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by a qualified biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project

construction zones (typically by August), the project can proceed without further regard to the nest site(s).

MM #4) Pre-construction Bat Survey – To avoid "take" of special–status bats, the following mitigation measures shall be implemented prior to the removal of any existing trees or structures on the project site:

a) A bat habitat assessment shall be conducted by a qualified bat biologist during seasonal periods of bat activity (mid–February through mid–October – ca. Feb. 15 – Apr. 15, and Aug. 15 – October 30), to determine suitability of each existing structure as bat roost habitat.

b) Structures found to have no suitable openings can be considered clear for project activities as long as they are maintained so that new openings do not occur.

c) Structures found to provide suitable roosting habitat, but without evidence of use by bats, may be sealed until project activities occur, as recommended by the bat biologist. Structures with openings and exhibiting evidence of use by bats shall be scheduled for humane bat exclusion and eviction, conducted during appropriate seasons, and under supervision of a qualified bat biologist.

d) Bat exclusion and eviction shall only occur between February 15 and April 15, and from August 15 through October 30, in order to avoid take of non–volant (non–flying or inactive, either young, or seasonally torpid) individuals.

OR

A qualified wildlife biologist experienced in surveying for and identifying bat species should survey the portion of the Property with large trees and abandoned structures. If tree removal is proposed to determine if any special–status bats reside in the trees. Any special–status bats identified should be removed without harm. Bat houses sufficient to shelter the number of bats removed should be erected in open space areas that would not be disturbed by project development.

MM #5) Pre-construction Reptile Survey – While potential occurrence of Alameda whipsnake and western pond turtle is limited to dispersal throughout the creek channel, riparian woodland corridor, and mixed woodland habitats, a pre-construction survey for special status reptile species should be performed no more than 48 hours prior to ground disturbance or vegetation removal to determine presence/absence of these species. Worker Environmental Awareness training discussing the potential for these species should be

conducted by the Designated Biologist or Biological Monitor for all construction personnel working within the project site.

MM #6) Pre-construction Amphibian Surveys – Directed pre-construction surveys for CRLF are recommended prior to construction activities. The creek channel and associated riparian woodland may serve as dispersal areas for CRLF. A Designated Biologist shall conduct a pre-construction survey of these habitats for CRLF preceding the commencement of construction activities to verify presence/absence of this species. Wildlife exclusion fencing (ERTEC fencing) should be installed along the grading limit of the Project site in order to prevent dispersal into the grading and work areas of the site from the creek channel and/or the riparian corridor. Fencing should be trenched into the ground at a minimum of 6 inches and a lip should be formed along the top of the fence line. A Designated Biologist or Biological Monitor shall be onsite during initial ground-disturbing activities in order to inspect the work area and fence lines daily for special status amphibians and other wildlife. Worker Environmental Awareness training discussing the potential for these species should be conducted by the Designated Biologist or Biological Monitor for all construction personnel working within the project site. If any CRLF or other listed amphibians are found during construction activities, the U.S. Fish and Wildlife Service should be consulted to approve capture and relocation by a Qualified Biologist.

MM #7) Wildlife Exclusion Fencing – In order to mitigate for potential impacts to CRLF and western pond turtle, heavy-duty wildlife exclusion fencing (ERTEC) should be installed along the grading limit of the proposed project site to prevent these species from entering the project site during construction activities. Exclusion fencing should be trenched into the ground at a minimum of 6 inches and a lip shall be folded along the upper portion of the fence line. Pre-construction surveys shall be conducted by a Designated Biologist prior to vegetation clearing and fence installation.

MM #8) Erosion Control – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the Property could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. Mitigation measures may include best management practices (BMP's) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

Habitat Conservation Plans - The proposed project does not lie within the East Contra Costa County HCP/NCCP or any other HCP/NCCP. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

L**ocal Ordinances** - With implementation of the mitigation measures provided above, plus MM #2 provided above, the project is not expected to conflict with local policies and ordinances protecting biological resources, including the Contra Costa County tree protection and setback ordinances:

- Contra Costa County Tree Ordinance – Chapter 816-6 – Tree Protection and Preservation Ordinance discussed in Section 4.2.4 of this report

- Contra Costa County Creek Setback Ordinance – Chapter 914 – Rights-of-Ways and Setbacks discussed in Section 4.2.5 of this report

9.0 LITERATURE CITED

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ATTACHMENTS

ATTACHMENT 1
FIGURES

Figure 1
Regional Map

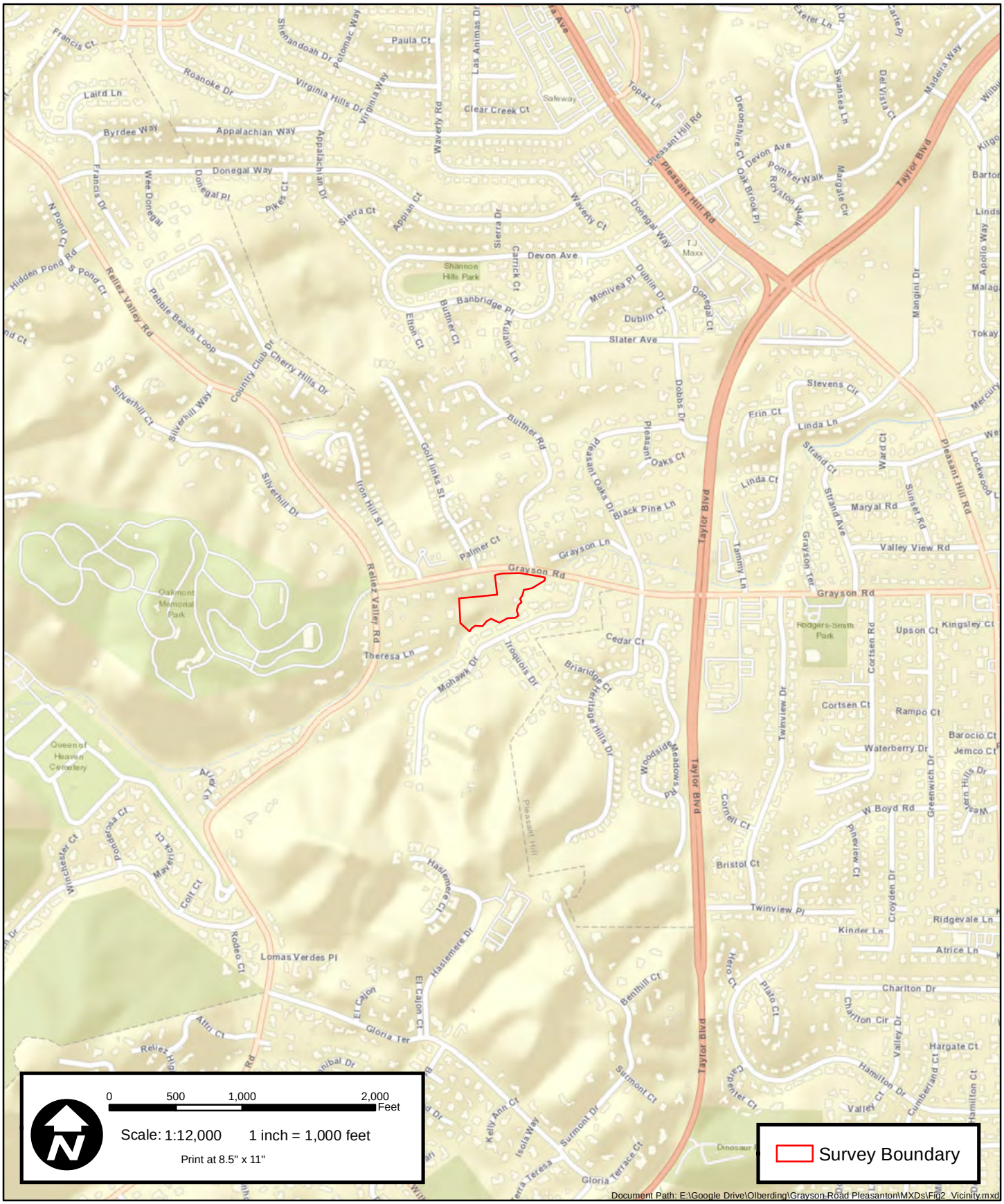
OLBERDING -ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 1: Regional Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/15/2021

