

**INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION**

**NEW SINGLE-FAMILY RESIDENCE AT
370 LINDSEY DRIVE PROJECT
MARTINEZ, CALIFORNIA**

LSA

September 2021

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**NEW SINGLE-FAMILY RESIDENCE AT 370
LINDSEY DRIVE PROJECT
MARTINEZ, CALIFORNIA**

Submitted to:

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Martinez, California 94553

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Project No. CMA2101



September 2021

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LIST OF ABBREVIATIONS AND ACRONYMS

APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
CAP	Climate Action Plan
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CH ₄	methane
Clean Air Plan	Bay Area Air Quality Management District 2017 Clean Air Plan
CO ₂	carbon dioxide
GHG	greenhouse gas
MLD	Most Likely Descendent
NAHC	Native American Heritage Commission
N ₂ O	nitrous oxide
OPR	Governor's Office of Planning and Research
PPOS	Public Permanent Open Space
R-7.5	One-Family Residential District – 7.5
R-10	One-Family Residential District – 10
SCP	Stormwater Control Plan
SR 4	State Route 4
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
UCMP	University of California Museum of Paleontology
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled

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1.0 PROJECT INFORMATION

1. Project Title:

New Single-Family Residence at 370 Lindsey Drive Project (20PLN-001)

2. Lead Agency Name and Address:

City of Martinez
525 Henrietta Street
Martinez, CA 94553

3. Contact Person and Phone Number:

Hector Rojas, Planning Manager
Phone: (925) 372-3524
Email: hrojas@cityofmartinez.org

4. Project Sponsor's Name and Address:

Robert Romeo
280 Arthur Road
Martinez, CA 94553

5. General Plan Designation: Public Permanent Open Space (PPOS)

6. Zoning: One-Family Residential (R-7.5) District/One-Family Residential (R-10) District

7. Project Location:

The approximately 120-acre project site is located at 370 Lindsey Drive in the City of Martinez, Contra Costa County (Assessor's Parcel Numbers [APNs] 366-150-029; -036). Vehicular access to the project site is provided by Lindsey Drive, access to which is provided by Alhambra Avenue. Regional access to the project site is provided by State Route 4 (SR 4), an on-ramp for which is located approximately 2 miles to the north. Figure 1 shows the regional site location and Figure 2 shows an aerial of the project site.

8. Description of Project:

A portion of the project site is currently developed with an existing building pad that remains from a former house and a partially paved driveway as well as a few dirt ranch roads. A fifth wheel trailer is present on the building pad as well as a large shipping container that is used for storage. A smaller flat pad has a pen suitable for goats or sheep, and some construction materials are stored there. The property perimeter is fenced with barbed wire. Ditches run along the shoulder of some of the roads. Approximately 20 feet of erosion control wattle with monofilament netting had been installed in the ditch along the driveway.

The proposed project consists of the construction of a single-story, approximately 6,498-square-foot single-family residence that would be built on the existing pad within the footprint of the former house. The proposed residence would have a maximum height of approximately 21 feet,

4 inches. The proposed project would also include the construction of a pool and a 638-square-foot pool house adjacent to the proposed pool and a 220-square-foot entry kiosk/guard house near the entrance to the project from Lindsey Drive. The building pad would be excavated to remove rubble from the former house that was buried and to build the foundation. The existing driveway would be resurfaced with concrete and an approximately 212-foot long retaining wall would be constructed on the south side of the driveway adjacent to the proposed residence. At the driveway entry from Lindsey Drive, an entry kiosk would be constructed, along with an 8-foot-tall wrought iron custom entry gate with stone columns. Eight-foot-tall wrought iron fencing would flank both sides of the driveway entry, extending approximately 112 feet up the driveway. A conceptual site plan is shown in Figure 3. The floor plan and elevations for the house are provided in Figures 4 through 6, respectively. The floor plan and elevations for the proposed pool house and entry kiosk/guard house are shown in Figures 7 and 8, respectively.

Project construction would take approximately 12 months and would occur in a single phase. Project construction is expected to start upon issuance of building permits. Construction would comply with the City of Martinez Noise Ordinance (Chapter 8.34 of the City of Martinez Municipal Code), which limits construction to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on weekends and holidays. Typically, construction would occur between 8:00 a.m. and 5:00 p.m. Construction vehicles would access the site via Lindsey Drive and construction staging would occur within the existing project site. Grading for proposed improvements would require approximately 5,475 cubic yards of soil to be cut from the project site. Approximately, 1,076 cubic yards would be used for fill, and the remaining 4,399 cubic yards would be spread out on the project site.

9. Surrounding Land Uses and Setting:

The project site is bound by open space to the west and single-family residential uses to the north, east, and south, as well as the Forest Hills Aquatic Park to the south. While the surrounding area is largely residential, commercial uses are interspersed throughout, as well as the John Swett Elementary School, located approximately 1 mile northwest of the project site, and the Forest Hills Preschool and Bethany Baptist Church approximately 0.5 mile southeast of the project site.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

None.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource 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.?

A request form describing the proposed project was sent to the Native American Heritage Commission (NAHC) in West Sacramento requesting a list of tribes eligible to consult with the City, pursuant to Public Resources Code section 21080.3.1. The City sent a letter regarding the project to these individuals on August 30, 2021. To date, tribal consultation is still ongoing.