Figure 2
Vicinity Map



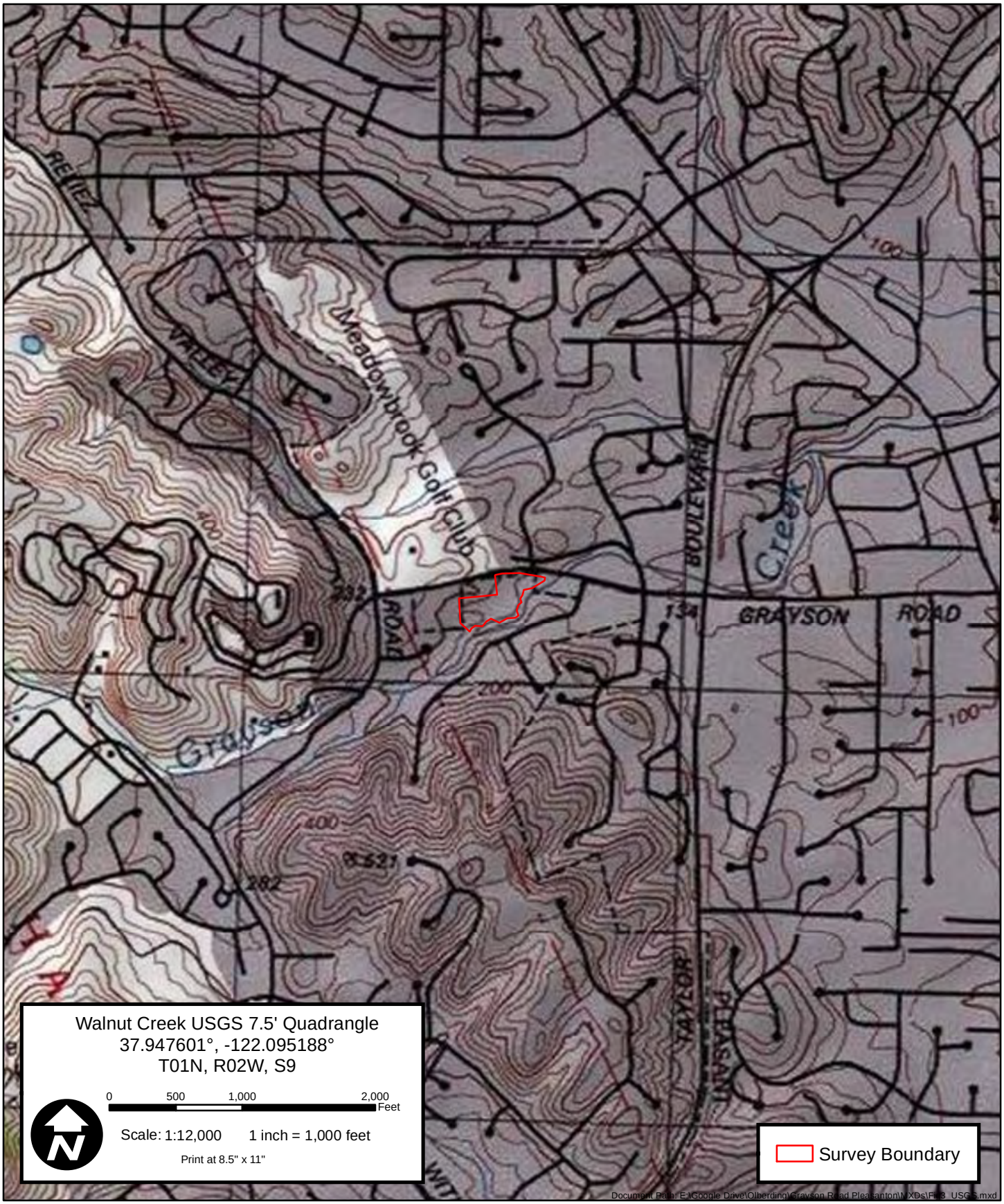
OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 2: Vicinity Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/15/2021

Figure 3
USGS Quadrangle Map



OLBERDING
-ENVIRONMENTAL-

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Folsom, CA 95630
Phone: (916) 985-1188

Figure 3: USGS Topographic Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/15/2021

Figure 4
Aerial Photograph

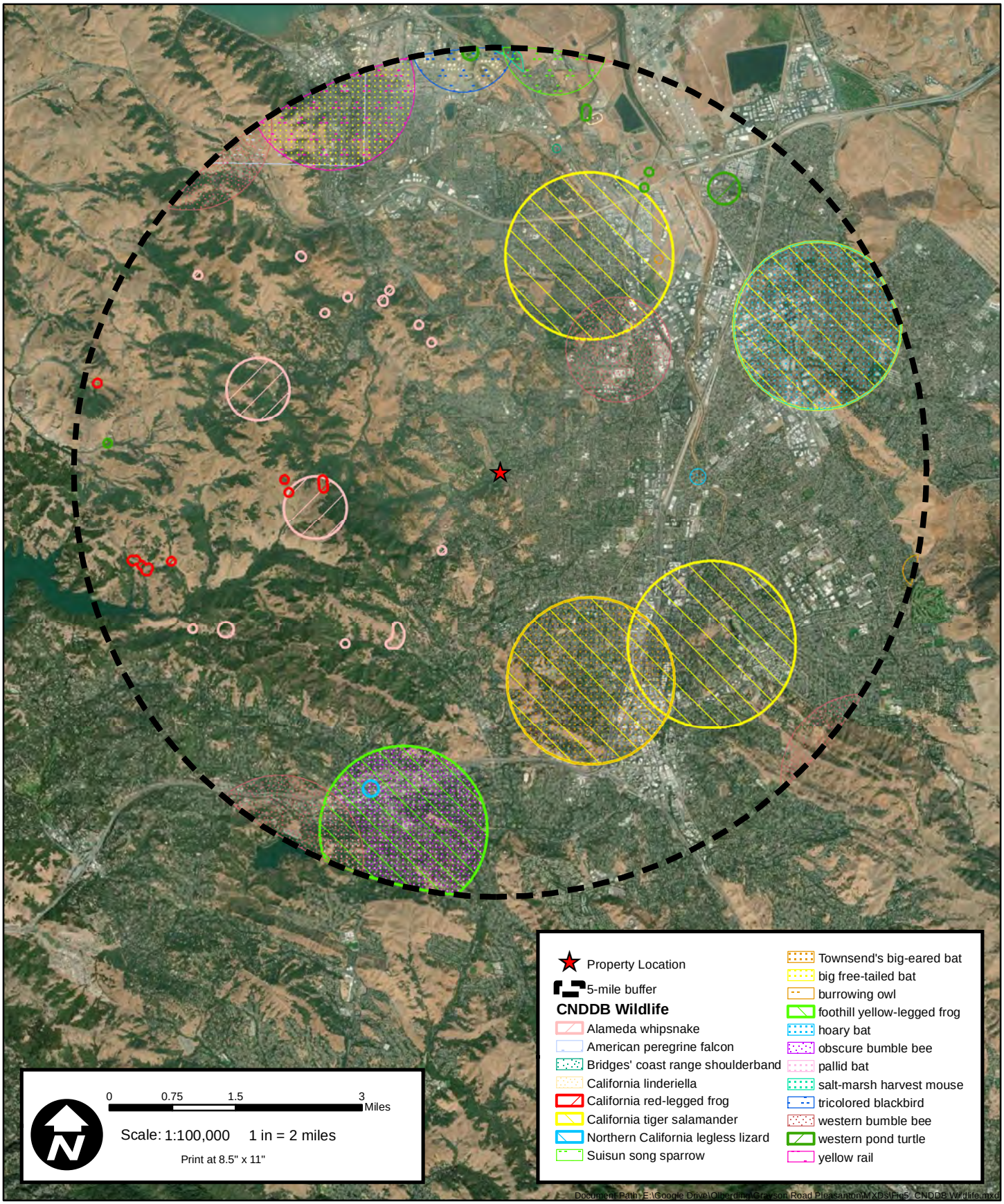
Figure 4: Aerial Map
Grayson Road Property
Contra Costa County, California

OLBERDING -ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Revision Date: 4/15/2021

Figure 5
CNDDB Map of Special Status Wildlife



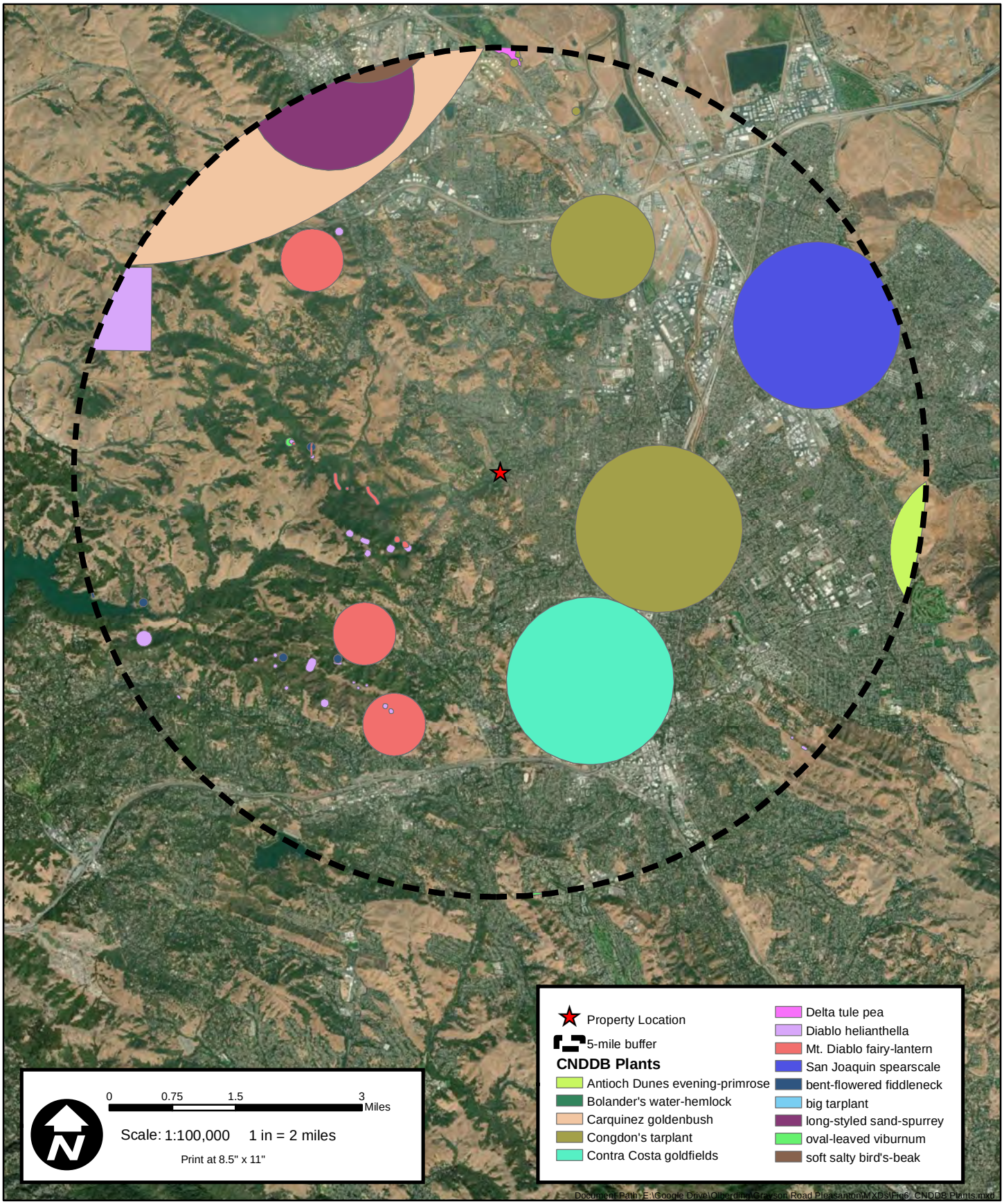
OLBERDING -ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 5: CNDDB Wildlife Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/15/2021

Figure 6
CNDDB Map of Special Status Plants



OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 6: CNDDB Plants Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/15/2021

Figure 7
USFWS Designated Critical Habitat

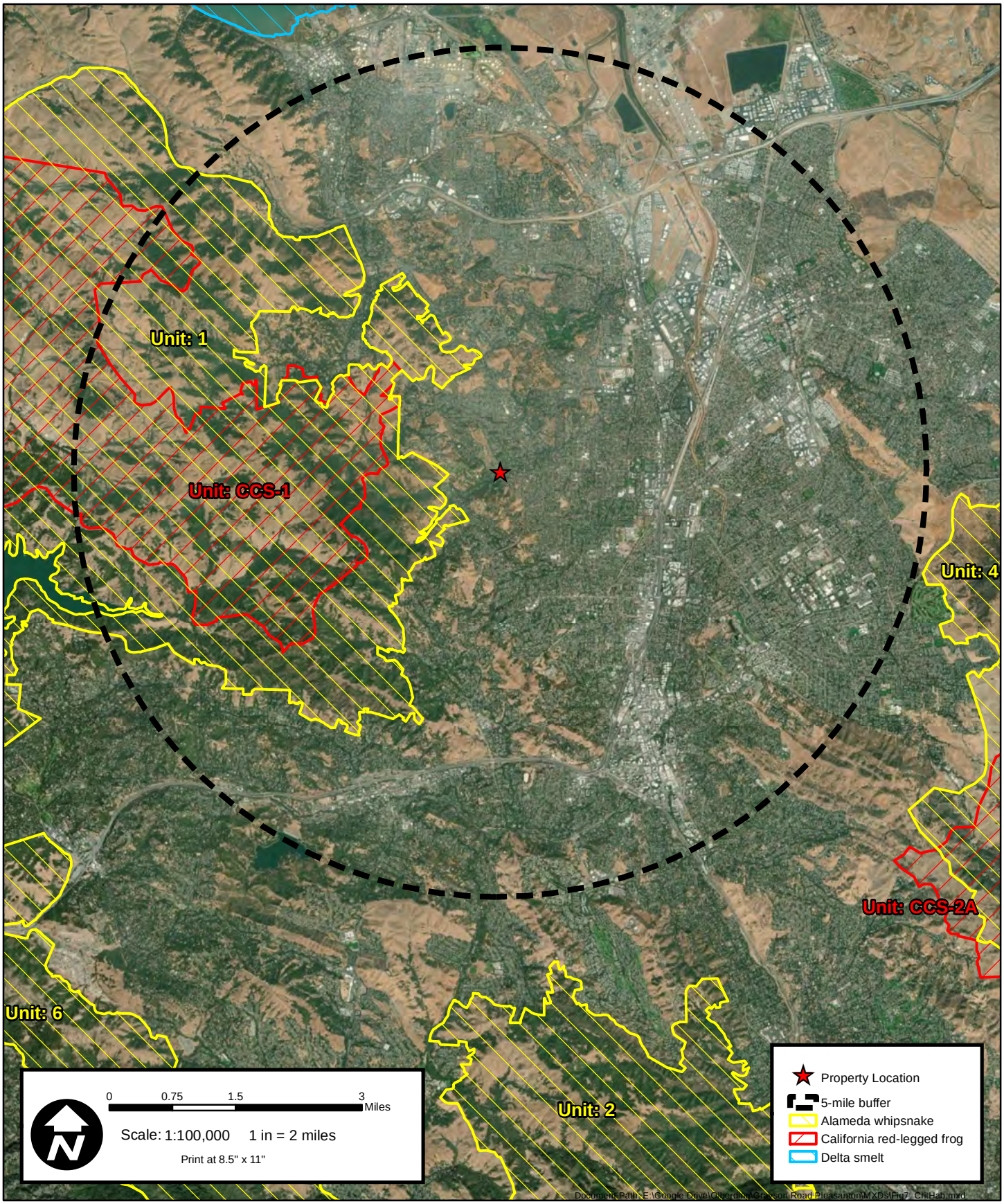


Figure 7: USFWS Designated Critical Habitat Map
Grayson Road Property
Contra Costa County, California

OLBERDING -ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Revision Date: 4/15/2021

Figure 8
Soils Map

OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 8: Soils Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/16/2021

Figure 9
Photo Location Map

Figure 9: Photo Points Map
Grayson Road Property
Contra Costa County, California

OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Revision Date: 4/16/2021

Figure 10
Habitat Map

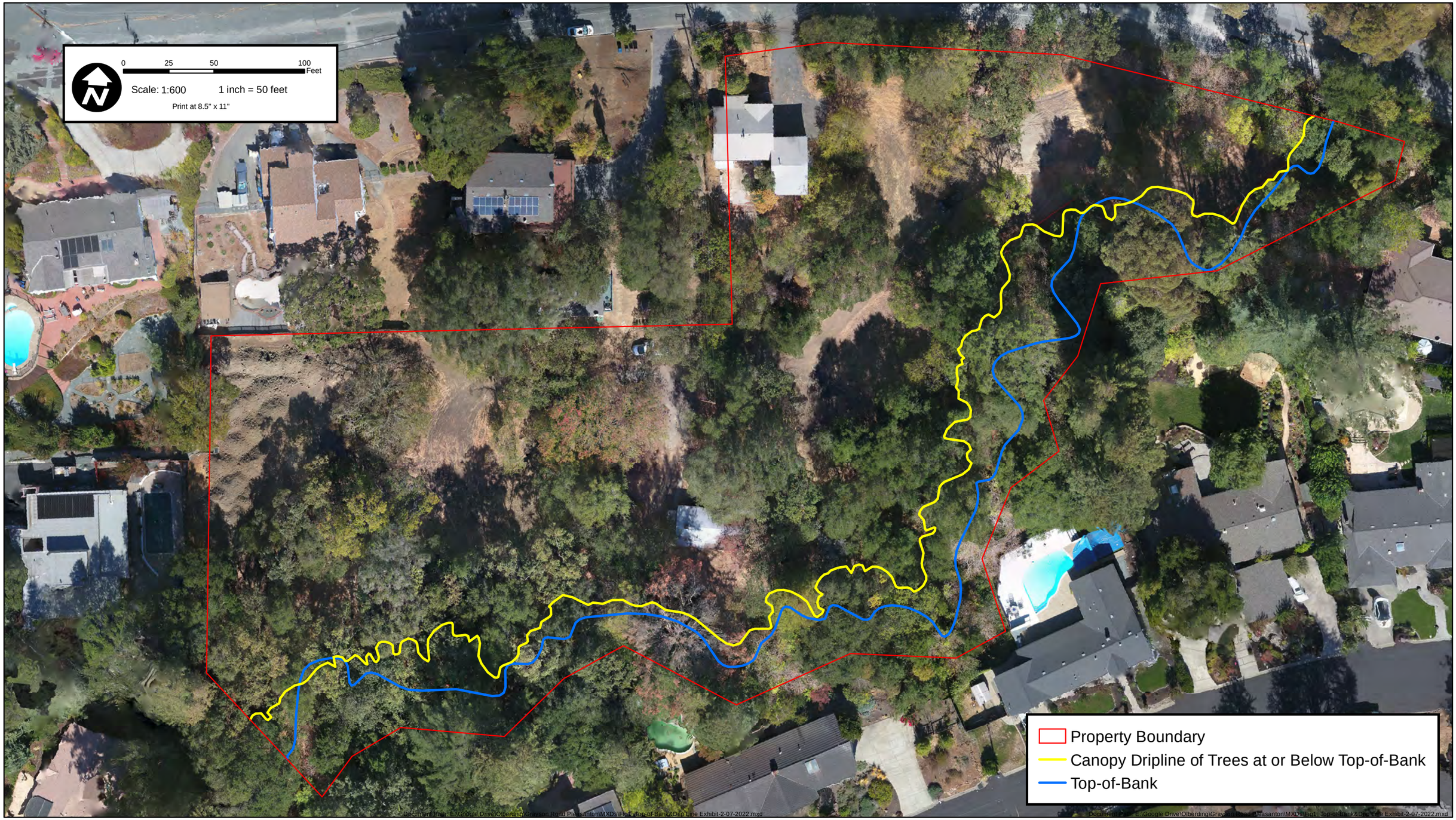
OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 10: Habitat Map
Grayson Road Property
Contra Costa County, California

Revision Date: 4/16/2021

Figure 11
Canopy Dripline of Trees at or Below Top-of-Bank



OLBERDING
-ENVIRONMENTAL-

193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 11: Drip Line Exhibit
Grayson Road Property
Contra Costa County, California

Aerial Imagery: Drone Flight Orthomosaic - 10/16/2021
Revision Date: 2/7/2022

ATTACHMENT 2

SITE PLANS

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY.