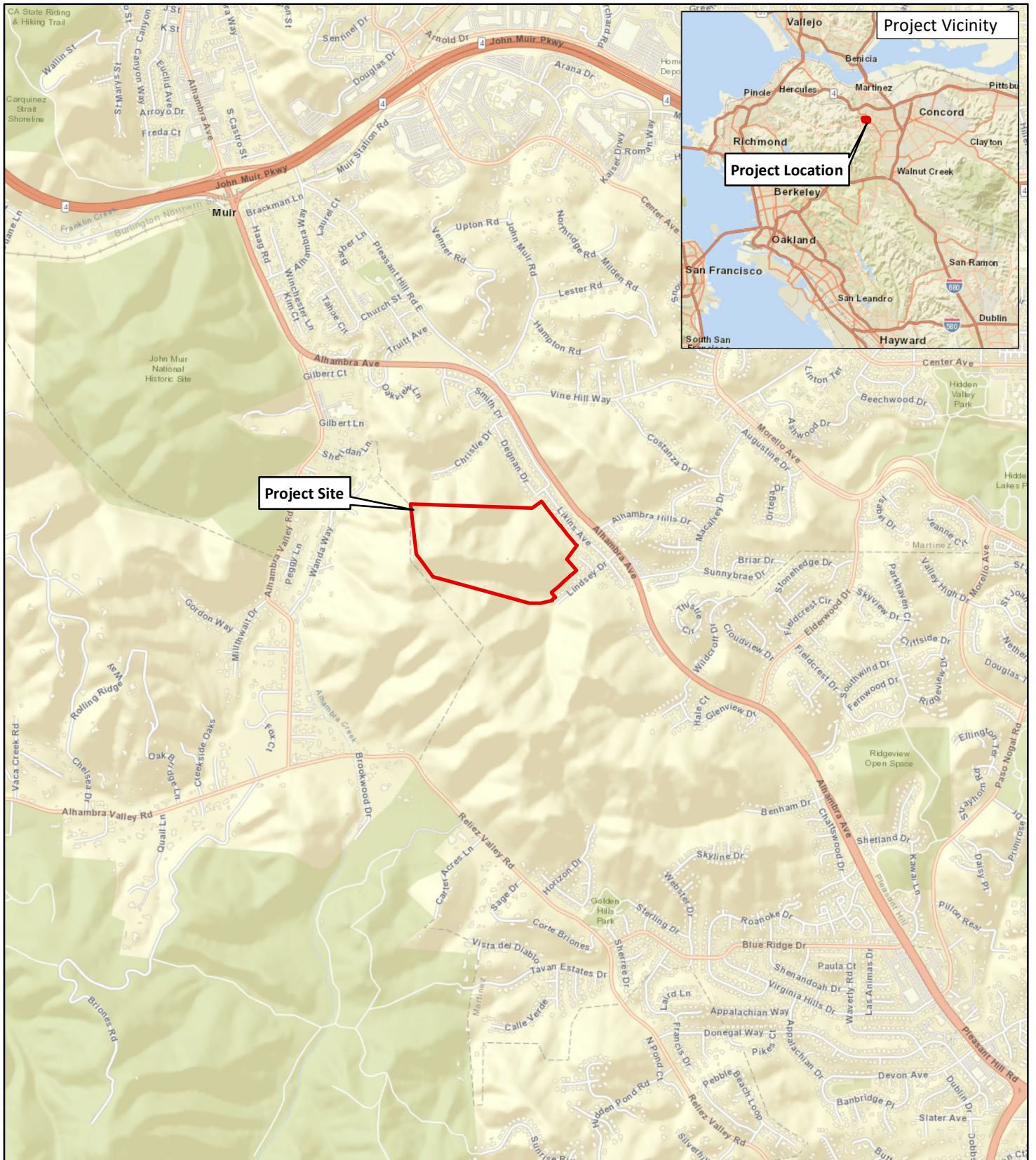


FIGURE 1

*New Single-Family Residence at
370 Lindsey Drive Project IS/MND*
Project Location and Regional Vicinity

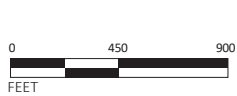
SOURCE: Esri World Street Map (2020).

I:\CMA2101\GIS\Maps\Figure 1_Project Location and Regional Vicinity Map.mxd (7/13/2021)



FIGURE 2

LSA



 Project Site Boundary

*New Single-Family Residence at 370 Lindsey Drive Project IS/MND
Aerial Photograph of Project Site and Surrounding Land Uses*

SOURCES: Google Earth, 2/24/2021; LSA, 2021

P:\CMA2101 370 Lindsey Residential\PRODUCTS\Graphics\Figure 2.ai (7/13/2021)

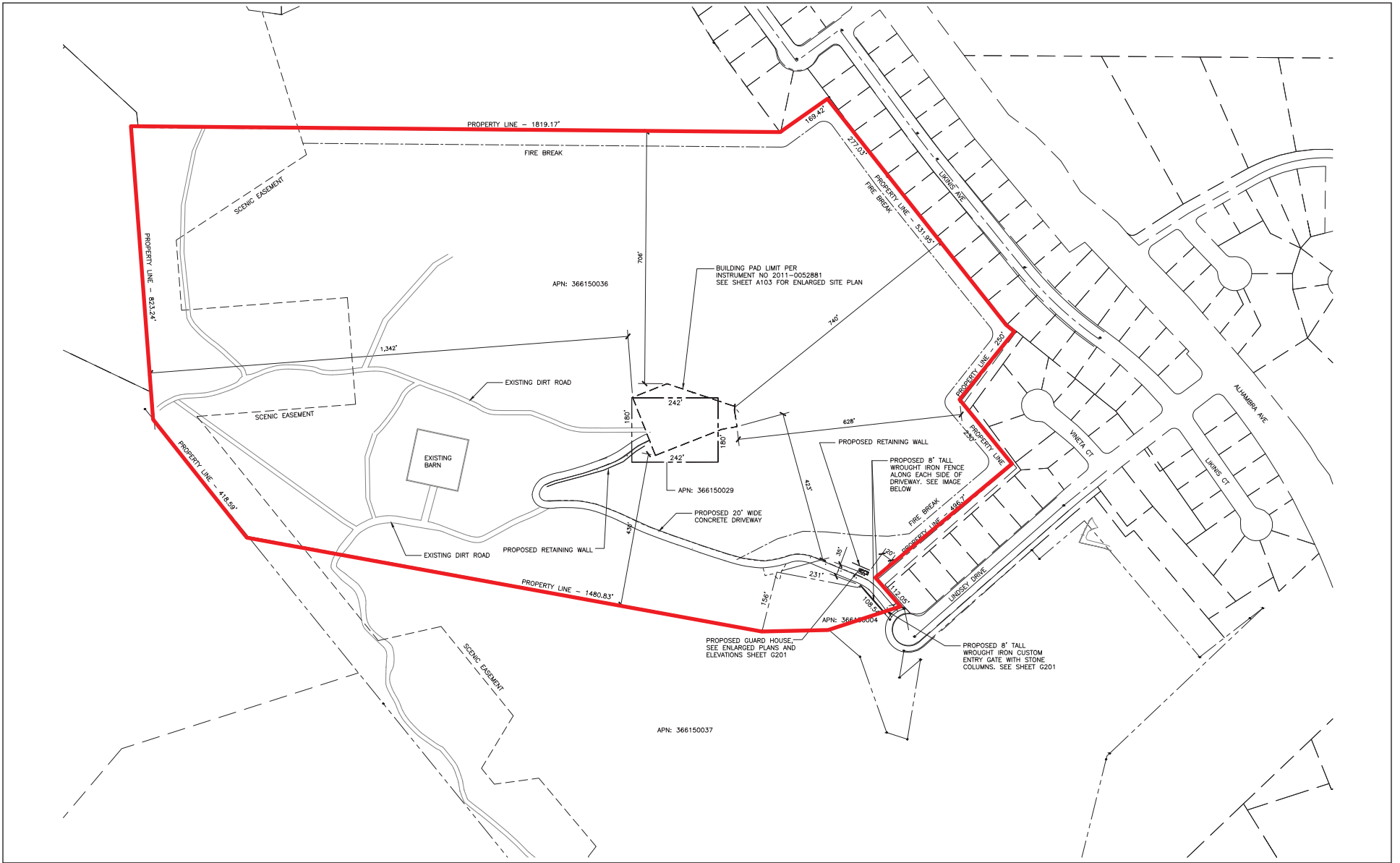
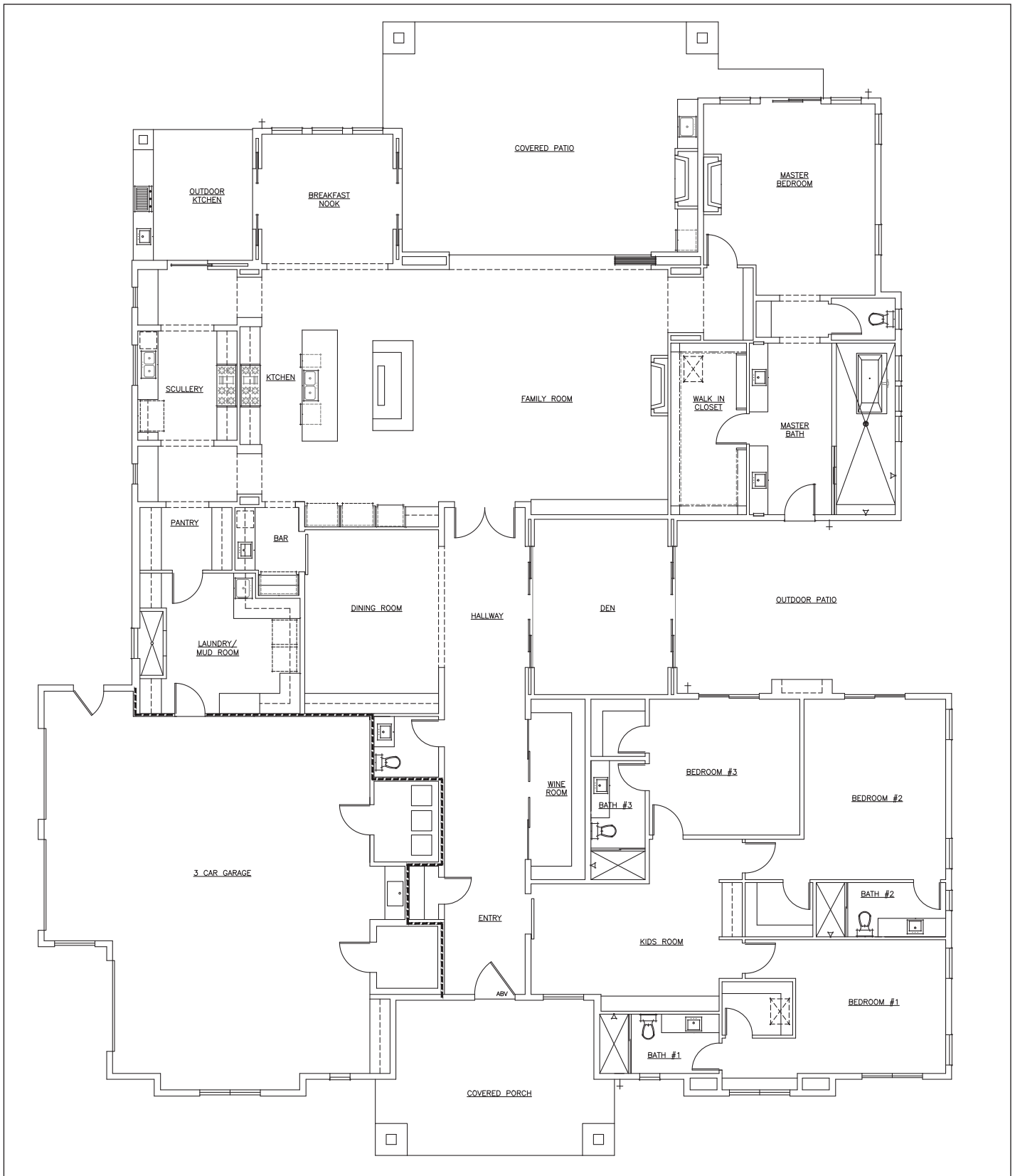


FIGURE 3



Project Site Boundary

New Single-Family Residence at 370 Lindsey Drive Project IS/MND
Overall Conceptual Site Plan



LSA

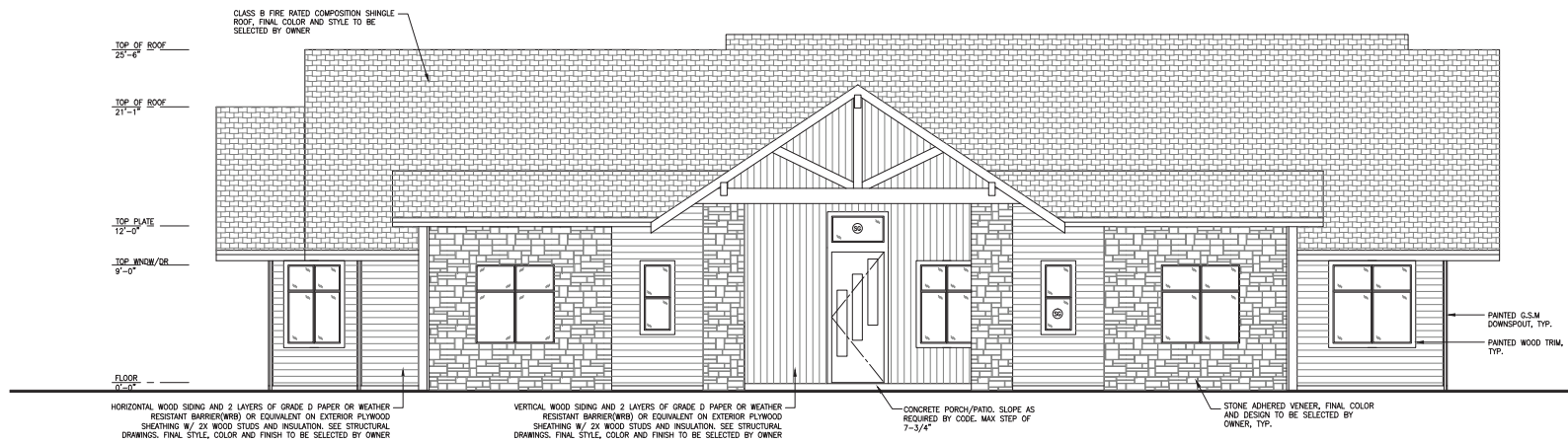
FIGURE 4

NOT TO SCALE

New Single-Family Residence at 370 Lindsey Drive Project IS/MND
Conceptual Main House Floor Plan

SOURCE: JLW Design LLC, 2021

P:\CMA2101 370 Lindsey Residential\PRODUCTS\Graphics\Figure 4.ai (7/13/2021)



1 EXTERIOR ELEVATION - FRONT



2 EXTERIOR ELEVATION - SIDE

LSA

FIGURE 5

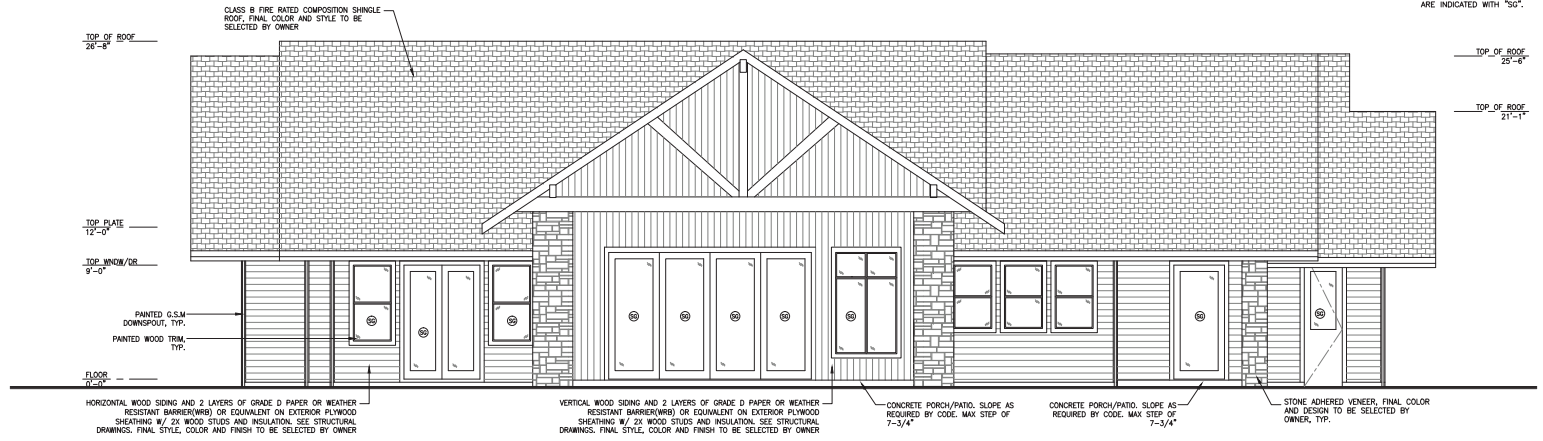
NOT TO SCALE

New Single-Family Residence at 370 Lindsey Drive Project IS/MND
Conceptual Main House Elevations - Front and Side