CONCEPTUAL BUILDING LAYOUT

1024 & 1026 GRAYSON ROAD
SUBDIVISION SD20-9531

VICINITY OF PLEASANT HILL CONTRA COSTA COUNTY

REGISTERED PROFESSIONAL ENGINEER
EASTON C. McALLISTER
No. 61148
EXP. 12/31/20
CIVIL
STATE OF CALIFORNIA
CALIFORNIA

EASTON C McALLISTER - R.C.E. 61148
RENEWAL DATE: 12/31/22

#	REVISIONS	DATE

DEBOLT CIVIL ENGINEERING
45+ YEARS
811 SAN RAMON VALLEY BLVD #201
DANVILLE, CALIFORNIA 94526
(925) 837-3780 | DEBOLTCIVIL.COM

Date: 08/20/21
Scale: 1" = 20'
By: EM
Job No.: 19300

VTM-7

ATTACHMENT 3

TABLES

Table 1

Plant and Wildlife Species Observed

Within/Adjacent to the Survey Area

Table 1

Wildlife Species Observed Within/Adjacent to the Survey Area

Scientific Name	Common Name
Plant Species Observed	
Salix spp.	Willow species
Aesculus californica	California buckeye
Avena fatua	Wild oat
Galium aparine	Cleavers
Ulmus pumila	Siberian Elm
Bromus diandrus	Ripgut brome
Vinca major	Periwinkle
Carduus pycnocephalus	Italian thistle
Claytonia perfoliata	Miner's lettuce
Medicago polymoprha	Bur clover
Festuca perennis	Italian rye grass
Oxalis pes-caprae	Bermuda buttercup
Torilis arvensis	Field hedgeparsley
Sequoia sempervirens	Coast redwood
Pyrus communis	Common pear
Prunus cerasifera	Cherry plum
Calocedrus spp.	Cedar
Hedera helix	English ivy
Vicia sativa	Common vetch
Plantago lanceolata	English plantain
Quercus agrifolia	Coast live oak
Quercus lobata	Valley oak
Juglans nigra	Black walnut
Rubus armeniacus	Himalayan blackberry
Silybum marianum	Milk thistle
Toxicodendron diversilobum	Western poison oak
Pinus radiata	Monterey pine
Umbellularia californica	California bay laurel
Eucalyptus globulus	Blue gum
Animal Species Observed	
Birds	
Aphelocoma californica	Western scrub jay

Table 1

Wildlife Species Observed Within/Adjacent to the Survey Area

Scientific Name	Common Name
Buteo jamaicensis	Red-tailed hawk
Calypte anna	Anna's hummingbird
Cathartes aura	Turkey vulture
Cyanocitta stelleri	Steller's Jay
Junco hyemalis	Dark-eyed junco
Melanerpes formicivorus	Acorn woodpecker
Melozone crissalis	California towhee
Pipilo maculatus	Spotted towhee
Sayornis nigricans	Black phoebe
Psaltriparus minimus	Bushtit
Corvus brachyrhynchos	American crow
Accipiter cooperii	Cooper's hawk
Buteo lineatus	Red-shouldered hawk
Zonotrichia leucophrys	White-crowned sparrow
Reptiles	
Sceloporus occidentalis	Western fence lizard

Table 2

Special-Status Species for the Walnut Creek, Benicia, Vine Hill, Honker Bay, Briones Valley, Clayton, Oakland East, Las Trampas Ridge, Diablo 7.5 Minute Quadrangle Maps

Table 2

Special-Status Species for the Walnut Creek, Benicia, Vine Hill, Honker Bay, Briones Valley, Clayton, Oakland East, Las Trampas Ridge, Diablo 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ CNPS)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
PLANTS					
Antioch Dunes Evening Primrose (*Oenothera deltoides ssp. howellii*)	E/E/1B	March – September	Inland dunes.	Low Surveyed during blooming period	Presumed absent
Bent-flower Fiddleneck (*Amsinckia lunaris*)	-/-/1B	March – June	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland	Low Surveyed during blooming period	Presumed absent
Big tarplant (*Blepharizonia plumosa)*	-/-/1	July - October	Valley grassland, foothill woodland, chaparral.	Low Suitable habitat present	Not likely to occur
Bolander's Water-Hemlock (*Cicuta maculata var. bolanderi*)	-/-/2B	July – September	Coastal, salt marsh and wetland riparian.	Low No suitable habitat present	Presumed absent
California Linderiella (*Linderiella occidentalis*)	SOC/-/-	December – May (dependent on the timing of winter and spring rains)	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity and conductivity.	Low Surveyed during blooming period	Presumed absent
Carquinez Goldenbush (*Isocoma arguta*)	-/-/1B	August – December	Alkaline valley and foothill grassland.	Low Suitable habitat present	Not likely to occur

Table 2

Special-Status Species for the Walnut Creek, Benicia, Vine Hill, Honker Bay, Briones Valley, Clayton, Oakland East, Las Trampas Ridge, Diablo 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ CNPS)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	-/-/1B	June – November	Valley and foothill grasslands in alkaline soils.	Moderate Suitable habitat present.	Presumed absent
Contra Costa Goldfields (*Lasthenia conjugens*)	E/-/1B	March – June	Valley and foothill grassland, cismontane woodland, and vernal pools, swales, and low depressions in open grassy areas.	Low Surveyed during blooming period	Presumed absent
Delta Tule Pea (*Lathyrus jepsonii var. jepsonii*)	-/-/1B	May – July	Freshwater wetlands, wetland-riparian, freshwater marsh, brackish marsh.	Low No suitable habitat present	Presumed absent
Diablo Helianthella (*Helianthella castanea*)	-/-/1B	March – June	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils, often in partial shade.	Low Surveyed during blooming period	Presumed absent
Hall's Bush-Mallow (*Malacothamnus hallii)*	-/-/1B	May – September	Chaparral, coastal scrub.	Low No suitable habitat present	Presumed absent
Long-Styled Sand Spurrey (*Spergularia macrotheca longistyla*)	-/-/1B	February – May	Alkaline meadows and seeps, marshes and swamps.	Low Surveyed during blooming period	Presumed absent

Table 2

Special-Status Species for the Walnut Creek, Benicia, Vine Hill, Honker Bay, Briones Valley, Clayton, Oakland East, Las Trampas Ridge, Diablo 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ CNPS)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Mount Diablo Fairy-Lantern (*Calochortus pulchellus*)	-/-/1B	April – June	Chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland; on wooded and brushy slopes.	Low Surveyed during blooming period	Presumed absent
Oval-Leaved Viburnum (*Viburnum ellipticum*)	-/-/2B	May – June	Chaparral, cismontane woodland, lower montane coniferous forest.	Low Suitable habitat present	Not likely to occur
San Joaquin spearscale (*Atriplex joaquiniana)*	-/-/1B	April-October	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland in seasonal alkali wetlands or alkali sink scrub with *Distichlis spicata, Frankenia,* etc.	Low Surveyed during blooming period	Presumed absent
Soft Salty Bird's Beak (*Chloropyron molle ssp. molle*)	E/R/1B	July – November	Coastal salt marsh, wetland-riparian.	Low No suitable habitat present	Presumed absent

BIRDS					
American Kestrel (*Falco sparverius)*	-/CP/-	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	Moderate Suitable habitat present	May occur
American Peregrine Falcon (*Falco peregrinus anatum*)	-/-CP/-	February – August	Nests near wetlands, lakes, rivers, or other water. On cliffs, banks, dunes, mounds, and human-made structures.	Low No suitable habitat present	Not likely to occur
Burrowing Owl (*Athene cunicularia*)	SOC/-/SC	February – August	Dry open annual or perennial grassland, desert and scrubland. Uses abandoned mammal burrows for nesting.	Low No suitable habitat present	Not likely to occur
Cooper's Hawk (*Accipiter cooperii*)	-/CP/-	February – August	Oak woodlands, coniferous forests, riparian corridors. Often hunts on edges between habitats.	High Suitable habitat present	Present
Ferruginous Hawk (*Buteo regalis*)	-/CP/-	Late Fall – Winter	Open country such as semiarid grasslands with few trees, rocky outcrops, and open valleys. Also along streams or in agricultural areas during migration.	Low No suitable habitat present	Not likely to occur
Golden Eagle (*Aquila chrysaetos*)	-/CP/SC	February – August	Nests in cliff-walled canyons and tall trees in open areas. (Nesting and wintering) Rolling foothills mountain areas, sage-juniper flats, and desert.	Low No suitable habitat present	Not Likely to Occur
Great Blue Heron (*Ardea herodias*) ROOKERIES	-/-/-	February – August	(Rookery) Nests in tall trees in close proximity to foraging areas such as marshes and streams.	Low No suitable habitat present	Not likely to occur
Great Egret (*Ardea alba*) ROOKERIES	-/-/-	February – August	Freshwater, brackish and marine wetlands. Form breeding colonies on lakes, ponds, marshes, estuaries or islands. Forage in marshes, swamps, streams, rivers, ponds, tidal flats, canals and flooded fam fields.	Low Suitable habitat present	Not likely to occur

Red-shouldered Hawk (*Buteo lineatus*)	-/CP/-	February – August	Forages in variety of semi-developed habitats including orchards. Forages in woodlands and riparian areas. Nests in riparian habitat but also eucalyptus groves.	High Suitable habitat present	Present
Red-tailed Hawk (*Buteo jamaicensis*)	-/CP/-	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	High Suitable habitat present	Present
Sharp-Shinned Hawk (*Accipiter striatus*)	-/CP/-	February – August	Oak woodlands, coniferous forests, riparian corridors. Often hunts on edges between habitats. (Nesting) Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas.	Moderate Suitable habitat present	May occur
Suisun Song Sparrow (*Melospiza melodia maxillaris)*	-/-/SC	February – August	Inhabits tidal salt marshes, needs vegetation for nesting sites.	Low No suitable habitat present	Not likely to occur
Swainson's Hawk (*Buteo swainsonii)*	-/T/-	February – October	Nests in riparian areas and in oak savannah near foraging areas. Forages in alfalfa and grain fields with rodent populations.	Low No suitable habitat present	Not likely to occur
Tricolored Blackbird (*Agelaius tricolor*)	SOC/-/SSC	February – August	Nesting within seasonal wetland marshes, blackberry brambles or other protected substrates. Forages in annual grassland and wetland habitats.	Low No suitable habitat present	Not likely to occur
White-tailed Kite (*Elanus leucurus*)	SOC/CP/FP	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	Low Suitable habitat present	Not likely to occur
Yellow Rail (*Coturnicops noveboracensis)*	-/-/SSC	February - August	Salt or brackish marshes or wet meadows. Prefers habitats with tall, dense vegetation such as sedges or cattails.	Low No suitable habitat present	Presumed absent
MAMMALS					

Big Free-Tailed Bat (*Nyctinomops macrotis*)	-/-/SSC	Resident	Inhabits rocky or canyon country where it roosts in crevices. Arid landscapes such as desert shrub, woodlands and evergreen forests.	Low No suitable habitat present	Not likely to occur
Hoary Bat (*Lasiurus cinereus*)	-/-/-	Resident	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 near water. Feeds mainly on moths.	Moderate Suitable habitat present	May occur
Pallid Bat (*Antrozous pallidus*)	-/SC/-	N/A	Forages in grasslands, shrublands, deserts, forests, and woodlands. Most common in open, dry habitats. Roosts in rock crevices, caves, tree hollows, and buildings. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.	Low Suitable habitat present	Not likely to occur
Salt Marsh Harvest Mouse (*Reithrodontomys raviventris)*	E/E/FP	Resident	Salt marshes with dense stands of pickleweed and other dense wetland vegetation such as cattails or bullrush.	Low No suitable habitat present	Presumed absent
Townsend's Big-Eared Bat (*Corynorhinus townsendii*)	-/SSC/-	Resident	Throughout California in a wide variety of habitats; roosts in the open, hanging from walls and ceilings. Needs sites free from human disturbance. Most common in mesic sites.	Low Suitable habitat present	Not likely to occur
Western Red Bat (*Lasiurus blossevillii)*	-/-/SSC	Resident	Winter in western lowlands and coastal regions of the San Francisco Bay. Roosts in forests and woodlands. Feed in grasslands, shrublands, open woodlands and forests and croplands.	Moderate Suitable habitat present	May occur
Yuma Myotis (*Myotis yumanensis*)	-/-/-	Resident	Optimal habitats are open forests and woodlands with sources of water over which to feed. Maternal colonies occur in caves, mines, buildings or crevices.	Moderate Suitable habitat present	May occur
AMPHIBIAN					

California Red-Legged Frog (*Rana draytonii*)	T/-/SC	May 1 – November 1	Lowlands and foothills in or near permanent deep water with dense, shrubby or emergent riparian habitat. Requires 11-20 weeks of permanent water for breeding and larval development. Must have access to aestivation habitat.	Moderate Suitable dispersal habitat present	May occur in a dispersal capacity only
California Tiger Salamander (*Ambystoma californiense*)	T/T/-	Aquatic Surveys - Once each in March, April, and May with at least 10 days between surveys. Upland Surveys - 20 nights of surveying under proper conditions beginning October 15 and ending March 15.	Vernal pools, swales and depressions for breeding, needs underground refugia.	Low No suitable habitat present	Presumed absent
Foothill Yellow-Legged Frog (*Rana boylii*)	SOC/-/SC	Year-round resident	Partially-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need cobble for egg-laying.	Low Suitable habitat present	Not likely to occur
REPTILE					
Alameda Whipsnake (*Masticophis lateralis euryxanthus*)	T/T/-	Year-round resident	Valley-foothill hardwood habitat of the coast ranges between Monterey and north San Francisco Bay areas. Inhabits south-facing slopes and ravines where shrubs form a vegetative mosaic with oak trees and grasses.	Low Suitable dispersal habitat present	May occur in a dispersal capacity only
Western Pond Turtle (*Emys marmorata*)	-/-/SC	March – October	Aquatic turtle needs permanent water in ponds, streams, irrigation ditches. Nests on sandy banks or grassy fields.	Moderate Suitable dispersal habitat present	May occur in a dispersal capacity only

1. Special-status plants and animals as reported by the California Natural Diversity Data Base, California Native Plant Society, and other background research April 2021
2. Order of Codes for Plants - Fed/State/CNPS

Order of Codes for Animals - Fed/State/CDFW

Codes:

SOC - Federal Species of Concern

SC - California Species of Special Concern

E - Federally/State Listed as an Endangered Species

T - Federally/State Listed as a Threatened Species

C - Species listed as a Candidate for Federal Threatened or Endangered Status

R - Rare

D - Delisted

CP- California protected

FP - State Fully Protected

DFG: SC California Special Concern species

1B - California Native Plant Society considers the plant Rare, Threatened, or Endangered in California and elsewhere.

1A - CNPS Plants presumed extinct in California.

2 - CNPS Plants Rare, Threatened or Endangered in California, but more common elsewhere.

3 - CNPS Plants on a review list to find more information about a particular species.

4 - CNPS Plants of limited distribution - a watch list.

ATTACHMENT 4

SITE PHOTOGRAPHS

1. Photo taken facing south showing the two-story residential home and surrounding woodland habitat at northwestern boundary of Property. Photo taken April 6, 2021.

2. Photo taken facing west showing mixed woodland habitat within the northeastern portion of the Property. Photo taken April 6, 2021.

3. Photo taken facing west showing riparian woodland habitat within the eastern portion of the Property. Photo taken April 6, 2021.

4. Photo taken facing northeast showing mixed woodland habitat in the western portion of the Property. Photo taken April 6, 2021.

5. Photo taken facing southeast showing mixed woodland and riparian woodland habitat within the western portion of the Property. Photo taken April 6, 2021.

6. Photo taken facing south showing the single-story residential home and surrounding woodland habitat located near the southern boundary of the Property. Photo taken April 6, 2021.

7. Photo taken facing west showing mixed woodland habitat in the western portion of the Property. Photo taken April 6, 2021.

8. Photo taken facing south showing mixed woodland and riparian woodland habitat in the western portion of the Property. Photo taken April 6, 2021.

9. Photo taken facing southeast showing portion of Grayson Creek. Photo taken April 6, 2021.

10. Photo taken facing southeast showing Grayson Creek and associated riparian woodland corridor. Photo taken April 6, 2021.

11. Photo taken facing northwest showing mixed woodland with existing residential structure in the background. Photo taken April 6, 2021.

12. Photo taken facing northwest showing mixed woodland habitat in the eastern portion of the Property. Photo taken April 6, 2021.

TRAVERSO TREE SERVICE
WHEN IT HAS TO BE DONE RIGHT

May 6, 2020

Andy Byde
Calibr Ventures
bydeandy@gmail.com

RE: Revised Arborist Report for the Development of 1024-1026 Grayson Road

Project Summary
This report updates the 2006 arborist report with current tree assessment and measurements, and anticipated tree impact. Trees proposed for removal are estimated based on proposed grading and building footprints. Actual impacts may vary once homes are designed. A supplemental arborist report may be necessary at that time.

Site Summary
A total of 117 trees > 6" in diameter were inventoried. It is my opinion that 84 trees will need to be removed to accommodate the proposed project. The remaining trees can be retained given that the protection measures within this report are followed.

Assumptions & Limitations
This report is based on my site visit on 5/4/20, and the Preliminary Grading, and Vesting Tentative maps by DeBolt Engineering dated 12/12/2019. It was assumed that the trees and the proposed improvements were accurately surveyed. A few trees were not surveyed, so I approximately located them on the tree protection plan based on their proximity to adjacent surveyed trees.

The health and structure of the trees were assessed visually from ground level. No drilling, root excavation, or aerial inspections were performed. Internal or non-detectable defects may exist and could lead to part or whole tree failures. Due to the dynamic nature of trees and their environment, it is not possible for arborists to guarantee that trees will not fail in the future.

Tree Inventory & Assessment Table
#s: Each tree was given a square metal tag with numbers ranging from 102-206. Trees with letters attached (a, b, or c) were new young trees that have grown up to protected size since the 2006 inventory. Their locations are shown on the attached the tree inventory plan.
DBH (Diameter at Breast Height): Trunk diameters in inches were measured at 4.5' above average grade with a diameter tape. Height of measurement may deviate slightly from the standard on atypical trunks.

Health & Structural Condition Rating
Dead: Dead or declining past chance of recovery.
Poor (P): Stunted or declining canopy, poor foliar color, possible disease or insect issues. Severe structural defects that may or may not be correctable. Usually not a reliable specimen for preservation.
Fair (F)*:* Fair to moderate vigor. Minor structural defects that can be corrected. More susceptible to construction impacts than a tree in good condition.

Good (G): Good vigor and color, with no obvious problems or defects. Generally more resilient to impacts.
Very Good (VG): Exceptional specimen with excellent vigor and structure. Unusually nice.

Dripline: Canopy radius was visually estimated in each cardinal direction.

Age
Young (Y): Within the first 20% of expected life span. High resiliency to encroachment.
Mature (M): Between 20% - 80% of expected life span. Moderate resiliency to encroachment.
Overmature (OM): In >80% of expected life span. Low resiliency to encroachment.