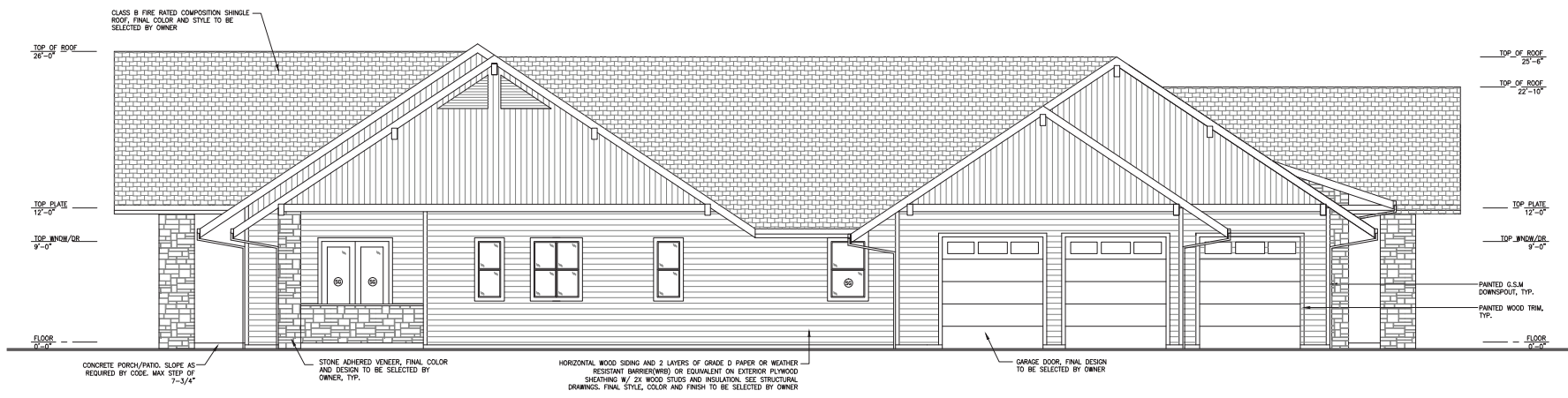
SOURCE: JLW Design, LLC, 2020

P:\CMA2101 370 Lindsey Residential\PRODUCTS\Graphics\Figure 7.ai (8/13/2021)

- a.b. HAVE A PERMANENT LABEL IF THE PRODUCT IS RATED USING NFRC PROCEDURES
- 5. ALL WINDOWS TO RECEIVE SAFETY GLAZING AS REQUIRED BY CODE ARE INDICATED WITH "SG".



1 EXTERIOR ELEVATION - REAR



2 EXTERIOR ELEVATION - SIDE

LSA

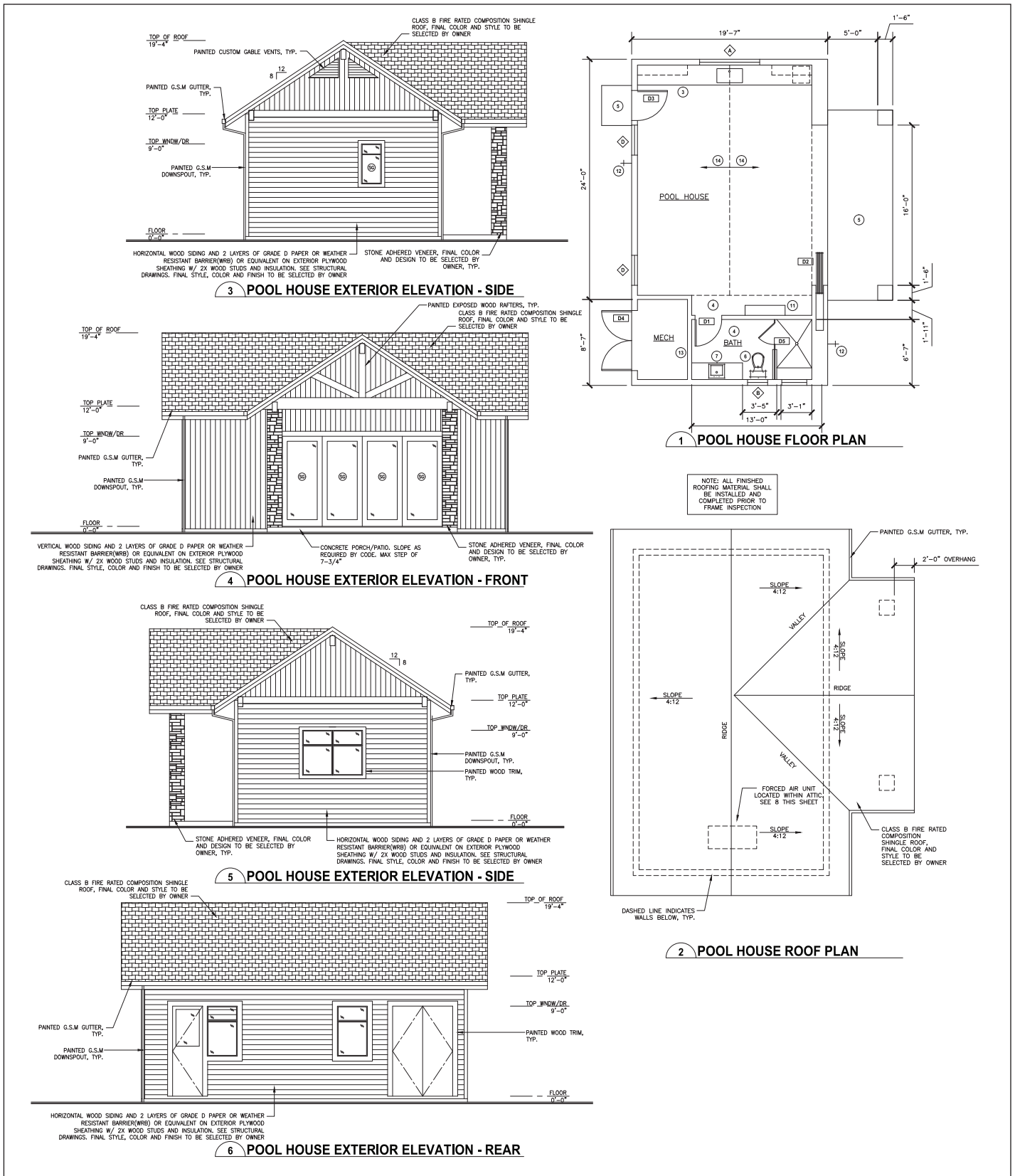
FIGURE 6

NOT TO SCALE

New Single-Family Residence at 370 Lindsey Drive Project IS/MND
 Conceptual Main House Elevations - Rear and Side

SOURCE: JLW Design, LLC, 2020

P:\CMA2101 370 Lindsey Residential\PRODUCTS\Graphics\Figure 8.ai (8/13/2021)



LSA

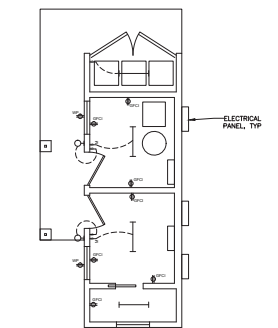
FIGURE 7

NOT TO SCALE

New Single-Family Residence at 370 Lindsey Drive Project IS/MND
 Conceptual Pool House Floor Plan and Elevations

SOURCE: JLW Design LLC, 2020

P:\CMA2101 370 Lindsey Residential\PRODUCTS\Graphics\Figure 5.ai (8/13/2021)



7 GUARD HOUSE ELECTRICAL PLAN

SHEET NOTES:

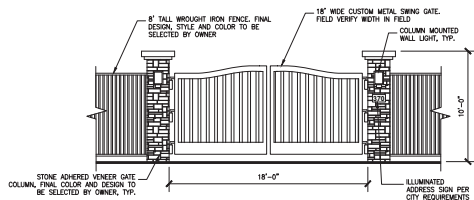
1. ALL CEILING ARE EXPOSED TO STRUCTURE ABOVE
2. FIBER-CEMENT BOARD TO BE USED IN ALL WET LOCATIONS

LEGEND:

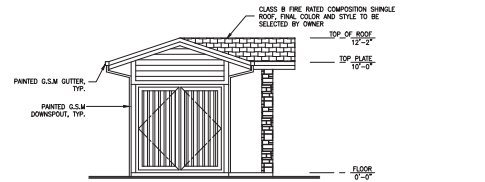
- ⌋ SINGLE POLE LIGHT SWITCH
- ⌋¹ SINGLE POLE LIGHT SWITCH WITH INTEGRAL MOTION SENSOR
- ⊙ WALL MOUNTED EXTERIOR HIGH EFFICIENCY LED LIGHT FIXTURE, FRANKLIN IRON WORKS "HICKORY POINT 15" OR APPROVED EQUAL
- ⌋² SURFACE MOUNTED 2-BULB FLOURESCENT SHOP LIGHT
- ⊕ 110 VOLT, 20 AMP DUPLEX OUTLET
- ⊕¹ 110 VOLT DUPLEX, 20 AMP OUTLET GROUND FAULT CIRCUIT INTERRUPTER
- ⊕² 110 VOLT DUPLEX, 20 AMP OUTLET WATERPROOF COVERPLATE

GENERAL ELEC NOTES:

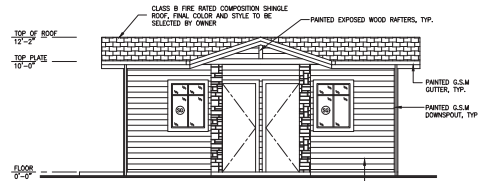
1. ANY RECEPTACLES LOCATED IN AN AREA WITH AN EXPOSED CONCRETE FLOOR MUST BE GFC PROTECTED.
2. ALL OUTDOOR INCANDESCENT LUMINARIES RATED OVER 100 WATTS SHALL BE CONTROLLED BY A MOTION SENSOR.



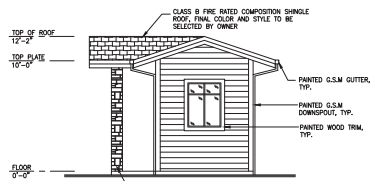
8 ENTRY GATE ELEVATION



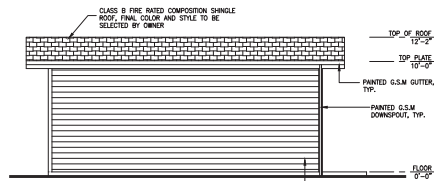
3 GUARD HOUSE EXTERIOR ELEVATION - SIDE



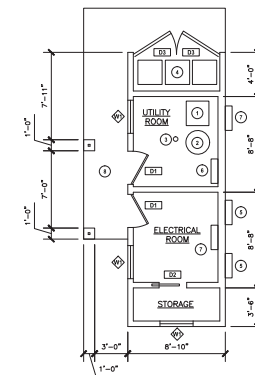
4 GUARD HOUSE EXTERIOR ELEVATION - FRONT



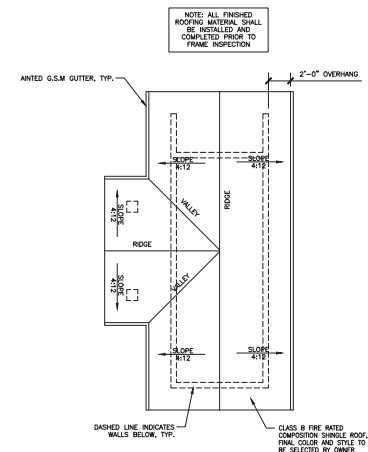
5 GUARD HOUSE EXTERIOR ELEVATION - SIDE



6 GUARD HOUSE EXTERIOR ELEVATION - REAR



1 GUARD HOUSE FLOOR PLAN



2 GUARD HOUSE ROOF PLAN

2.0 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 in Chapter 3.0. These impacts would be reduced to less than significant with implementation of mitigation measures.

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

2.1 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature

9/11/21
Date

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3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

No scenic vistas to or from the project site are identified in the City’s General Plan. The proposed project would not be visible from any surrounding roadways due to the distance from public vantage points, existing topography and vegetation on and adjacent to the project site. Therefore, the proposed project would not have a substantial effect on a scenic vista, and this impact would be less than significant.

The project site is not located in the vicinity of any State scenic highways, and would not be visible from any roadways aside from the private driveway. Therefore, the proposed project would not substantially damage scenic resources within a State scenic highway.

As noted in Section 1.0, Project Information, the project site is located within the R-7.5 and R-10 zoning districts. The R-7.5 district has a minimum site area of 7,500 square feet, maximum site coverage of 35 percent, and a maximum height of two stories (25 feet). The R-10 district has a minimum site area of 10,000 square feet, maximum site coverage of 30 percent, and a maximum height of two stories (25 feet). The proposed project would consist of an approximately 6,498-square-foot single-family residence on a 120-acre property with a maximum height of approximately 21 feet. The proposed single-family residence would not be visible from any adjacent properties or roadways and would be consistent with the development standards for the R-7.5 and R-10 zoning districts. Therefore, the proposed project would not degrade the visual character of the project site and this impact would be less than significant.

Streetlight, vehicle headlights and taillights, and lighting associated with existing homes in the adjacent neighborhoods are the existing sources of light and glare. The proposed project would

introduce new sources of light and glare to the project site that don't currently exist. However, the site was formerly developed with a single family residence and, as noted above, the proposed project would not be visible from any adjacent roadways or properties. Therefore, the proposed project would not adversely affect day or nighttime views in the area. This impact would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

No agricultural uses are located within or adjacent to the project site. The project site is classified as “Grazing Land” by the State Department of Conservation.¹ The project site is within the R-7.5 and R-10 zoning districts, and previously contained a residential use, and therefore is not eligible for a Williamson Act contact. The proposed project would not include a change of use on the project site, and therefore would not conflict with existing zoning for agricultural production or use, timberland production, or the loss of forest land. Therefore, the proposed project would have no impact related to agriculture and forestry resources.

¹ California, State of. 2016. Department of Conservation. California Important Farmland Finder (map). Website: maps.conservation.ca.gov/dlrp/ciff/ (accessed July 2021).

3.3 AIR QUALITY

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The applicable air quality plan is the BAAQMD 2017 Clean Air Plan (Clean Air Plan), which was adopted on April 19, 2017. The Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: 1) supports the goals of the Clean Air Plan; 2) includes applicable control measures from the Clean Air Plan; and 3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan.

The primary goals of the Bay Area Clean Air Plan are to: attain air quality standards; reduce population exposure and protect public health in the Bay Area; and reduce greenhouse gas emissions and protect climate. The BAAQMD has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region’s attainment of air quality standards. The health and hazards thresholds were established to help protect public health. As discussed below, implementation of the proposed project would result in less-than-significant operation-period emissions and, with implementation of Mitigation Measure AIR-1, the project would result in less-than-significant construction-period emissions. Therefore, the project would not conflict with the Clean Air Plan goals.

The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-Greenhouse Gas (GHG) Pollutants Measures. The project would result in the construction

of a single-family residence, pool, an in-law unit, and an entry kiosk; therefore, the Stationary Source, Energy Control, Agricultural Control, Natural and Working Lands Control, Water Control, and Super GHG Control Measures are not applicable to the proposed project.

The proposed project is not expected to result in a significant increase in the generation of vehicle trips or vehicle miles traveled. Therefore, the project would not conflict with the BAAQMD's initiatives to reduce vehicle trips and vehicle miles traveled. In addition, the proposed project would be required to comply with the 2019 Title 24 standards, aimed at reducing greenhouse gas emissions. Therefore, the proposed project would not conflict with the Building Control Measures. Furthermore, the project would comply with local requirements for waste management (e.g., recycling and composting services), as applicable, and would therefore be consistent with the Waste Management Control Measures. Therefore, the project would not disrupt or hinder implementation of a control measure from the Clean Air Plan and this impact would be less than significant.

The proposed project would consist of the construction of an approximately 6,498-square-foot single-family residence and associated improvements. The proposed project would be constructed on the same building footprint and foundation as a previous residential use on the project site. Soils would be balanced on the project site and therefore would not require any truck trips related to the import or export of soil. For single-family residential land uses, the BAAQMD screening size for construction criteria pollutants is 114 units. Therefore, based on the BAAQMD's screening criteria, construction activities associated with the proposed project are not anticipated to exceed established thresholds. In addition, the BAAQMD requires the implementation of the BAAQMD's Basic Construction Mitigation Measures (best management practices) to reduce construction fugitive dust impacts to a less-than-significant level as follows:

Mitigation Measure AIR-1: In order to meet the BAAQMD fugitive dust threshold, the construction contractor shall implement the following BAAQMD Basic Construction Mitigation Measures during all construction activities:

- 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 5 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. If feasible, roadways, driveways, and sidewalks should be completed prior to excavation for utilities and foundations of the main house.