DE: Dripline Encroachment (X indicates encroachment)
CI: Anticipated Construction Impact (L = Low, M = Moderate, H = High)

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
101	Coast live oak											This tree no longer exists. Old report stated it as a 9” tree. No evidence of a stump was found.	N/A
102	Valley oak	16	G-F	G	20	25	20	20	Y	X	M	Epicormic sprouts along scaffold branches. Within west p/l set back, some grading will likely occur within dripline.	Save Set protection fencing at dripline (d/l), and have arborist on site for any d/l encroachment.
103	Fruiting pear	10, 5, 5, 4, 4	P	P	10	0	10	10	OM	X	H	Declining tree. In proposed driveway	Remove
104	Valley oak	18, 19, 20, 12	G	G	30	30	30	30	M	X	H	Co-dominant stems at 3'. In proposed driveway.	Remove
105	Coast live oak	11, 7, 6	F-P	F	15	15	10	0	M	X	H	Co-dominant stems. Understory tree. Within building footprint.	Remove
106	Valley oak	11, 12	G	F	25NW-W				M	X	H	Co-dominant stems. Within building footprint.	Remove
107	Valley oak	4, 3, 12, 11, 5, 7, 5	G	F	25	0	18	25	M	X	H	Basal shoot from old stump. In proposed driveway. Within building footprint.	Remove
107 B	Coast live oak	11, 5, 8	F	P	15	0	0	25	M	X	H	Growing out from base of #107. Co-dominant trunks. Within building footprint.	Remove
108	Coast live oak	17	F	F	25NW-W				M	X	H	Curved trunk. Within building footprint.	Remove
109	Valley oak	12, 11, 7, 6	F	F	30N				M	X	H	One sided tree to the N/W. Dieback & epicormic sprouting. Within building footprint.	Remove
110	Valley oak	20, 11, 11, 16	G	F	25	25	0	25	M	X	H	Co-dominant trunks. Within building footprint.	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
111	Coast live oak	19	F-P	F	20	25	20	20	M	X	H	Bark inclusion on all 3 attachments. Sparse with stunted growth. Within building footprint.	Remove
112	Coast live oak	11	F	P	0	6	10	10	Y	X	H	Top broken at 12' with sprouting. Within building footprint.	Remove
113	Valley oak	7	F	P	6S				Y	X	H	Sparse canopy, 2 trunks removed. Within building footprint.	Remove
114	Valley oak	7, 4	F	F	6	6	6	6	Y	X	H	Crowded. Within building footprint.	Remove
115	Coast live oak	13	G	G	12	0	8	10	Y	X	H	3" from base of #116; crowded. Within building footprint.	Remove
116	Valley oak	7, 6	F	F	18N				Y	X	H	Very crowded. Co-dominant trunks; sweeping lean to N. Within building footprint.	Remove
117	Coast live oak	17	F-P	F-P	15NE				M		L	Sparse understory tree. Outside of grading limits.	Save
118	Valley oak	14, 18	F	F	15	15	20	20	M		L	Co-dominant stem bends to N. Outside of grading limits.	Save
119	Coast live oak	17	Dead										Remove.
120	Coast live oak	17	F-P	F	10	10	10	10	M		L	Ivy covering trunk. In decline; sycamore borer damage. Treat for Borer. Outside of grading limits in creek setback.	Save
121	Valley oak	13	F	F	20S				Y		L	Ivy covering trunk. Outside of grading limits in creek setback.	Save
122	Valley oak	22	P	P	25N				M		L	Ivy covering trunk. Declining canopy; sweeping lean to N. Outside of grading limits in creek setback.	Save
122 A	Coast live oak	30	F	F	50N				M		L	In creek structure setback. Significant lean to N. Ivy covering trunk. Outside of grading limits in creek setback.	Save
123	Valley oak	14, 7, 7, 10, 10	F	F	0	25	0	15	M	X	H	Sparse canopy. Co-dominant stems at 6'. Within grading limits	Remove
124	Valley oak	16	F	G	15	20	15	8	M	X	H	Tag embedded in trunk. Epicormic sprouts. Within grading limits	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
124 B	Coast live oak	7	F	P	6	10	4	0	Y	X	H	90° correcting bend in trunk. Within grading limits	Remove
125	Chinese pistache	27	G	G	25	25	25	25	OM	X	H	Dieback; slightly drought stressed. Within grading limits	Remove
126	Chinese pistache	17, 17, 10, 8	F	G	25	25	25	6	OM	X	H	Within grading limits	Remove
127	Coast live oak	17	G	G	15	0	0	20	M	X	H	Within grading limits	Remove
128	Valley oak	19	G	F	20	25	0	20	M	X	H	Within grading limits	Remove
129	Valley oak	14	G	F	0	20	20	20	Y	X	H	Within grading limits	Remove
130	Coast live oak	16	F	G	15	15	10	0	Y	X	H	Sparse lower canopy. Within grading limits	Remove
131	Calif. Buckeye	11, 8	F	F	15	20	25	20	M	X	H	Dead lower/interior canopy. Within grading limits	Remove
131 B	Valley oak	18	F	F	35N				M	X	H	Not surveyed. 35° lean to N. Ivy and poison oak covering trunk. Within grading limits	Remove
132	Coast live oak	11	F	F	40N				Y	X	H	10° lean to N. Tag engulfed by trunk. Within grading limits	Remove
133	Coast live oak	14	G	F	40N-20NW				Y	X	H	10° lean to N. Within grading limits	Remove
134	Monterey pine	50	P	F	50	50	50	50	OM	X	M	Over mature tree, in declining years. Sparse canopy. Recommend removal. Less than 5 years of anticipated lifespan.	Remove
135	Coast redwood	18, 18, 10	F	G	20	20	20	20	M	X	H	Drought stressed, needs irrigation. Within grading limits.	Remove
135 A	Calif. Buckeye	6, 8, 11, 7, 7, 9, 11, 8	G	G	20	20	20	20	M		L	Within creek structure set back. ~3 trunk clusters treated as one.	Save
136	Silver dollar eucalyptus (*Eucalyptus cinerea*)	13, 16	F	F	25	15	10	0	M	X	H	Failed trunk. Within grading limits.	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
137	Coast live oak	40	G-F	P	35	35	35	35	M	X	M-H	Ivy covering trunk. Co-dominant stems at 4' with included bark. Grading just north of trunk proposed. Pull grade limits at least 15' from trunk in order to save tree.	Save If grading can be adjusted.
138	Valley oak	18	F	F	15	15	5	0	M	X	M-H	Ivy covering trunk. Grading just north of trunk. Recommend pulling grade limits at least 10' from trunk.	Save If grading can be adjusted
138 B	Buckeye	17, 12, 13, 14, 15, 13, 12, 10, 10, 13	F-P/P	F	20	20	20	20	M		L	In creek structure setback. Top dieback.	Save
139	Mimosa		Dead									Within grading limits.	Remove
140	Coast live oak	17	G	G	18	18	18	18	M	X	H	Within grading limits.	Remove
141	Coast live oak	9	G	G	10	10	10	10	Y	X	H	Tag embedded in trunk but readable. Within grading limits.	Remove
142	Coast live oak	19, 20	G	F	30	30	10	10	M	X	H	Co-dominant trunks. Within grading limits.	Remove
142 B	Coast live oak	20	G	F	30	0	0	20	M	X	H	In creek structure setback. Within grading limits.	Remove
142 C	Coast live oak	14	G	G	20	15	0	0	Y	X	H	Not surveyed.	
143	Valley oak	15	G-F	G	12	12	12	12	Y	X	H	Ivy on trunk. Within grading limits.	Remove
144	Valley oak	11	G	F	15SE				Y	X	H	Ivy on trunk. Understory tree. Within grading limits.	Remove
145	Coast live oak	22	G-F	G	25	20	18	20	M	X	H	Ivy on trunk. Within grading limits.	Remove
146	Coast live oak	18, 15	G	F	25	0	20	25	M	X	H	Co-dominant trunks. Within grading limits.	Remove
147	Fruiting plum		Dead							X	H	Within grading limits.	Remove
148	Persimmon	6, 7	G	P	6	15SE		5	M	X	H	Leaders poorly attached, breaking apart. Within grading limits.	Remove
149	Black Walnut	7, 6	G	F	8	15	15	0	Y	X	H	Within grading limits.	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
149 B	Valley oak	7	G	F	25NE				Y	X	H	Not surveyed. Within grading limits.	Remove
150	Coast live oak	19	G	F	0	25	20	20	M	X	H	One stem topped by PG&E, Poor location. Within grading limits.	Remove
151	Coast live oak	15	F-P	P	25N-NE		0	20	Y	X	H	Topped by PG&E. Sparse canopy and deadwood. Within proposed driveway	Remove
152	Coast live oak	15	G	F	10	15	0	0	Y	X	H	Sided by PG&E. Within proposed driveway.	Remove
153	Valley oak	20, 15	G	F	10	25	30	30	M	X	H	Somewhat lions tailed, branches elongated to S. Within grading and sewer easement.	Remove
154	Valley oak	13	G	G-F	10	0	20	20	Y	X	M-H	1' from existing gravel driveway. Trunk buried. At edge grading limits. Arborist on site for grading.	Save Arborist to pull fill back from base of tree.
155	Coast live oak	11	G	F	8	12	15	0	Y	X	H	Topped by PG&E. Within proposed driveway.	Remove
156	Coast live oak	9	G	F	6	8	6	0				Growing up under PG&E wires. Within proposed driveway.	Remove
157	Coast live oak	10	G	F	10	0	10	18	Y	X	L	Off-site. Trunk buried. 1.5' from existing gravel driveway. Grading at edge of dripline.	Save Arborist to pull fill back from base of tree.
158	Chinese pistache	12	F	F	15	12	0	10	M	X	H	Partially topped. Within grading for road.	Remove
159	Coast live oak	8	G	F-P	12NW				Y	X	L	Off-site. Trunk buried. Sided by PG&E. Grading at edge of dripline.	Save
160	Valley oak	7	G	F	8	8	0	0	Y	X	L	Off-site. Co-dominant stems at 7'. Topped by PG&E. Trunk buried. Grading at edge of dripline.	Save
160 B	Coast live oak	7	G	F	15N-NE				Y	X	L	Off-site; not surveyed. Lean to NE. 6" NW of #160. . Grading at edge of dripline.	Save
161	Iron bark euc.	11, 7										Previously removed. Suspect by PG&E (under wires)	N/A
162	Coast live oak	15, 11	G	P	15	15	15	15	M	X	L	Topped by PG&E, co-dominant stems. Grading for road at edge of dripline.	Save