- 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 5 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 mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number (415-749-5000) shall also be visible to ensure compliance with applicable regulations.

As discussed above, the BAAQMD has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment. For single-family residential land uses, the BAAQMD screening size for operational criteria pollutants is 325 units. The proposed project would develop a single-family residence and associated improvements. Therefore, based on the BAAQMD's screening criteria, the proposed project is not anticipated to exceed established thresholds and operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or State ambient air quality standards. Impacts would be less than significant.

The closest sensitive receptors to the project site include single-family residences located immediately north, east, and south of the project site along Christie Drive, William Henry Way, Likins Avenue, Vineta Court, and Lindsey Drive. Construction of the proposed project may expose these surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Mitigation Measure AIR-1 described above. With implementation of this mitigation measure, project construction pollutant emissions would be below the BAAQMD significance thresholds. Once the project is constructed, the project would not be a source of substantial pollutant emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during project construction and operation, and potential impacts would be considered less than significant.

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not

include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

This section summarizes the conclusions of the Alameda Whipsnake (Striped Racer) Report prepared for the project site in February 2021, which is included in Appendix A.² The Striped Racer Report concluded that the project site contains suitable habitat for the Alameda striped racer (*Coluber lateralis euryxanthus*). This habitat is discussed below.

Alameda Striped Racer Habitat Requirements. Alameda striped racer primarily occur in areas that support scrub plant communities, including mixed chaparral and coastal scrub. This species also occurs in annual grassland and oak woodlands that lie adjacent to scrub habitats. Within these plant communities, specific habitat features needed by Alameda striped racer include, but are not limited to, small mammal burrows, rock outcrops, talus, and cover types that provide temperature regulation, shelter from predators, egg-laying sites, and winter hibernation refuges. Many of these same elements are important in maintaining preferred prey species (e.g., western fence lizard

² LSA Associates, Inc. 2021. Alameda Whipsnake (Striped Racer) Report for 370 Lindsey Drive, Martinez. February 12.

[*Sceloporus occidentalis*]). Alameda striped racer likely eat any small animals they can capture and swallow, including other species of lizards, small rodents, birds, and amphibians.

Habitat on the Project Site. The site topography is hilly, and the natural vegetation consists of annual grassland, oak savannah, mixed oak woodland, and small patches of scrubland. The steep terrain encompasses several small ephemeral drainages.

A portion of the property is developed with an existing building pad (site of a former home) and partially paved driveway, as well as a few dirt ranch roads. Ditches run along the shoulder of some of the roads. Approximately 20 feet of erosion control wattle with monofilament netting had been installed in the ditch along the driveway.

The building pad area is mostly devoid of vegetation. A fifth wheel trailer is present on the building pad as well as a large shipping container that is used for storage. A smaller flat pad has a pen suitable for goats or sheep, and some construction materials are stored there as well. The property perimeter is fenced with barbed wire. Cattle were observed grazing on the adjacent property. Undeveloped areas of the site are covered with the following vegetation types.

Annual Grasslands. Annual grasslands are the only cover in much of the site and occur as an understory in oak savannah and mixed oak woodland habitats. Annual grasslands are characterized by a dominance of naturalized non-native grasses that cover the hilltops and well-drained uplands of the site and surrounding areas. Annual grasslands on the site are dominated by grasses including wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and barley (*Hordeum* spp.). Forbs such as wild lettuce (*Lactuca serriola*), miner's lettuce (*Claytonia perfoliata*), and broadleaf filaree (*Erodium botrys*) are also present. Grasslands also support the invasive plant artichoke thistle (*Cynara cardunculus*).

Oak Savannah. Oak Savannah forms the transition zone between the grasslands and oak woodland. Individual scattered coast live oaks (*Quercus agrifolia*) and valley oaks (*Quercus lobata*) are found in this habitat. The large oaks growing along the southwest property line were marked with aluminum tags, indicating they have been inventoried in the past.

Mixed Oak Woodlands. Mixed oak woodlands occur on the slopes. This habitat is characterized by a moderate to dense canopy of mature oaks with an understory of poison oak (*Toxicodendron diversilobum*), forbs, ferns, and annual grasses. In wetter areas toward the bottom of the canyons there are more California bay laurel (*Umbellularia californica*) and California buckeye trees (*Aesculus californica*), which tend to prefer more soil moisture.

Scrubland. Scrubland habitats in the project area are characterized by a dominance of endemic shrubs occurring on steep slopes with thin soils or even exposed rock. The patches of scrubland on the site are relatively small and occur primarily on southern or western facing exposures. Shrubs in these areas include poison oak, California sage (*Artemisia californica*), sticky monkeyflower (*Mimulus aurantiacus*), coyote brush (*Baccharis pilularis*), and cudweed (*Pseudognaphalium californicum*).

As described in the Striped Racer Report, the site is within Designated Critical Habitat Unit 1 for Alameda striped racer, indicating that on the landscape scale the property is within the range of the species and provides suitable habitat. The Critical Habitat designation confers additional legal restrictions on projects that involve a federal agency. The proposed project does not require any federal action.

Alameda Striped Racer Occurrences. Alameda striped racers have been previously captured on the project site during trapping surveys conducted in 2001 for the adjacent Alhambra Highlands Project.³ It is assumed that a breeding population of Alameda striped racer has persisted on the property, as there has been no change in habitat conditions on or adjacent to the project site since the 2001 trapping survey was conducted.

Construction activities associated with the proposed project could result in the substantial adverse impacts related to the sensitive species and communities identified above. Implementation of Mitigation Measures BIO-1 through BIO-8, which are described below, would ensure this impact would be less-than-significant.

Mitigation Measure BIO-1: A U.S. Fish and Wildlife Service (USFWS) accredited biologist shall conduct an environmental education program for any persons working on brush clearing, fence installation, earthmoving, and/or utility construction activities on the project site before they perform any such work. The program shall consist of a presentation from the biologist that includes a discussion of the biology and behavior of the Alameda striped racer; information about the distribution and habitat needs of the species; sensitivity of the species to human activities; the status of the species pursuant to the Federal Endangered Species Act, including legal protection; recovery efforts; and penalties for violations. The biologist shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on the site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all the protection measures.

Mitigation Measure BIO-2: The project applicant shall install an exclusion fence to deter Alameda striped racer from entering the work site. The exclusion fence shall be installed prior to the initiation of any construction activities. Unless alternative (equivalent or more effective) specifications are recommended by the accredited biologist, the fence shall be constructed as follows: Plywood sheets at least 3 feet in height, above ground. Alternatively, heavy-duty geotextile fabric or plastic materials designed for wildlife exclusion fencing such as Ertec or Animex may also be used for the snake exclusion fence. Standard silt fence

³ Swaim Biological Consulting. 2005. Alameda Whipsnake Mitigation and Monitoring Plan, Alhambra Highlands Project, Martinez, Contra Costa County, California. Prepared for Richland Development Corporation. June 9.

material is not adequate and shall not be used. Fence specifications include:

- Base buried 4 to 6 inches into the ground;
- Soil back-filled against the fence to create a solid barrier at the ground;
- Fence material maintained in an upright position with t-posts or stakes;
- Ends of plywood sheets overlapped with no gaps to ensure a complete barrier;
- Escape funnels (i.e., a one-way escape gateway that allows movement away from a construction site and prevents return) installed in the fence every 200 linear feet;
- Work site shall be completely enclosed by the exclusion fence with the exception of the driveway; and
- The fence shall be installed and remain in place throughout the construction period. All construction activities and equipment/materials/debris storage shall take place on the project side of the fence.

Mitigation Measure BIO-3: A USFWS accredited biologist shall be on the site to monitor exclusion fence installation and initial vegetation clearing, particularly the piles of wood or brush on the building pad.

Mitigation Measure BIO-4: The USFWS accredited biologist shall be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site otherwise associated with the project. The accredited biologist will have oversight over implementation of all these measures, and, through the applicant, will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled.