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
163	Coast live oak	11	G	G	6	6	6	6	Y	X	L	Reduced by PG&E. Grading at edge of dripline	Save
164	Incense cedar	15	F	F	7	7	7	7	M	X	H	Sweeping S shaped trunk. Within proposed road.	Remove
165	Incense cedar											Removed.	N/A
166	Coast live oak	19, 20	G-F	F	30	30	30	0	M	X	H	Co-dominant stems. Moderate sycamore borer. Within grading limits.	Remove
166 B	Siberian elm	7, 11	F-P	P	18	0	0	18	M	X	H	Not surveyed. Co-dominant stems at 2'. Within grading limits.	Remove
166 C	Siberian elm	9, 8, 7	P	P	20	0	0	20	M	X	H	Not surveyed. Basal sprouts; decay. Within grading limits.	Remove
167	Black walnut	9, 4, 4	F	F	20	0	0	20	M	X	H	Within grading limits.	Remove
168	Black walnut	8	P	P	20NW				Y	X	H	Understory tree; no growth in past 14 years. Within grading limits.	Remove
169	Coast live oak	20	G	F	35	20	20	20	M	X	H	Within grading limits.	Remove
169 B	Coast live oak	9	G	F	30NW				Y	X	H	Not surveyed. Understory tree. 40° phototropic lean to NW. Within grading limits.	Remove
170	Coast live oak	14	G	G	8	8	8	8	Y	X	H	Trunk buried. Within grading limits.	Remove
171	Coast live oak	14	F-P	F	35N-NW				Y	X	H	Ivy around base, upper branches are damaged by a fungal canker at 15'. On creek bank well. Within grading limits.	Remove
171 B	Coast live oak	14	G	G	35NW				Y	X	H	In creek structure setback. 40° lean to NW. Within grading limits.	Remove
172	Monterey pine	48	F-P	F-P	30	30	30	30	OM	X	H	5° lean to N/W. Grading up to base of tree. Only 3-5 years of anticipated lifespan left.	Remove
173	Calif. Buckeye	14, 14, 8, 8, 8, 7, 7, 5	G	F	35	20	0	20	M	X	M-H	Low branching (trunks laying on ground). Grading limits well within N/W dripline. Pull grade limits back so 15' from trunk.	Save Assuming grade limits can be adjusted.
173 B	Calif. Buckeye	11, 12	G	F	10	10	10	10	M		L	In creek structure setback. Ivy covering tree.	Save

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
173 C	Coast live oak	8	F	P	25N				Y	X	L-M	Understory tree with heavy lean (trunk horizontal before correcting) to NW. Young tree with some dripline grading encroachment.	Save
174	Black walnut	23	F-P	F	20	20	20	25	M	X	H	Low branching, old mistletoe in canopy; dieback. Within grade limits.	Remove
175	Siberian elm	17, 17, 15	P	P	20	20	20	20	M	X	H	Tree in decline, poorly structured. Within grade limits.	Remove
176	Coast redwood	30	F/F-P	G	15	15	15	15	M	X	H	Drought-stressed. Within grade limits.	Remove
177	Coast redwood	26	F/F-P	G	15	15	15	15	M	X	H	Drought-stressed. Within grade limits.	Remove
177 B	Valley oak	11	G	G	8	8	8	8	Y	X	H	Not surveyed. Chain on trunk. Within grade limits.	Remove
178	Valley oak	14, 6	G	F	15	15	20	20	Y	X	H	Lean to SW. Within grade limits.	Remove
178 B	Valley oak	8	G	F	12	12	0	0	Y			Not surveyed. Within grade limits.	Remove
179	Calif. Buckeye	8, 7, 6	G	G	12	12	12	12	M	X	H	Within grade limits	Remove
180	Mulberry	18	P	P	0	10	10	0	OM	X	H	Previously topped. Within grade limits.	Remove
181	Valley oak	11	F	F	15NE-NW				Y		L	Grading just outside dripline.	Save
182	Valley oak	11	F	F	15S				Y	X	L-M	Grading at edge of dripline.	Save
183	Valley oak	13	F	F	20 NE	15	0	0	Y	X	L-M	Grading at edge of dripline.	Save
184	Black walnut	8, 8, 7	P	P	8	8	8	8	M	X	H	Declining health. Within grade limits.	Remove
185	Valley oak	11	F	F	18 NE	10	0	0	Y	X	L-M	S shaped trunk. Grading at edge of dripline.	Save

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
186	Calif. Buckeye	7, 7, 6, 6, 5, 5, 5	G	G	18	18	18	18	M	X	M	Tangled with mulberry, and walnut. Grading withn dripline.	Save Arborist on site during grading.
187	Mulberry	18	P	P	15	15	15	15	M	X	H	Drought stressed, tangled with buckeye. Within grading limits.	Remove
188	Black walnut	9	F	F	20S				Y	X	H	Competing with buckeye, recommend removal. Within grade limits.	Remove
188 B	Coast live oak	11	F	G	12	12	12	12	Y	X	H	Not surveyed. Within storm treatment area.	Remove
188 C	Coast live oak	11	G	G	6	0	10	15	Y	X	H	Not surveyed. Within storm treatment area.	Remove
189	Calif. Buckeye	9, 9, 8, 7, 7, 5, 5, 5, 3, 3, 3	G	G	15	20	25	20	M	X	L-M	Grading limits at edge of dripline.	Save
190	Mulberry	16	Dead										Remove.
191	Coast live oak	14	G	G	10	10	10	10	Y		L	Grade limits just outside dripline.	Save
191 B	Coast live oak	11, 9	F	F	18NE-NW				M		L	Not surveyed. Lean over road.	Save
192	Mulberry	19	P	P	8	8	8	8	OM	X	H	Drought stressed. In decline. Within grade limits.	Remove
192 A	Coast live oak	17	G	F	18 NE	10	10	18 NW	M		L	In creek structure setback. Reduced by PG&E. By street, lifting asphalt curb.	Save
192 B	Willow	20, 20	P	P	15	0	0	0	OM		L	Outside northeast property corner along Grayson. Topped by PG&E; sparse canopy. Recommend removal	Remove
192 C	Willow	24	F	P	0	0	25	30 SW	OM		L	Outside northeast property corner along Grayson. Uprooted to S. Fallen tree.	Remove
193	Siberian elm	12, 12, 10, 5, 5, 4	P	P	8	8	8	8	M	X	H	Dying tree. Within grading limits	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
194	Siberian elm	12, 9, 4	P	P	0	15	15	15	M	X	H	Dying tree. Within grade limits.	Remove
194 B	Coast live oak	9	G	F	15N				Y	X	H	Not surveyed. Up against elm.	Remove
195	Siberian elm	13, 4	P	P	20N				M	X	H	Declining health. Within grade limits.	Remove
196	Coast live oak	19	G	F	20 NW	0	20	20	M		L	Sweeping trunk	Save
197	Bush eucalyptus	10, 8, 8	Dead						M		L	Dead/failed. Fire hazard.	Remove
198	Bush eucalyptus	15, 15	P	P	10N				M		L	Dying, fire hazard.	Remove
199	Blue gum euc.	50	F	F-P	25	20	20	20	M		L	10" branch failure to N in 2006; minor sprouting from failure. Prune for safety if targets within 50ft.	Save
200	Bush eucalyptus	18, 5, 6	F	P	15S				M		L	Declining health. Recent failures. Prune for safety.	Save
201	Monterey pine	24	F	P	20	20	20	20	OM		L	Over mature tree, badly included co-dominant stems. Anticipate short life span, recommend removal.	Remove
202	Monterey pine	22	P	P	0	20	20	0	OM		L	Over mature tree, declining health. Recommend removal.	Remove
203	Monterey pine											Removed.	N/A
204	Monterey pine	18	F	P	25E				M		L	Poorly tapered trunk; lean to E. Recommend removal.	Remove
205	Monterey pine											Removed.	N/A
206	Calif. Buckeye	15, 15, 10, 10	G	G	25	25	25	25	M		L	Healthy tree.	Save

Tree Encroachment Summary

A total of 117 trees were inventoried. Three additional trees (#101, #203, & #205) that were shown on the survey, had previously been removed.

- Trees (84 total) that will need to be removed: #'s 103-116, 119, 123-135, 136, 139-153, 155-156, 158, 164, 166-172, 174-180, 184, 187-188c, 190, 192, 192b-195, 197, 198, 201-201.
- Trees (17 total) to be saved that will be subjected to dripline encroachment, and will need arborist supervision during grading within driplines: #'s 102, 137, 138, 154, 157, 159, 160, 160b, 162, 163, 173, 173c, 182, 183, 185, 186, 189.
- Additional trees (16 total) to be saved that will not have dripline encroachment: #'s 117, 118, 120, 121, 122, 122a, 135a, 173a, 181, 191, 191b, 192a, 196, 199, 200, 266.

Recommendations (to be printed on site plans

Pre- Grading Phase

- Mulch from tree removals may be spread out under the driplines of trees that will be retained, keeping at least 12" away from the trunks.
- Prior to construction or grading, contractor shall install protection fencing to construct a temporary Tree Protection Zone (TPZ) around each tree or grove of trees to be saved. TPZ fencing shall encompass the driplines and be approved by the project arborist.
- TPZ fencing shall remain in an upright sturdy manner from the start of grading until the completion of construction. Fencing shall not be adjusted or removed without consulting the project arborist.

Grading and Construction Phase

- The project arborist shall be on-site during excavation/grading within driplines, especially trees: #'s 102, 137, 138, 154, 157, 159, 160, 160b, 162, 163, 173, 173c, 182, 183, 185, 186, 189.
- Should roots $\geq$ 2" be encountered, arborist shall cleanly prune roots with a handsaw or sawzall, and immediately re-cover. Irrigate as necessary.
- If needed, canopy pruning shall be performed by personnel certified by the International Society of Arboriculture (ISA). All pruning shall adhere to ISA and American National Standards Institute (ANSI) Standards and Best Management Practices. Project arborist to set guidelines prior to pruning.
- Should Tree Protection Zone (TPZ) encroachment be necessary, the contractor shall contact the project arborist for consultation and recommendations.
- Contractor shall keep TPZs free of all construction-related materials, debris, fill soil, equipment, etc. The only acceptable material is mulch spread out beneath the trees.
- Should any damage to the trees occur, the contractor shall promptly notify the project arborist to appropriately mitigate the damage.

Landscaping Phase (if applicable)

- The Tree Protection Zone (TPZ) fencing shall remain in place with the same restrictions until landscape contractor notifies and meets with the project arborist.
- Avoid all fill work, grade changes, and trenching within driplines unless it is performed by hand, and approved by the project arborist.
- Pipes shall be threaded under or through large roots without damaging them.
- Contractor shall avoid trenching and grade changes within driplines.