Mitigation Measure BIO-5: To prevent the entanglement of Alameda striped racer and other wildlife, erosion control devices containing plastic monofilament netting shall not be used or stored on the site. Any existing wattle on the site that is wrapped in monofilament netting shall be removed. Acceptable alternatives include wattle that is wrapped in burlap or jute netting with large holes.

- Mitigation Measure BIO-6:** To reduce the potential for vehicle strikes of Alameda striped racer basking on the driveway, all construction related traffic shall not exceed 5 miles per hour.
- Mitigation Measure BIO-7:** If an Alameda striped racer is seen within the work area, all nearby work that could harm the snake shall stop until the project biologist has been contacted and the snake has left the site of its own volition. In no circumstances shall anyone other than a USFWS accredited biologist with the appropriate permits handle or attempt to capture an Alameda striped racer.
- Mitigation Measure BIO-8:** In the event an Alameda striped racer is inadvertently killed or injured or is observed to be injured, dead, or entrapped, the construction crew shall stop work and notify the project biologist who will then contact the USFWS and California Department of Fish and Wildlife's (CDFW) Bay Delta Regional Office (707-428-2002).

A field survey conducted as part of the Striped Racer Report did not identify any federally-protected wetlands or wildlife corridors on the project site. Common urban-adapted wildlife species likely move throughout the site. However, the proposed project is not anticipated to interfere with any resident or migratory fish or wildlife movement. However, several species of native birds are expected to nest in the trees, shrubs, and grasslands in and adjacent to the project site. Native birds may also nest on manmade structures on the property. The nests of most native birds are considered nursery sites and are protected under the federal Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code. If conducted during the nesting season (February 1 to August 31), construction activities could directly impact nesting birds by removing vegetation or structures that support active nests. With implementation of Mitigation Measure BIO-9, impacts associated with wildlife movement and corridors would be less than significant.

- Mitigation Measure BIO-9:** To the extent feasible, vegetation removal shall be conducted during the non-nesting season for birds (i.e., between September 1 and January 31). If vegetation removal occurs during the nesting season (February 1 to August 31), the project site shall be surveyed by a qualified biologist no more than 14 days prior to ground disturbing/vegetation removal activities. If an active nest is found, the biologist shall identify a no-work buffer around the nest until the young have fledged or the nest has otherwise become inactive. The biologist shall follow the applicable trustee agency protocol for species protection.

The project site is not located within the boundaries of a habitat conservation plan or natural community conservation plan. No trees are proposed for removal; therefore, the project would not

conflict with the City's tree preservation ordinance.⁴ Therefore, these impacts would be less than significant.

⁴ Chapter 8.12 of the City's Municipal Code defines a protected tree as: 1) Any tree that measures 20 inches or larger in circumference (approximately 6.5 inches in diameter) measured 4½ feet from ground level; 2) Any multi-stemmed tree with the sum of the circumferences measuring 40 inches or larger, measured 4½ feet from ground level; and 3) Any significant grouping of trees, including groves of four or more trees.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The project site does not contain any known historic, or potential historic, resources as defined by CEQA Guidelines Section 15064.5. No archaeological resources or human remains have been identified in the vicinity of the project site based on previous site studies and analyses for the adjacent Alhambra Highlands Residential Project,⁵ and these resources are not anticipated to be discovered during project-related construction activities.

No archaeological historical resources have been identified at the project site. Although no archaeological deposits that qualify as historical resources are known to be present at the project site, the potential for such resources cannot be discounted. If significant archaeological deposits were unearthed during project construction, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired pursuant to CEQA Guidelines Section 15064.5(b)(1). With implementation of the following mitigation measure, potential impacts to archaeological historical resources would be reduced to a less-than-significant level.

Mitigation Measure CUL-1: Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for Archeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recordation of the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods and findings shall be prepared and submitted

⁵ Martinez, City of. 2010. Draft Supplemental EIR Alhambra Highlands Residential Project. October.

to the City for review, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate curation facility and used for public interpretive displays, as appropriate and in coordination with a local Native American tribal representative.

The applicant shall inform its contractor(s) of the sensitivity of the project area for archaeological deposits and shall verify that the following directive has been included in the appropriate contract documents:

“The subsurface of the construction site may be sensitive for Native American archaeological deposits. If archaeological deposits are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist contacted to assess the situation, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. Archaeological deposits can include shellfish remains; bones; flakes of, and tools made from, obsidian, chert, and basalt; and mortars and pestles. Contractor acknowledges and understands that excavation or removal of archaeological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5.”

There are no known human remains at the project site. In the event that human remains are identified during project construction, these remains would be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate.

Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner’s authority. If the human remains are of Native American origin, the coroner must notify the California Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Section 5097.98 of the Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the MLD) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or

preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site. With these regulations in place, no impact on human remains is anticipated. This impact would be less than significant.

3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed project would not substantially increase energy demand during construction and operation, as described below.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over a 12-month period. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading activities, and construction of the buildings. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the project would be required to restrict equipment idling times to 5 minutes or less and would require construction workers to shut off idle equipment, as required by Mitigation Measure AIR-1. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State’s available energy sources. Therefore, construction energy impacts would be less than significant.

Operational Energy Use. Typically, energy consumption is associated with fuel used for vehicle trips and electricity and natural gas use. The expected energy consumption during operation of the proposed project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. The proposed project would be required to comply with the 2019 Title 24 standards, which would help to reduce energy and natural gas consumption. In addition, the proposed project is not expected to result in a significant increase in the generation of vehicle trips or vehicle miles traveled. Therefore, the proposed project would not result in the wasteful, inefficient or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Impacts would be less than significant.

Energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the California Energy Commission's (CEC's) 2020 Integrated Energy Policy Report. Thus, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and this impact would be less than significant.

3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The project site is not located within an Alquist-Priolo Zone. However, expansive soils, soils with high-shrink swell potential, and soils with landslide potential are known to occur in the hilly areas of the City, which include the project site. Therefore, impacts related to seismic-related ground failure, expansive soils, and landslide would be potentially significant. Implementation of Mitigation Measure GEO-1, which requires the preparation and implementation of a Geotechnical Report, would ensure this impact would be reduced to a less than significant level.

Mitigation Measure GEO-1: A site-specific, design level geotechnical report satisfactory to the Chief Building Official shall be submitted for review and approval to the Building Division prior to the issuance of any construction-related permits and contain design recommendations for grading, footings, retaining walls, and provisions for anticipated differential settlement within the project site. Specifically:

- The Geotechnical Report shall include an analysis of expected ground motion at the project site. The analysis shall be in accordance with applicable City ordinances and policies, and

consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults in the project vicinity. The analysis presented in the geotechnical investigation report shall provide recommendations to minimize seismic damage to structures. All design measures, recommendations, design criteria, and specifications set forth in the final geotechnical investigation report shall be implemented.

- The Geotechnical Report shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, and roadways).
- The Geotechnical Report shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the geotechnical engineer shall be included in the final design, as approved by the City of Martinez.

Soil erosion, which is discussed in Section 3.10, Hydrology and Water Quality, could occur during project construction when excavation and grading would expose site soils. The project would be required to comply with existing regulations for stormwater protection, including preparation of a SCP. In addition to compliance with City standards and policies, the Regional Water Quality Control Board requires preparation of a project specific Storm Water Pollution Prevention Plan (SWPPP) for any project that disturbs an area of one acre or larger. The SWPPP will include project specific best management measures that are designed to control drainage and erosion. Therefore, impacts related to erosion and loss of topsoil would be less than significant.

The proposed project would connect to the City's wastewater conveyance system. On-site treatment and disposal of wastewater is not proposed for the project; therefore, the proposed project would have no impacts associated with soils incapable of supporting alternative wastewater disposal systems.