- All planting and irrigation shall be kept a minimum of 10’ away from native oaks. All irrigation within the driplines shall be targeted at specific plants, such as drip emitters or bubblers. No overhead irrigation shall occur within the driplines of native oaks.
- All planting within oak driplines shall be compatible with oaks, consisting of plant material that requires little to no water after two years’ establishment. A list of oak-compatible plants can be found in a publication from the California Oak Foundation, available at: http://californiaoaks.org/wp-content/uploads/2016/04/CompatiblePlantsUnderAroundOaks.pdf

Thank you for the opportunity to provide this report, and please do not hesitate to contact me if there are any questions or concerns.

Please see attached tree inventory plan.

Sincerely,

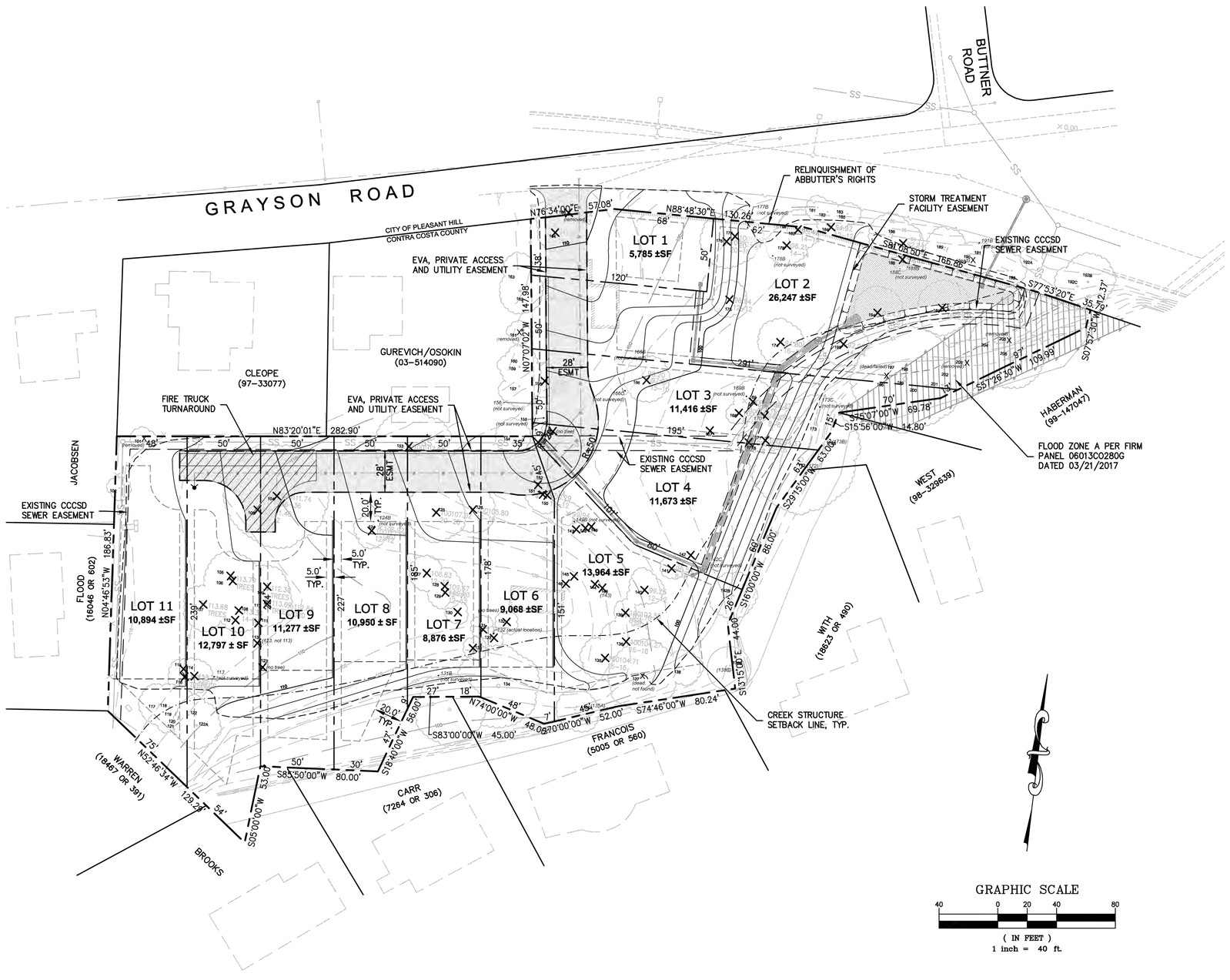
John C Traverso
ISA Board Certified Master Arborist #WE0206-B
ISA Tree Risk Assessor Qualified
TCIA Certified Tree Care Safety Professional #01802

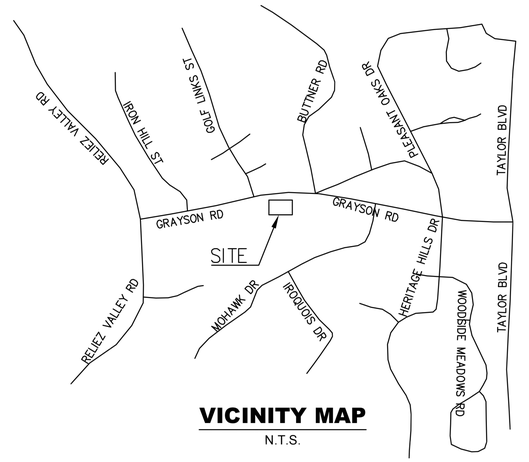
VESTING TENTATIVE MAP
1024 & 1026 GRAYSON ROAD

CITY OF PLEASANT HILL, CONTRA COSTA COUNTY, CALIFORNIA

TOTAL UNITS: 11 RESIDENTIAL

SUBDIVISION __-___





VICINITY MAP
N.T.S.

LEGEND:

BLDG	BUILDING
CONC	CONCRETE
(E)/EX	EXISTING
ESMT	EASEMENT
FNC	FENCE
INV.	INVERT
P.U.E	PRIVATE UTILITY EASEMENT
REBAR.	REBAR
( )	RECORD DATA
R/W	RIGHT OF WAY
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
SDDI	STORM DRAIN DRAIN INLET
(T)	TOTAL
WM	WATER METER
WV	WATER VALVE
	SANITARY SEWER MANHOLE
	WATER VALVE
	FOUND MONUMENT AS NOTED
	STANDARD STREET MONUMENT
	EASEMENT LINE
	ADJACENT PROPERTY LINE
	BOUNDARY LINE
	TIE LINE
	CENTERLINE
W	EXISTING WATER LINE
EX SD	EXISTING STORM DRAIN PIPE
OE	EXISTING ELECTRIC CABLE
SS	EXISTING SANITARY SEWER LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING BUILDING
	EXISTING BRICK PATH
	EXISTING CONCRETE
	EXISTING AC PAVEMENT
	EXISTING TREE

EXISTING UTILITY NOTE:

THE UTILITY LINES SHOWN ON THIS DRAWING ARE DERIVED FROM SURFACE OBSERVATION AND ARE APPROXIMATE ONLY. ACTUAL LOCATION AND SIZE, TOGETHER WITH PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS DRAWING SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY EXCAVATION.

FLOOD ZONE

ZONE A: SPECIAL FLOOD AREA WITHOUT BASE FLOOD. ELEVATION (BFE)

ZONE X: AREAS OF 0.2% CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% CHANCE FLOOD. FLOOD INSURANCE RATE MAP PANEL NUMBER 06013C0280G, DATED 03/21/2017.

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

PROJECT SUMMARY

PROPERTY ADDRESS:	1024 & 1026 GRAYSON ROAD PLEASANT HILL, CA 94523
DEVELOPER:	ANDY BYDE REED DEVELOPMENT 925-683-5493
CIVIL ENGINEER:	DEBOLT CIVIL ENGINEERING 811 SAN RAMON VALLEY BLVD DANVILLE, CA 94526 (925) 837-3780
SURVEYOR:	DEBOLT CIVIL ENGINEERING 811 SAN RAMON VALLEY BLVD DANVILLE, CA 94526 (925) 837-3780
ASSESSOR'S PARCEL NO:	166-030-001 & 002
TOTAL AREA:	3.05± ACRES
EXISTING ZONING:	R-15
PROPOSED ZONING:	PLANNED DEVELOPMENT
EXISTING LAND USE:	SINGLE-FAMILY RESIDENTIAL
PROPOSED LAND USE:	SINGLE-FAMILY RESIDENTIAL
UTILITIES:	
WATER SUPPLY:	CONTRA COSTA WATER DISTRICT
FIRE PROTECTION:	CONTRA COSTA COUNTY FPD
SEWAGE DISPOSAL:	CENTRAL CONTRA COSTA SANITARY DISTRICT
STORM DRAIN:	CITY OF PLEASANT HILL
GAS & ELECTRIC:	PACIFIC GAS & ELECTRIC
TELEPHONE:	AT&T
CABLE TELEVISION:	COMCAST

SHEET INDEX

ENGINEER'S STATEMENT

CIVIL ENGINEERING WORK ON THIS TENTATIVE PARCEL MAP HAS BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD CIVIL ENGINEERING PRACTICE.

12/12/19

EASTON C. MCALLISTER, PE — DATE
P.E. #61148 EXP 12/31/20

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY.

VESTING TENTATIVE MAP

1024 & 1026 GRAYSON ROAD

CITY OF PLEASANT HILL — CONTRA COSTA COUNTY — CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — EASTON C. MCALLISTER — No. 61148 EXP. 12/31/20 — CIVIL — STATE OF CALIFORNIA

EASTON C McALLISTER - R.C.E. 61148
RENEWAL DATE: 12/31/20

#	REVISIONS	DATE

DeBolt Civil Engineering
811 San Ramon Valley Boulevard
Danville, California 94526
Tel: 925/837-3780
deboltcivil@earthlink.net

Date: 12/12/19
Scale: 1" = 40'
By: EM/mm
Job No.: 19300