Although no paleontological resources or unique geological features are known to exist within or near the already disturbed project site, according to the locality search through the University of California Museum of Paleontology (UCMP) at the University of California, Berkeley, there are 907 known localities that have produced 2,569 specimens within Contra Costa County.⁶ Therefore, the possibility of accidental discovery of paleontological resources during project construction cannot be discounted. Implementation of Mitigation Measure GEO-2, described below, would reduce potential impacts to paleontological resources to a less-than-significant level.

⁶ University of California Museum of Paleontology. Databases. Website: ucmp.berkeley.edu/collections/databases/ (accessed July 2021).

Mitigation Measure GEO-2: Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a “qualified paleontologist” shall be an individual with the following qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least two years of professional experience related to paleontology; (3) proficiency in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field. If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate.

The project applicant shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the appropriate contract documents:

“The subsurface of the construction site may be sensitive for fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Contractor acknowledges and understands that excavation or removal of

paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5.”

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

This section describes the proposed project’s construction- and operational-related greenhouse gas (GHG) emissions and contribution to global climate change. The BAAQMD has not addressed emission thresholds for construction in their CEQA Guidelines; however, the BAAQMD encourages quantification and disclosure. Thus, construction emissions are discussed in this section.

Construction Activities. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. The proposed project would develop a single-family residence and associated improvements. Based on the project size, it is not expected that construction of the proposed project would result in substantial GHG emissions during construction. Implementation of Mitigation Measure AIR-1 would reduce GHG emissions by reducing the amount of construction vehicle idling and by requiring the use of properly maintained equipment. Therefore, project construction impacts associated with GHG emissions would be less than significant.

Operational Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). For single-family residential land uses, the BAAQMD screening size for operational GHG pollutants is 56 units. The proposed project would develop a single-family residence and associated improvements. Therefore, based on the BAAQMD’s screening criteria, the proposed project is not anticipated to exceed established thresholds. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment and this impact would be less than significant.

The City of Martinez developed a Climate Action Plan (CAP) in June 2009. In addition, the City prepares an annual Climate Action Plan and Sustainability Programs Update report to inform the City's progress on the CAP and sustainability programs. The CAP presents goals, principals, and strategies for reducing the City's GHG emissions, conserving energy and natural resources, and preparing for global warming. These strategies relate to transportation, electricity and natural gas, solid waste, water, adaptation, and carbon sequestration. Most of the CAP strategies would need to be implemented by the City; however, the proposed project would be constructed in compliance with City requirements and 2019 Title 24 standards, which would promote the CAP's strategies related to conserving energy and natural resources. In addition, the proposed project is not expected to result in a significant increase in the generation of vehicle trips or vehicle miles traveled, consistent with CAP's transportation strategies. Overall, the proposed project would be consistent with the CAP and, therefore, would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions. Therefore, the proposed project would have a less-than-significant impact related to GHG emissions.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed project would result in the construction of a new single-family residence on the same building footprint and foundation as a previous residential use. Proposed residential land uses would involve only small quantities of commercially available hazardous materials for routine maintenance (e.g., paint and cleaning supplies).

Construction of the proposed project would involve the use and transport of hazardous materials. These materials could include fuels, oils, paints, and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and environment. Transport and use of hazardous materials would be subject to all applicable State and federal laws, such as Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, California Health and Safety Code, and California Code of Regulations Title 8 and Title 22.

The project site previously contained a residential use, and therefore it is unlikely that soils on the project site would contain any hazardous materials. The project site is not located within one-

quarter mile of any school. Therefore, development of the proposed project would have a less-than-significant impact on the public and the environment related to the routine transport, use, and handling of hazardous materials.

The project site is not included on any list of hazardous materials site compiled pursuant to Government Code Section 65962.5.⁷ The proposed project would not include any modifications to the existing roadways on or in the vicinity of the project site, and therefore would not result in any impacts related to emergency access or an adopted emergency response plan.

The project site is not located within a high fire hazard severity zone. However, because it is generally surrounded by undeveloped land, the proposed project could expose people or structures to risks related to wildland fires. However, implementation of Mitigation Measure HAZ-1, which requires the implementation of a Vegetation Management Plan, would ensure that this impact would be reduced to a less than significant level.

Mitigation Measure HAZ-1: The project applicant shall develop a Vegetation Management and Fire Prevention Plan satisfactory to the Chief Building Official and shall implement the approved plan during construction and operation of the proposed project. The Vegetation Management and Fire Prevention Plan, which shall be submitted to the Chief Building Official for review and approval prior to the issuance of any construction-related permit, shall include, at a minimum, the following measures:

- Use of spark arrestors on all vehicles and equipment used for landscape and vegetation management;
- Planting and placement of fire-resistant plants near the structure and phasing out flammable vegetation;
- Schedule for trimming back vegetation around windows;
- Pruning the lower branches of tall trees;
- Clearing out ground-level brush and debris; and
- Storing combustible materials away from vegetated areas.

⁷ California Environmental Protection Agency. 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/ (accessed July 2021).

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed project would create more than 2,500 square feet of impervious surface, and therefore would be required to prepare and submit a Stormwater Control Plan (SCP).⁸ The SCP requires the project applicant to either: 1) disperse runoff from some amount of roof or paved area to a vegetated area; 2) incorporate some amount of permeable pavement; 3) include a cistern or rain barrel (if allowed); or, 4) incorporate a bioretention facility or planter box.

The proposed project would capture stormwater from the roof and paved areas through the use of downspouts and catch basins that would drain to a perimeter subdrain. This subdrain would carry stormwater to the eastern portion of the project site where it would connect to a 51-foot-long perforated pipe that would drain stormwater into a rock dissipater field. Therefore, the proposed project would collect and treat stormwater on the project site and would not violate any water quality standards or waste discharge requirements.

⁸ Contra Costa Clean Water Program. 2017. *Stormwater C.3 Guidebook. Stormwater Quality Requirements for Development Applications*. May 17.

The proposed project would be constructed within generally the same footprint as the prior single-family residence, and therefore would not require dewatering during construction. Limited additional impervious surfaces would be constructed; therefore, the proposed project would not interfere with groundwater recharge as stormwater would be collected and treated onsite. The project site is not located within a 100-year flood zone. While the proposed project would alter existing drainage patterns on the project site, the proposed project would not result in substantial on- or off-site erosion, increase flooding on- or off-site, exceed the capacity of existing stormwater systems, or impede flood flows as stormwater would be collected from the roof and paved areas in catch basins and drain spouts before being directed through a subdrain system to be drained onsite. Therefore, the proposed project would have a less-than-significant related to hydrology and water quality.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed project would result in the construction of a new single-family residence that would be built on the existing pad within the footprint of a former house. The proposed project would not change the existing use on the project site, would not include modifications to any of the existing roadways within the vicinity of the site and would not physically divide an established community.

The project site is located within the City of Martinez and is subject to the land use designations and zoning classifications of the City of Martinez General Plan (2012) and the zoning ordinance (Title 22, Zoning, of the City of Martinez Municipal Code [1975, as amended through 2021]).

The General Plan designates the site as PPOS (Public Permanent Open Space). Areas designated as PPOS and Open Space/Conservation Use Land are intended to be maintained in open space use where there are substantial threats to life and property or where private open space uses are appropriate. Appropriate private open space uses include agricultural, grazing, open space recreational uses such as camp facilities, or residential uses where such uses and related facilities such as roads and parking areas constitute less than two percent of the entire land area where the balance of the land is retained in a natural state or agricultural state. The property is subject to a recorded Open Space and Scenic Easement which reserves the right to construct a single family residence, parking, swimming pool and other associated improvements reasonably necessary for the use and enjoyment of the property. An amended judgment recorded on March 11, 2011 reaffirmed the right of the owner to construct these improvements on the property.

The proposed project would be consistent with the R-7.5 and R-10 zoning designations, which allow for construction of a single residential dwelling unit and would not conflict with any existing land use plans. Therefore, the proposed project would have a less-than-significant impact related to land use and planning.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

No known mineral resources are located on or near the project site. Additionally, as noted in Section 1.0, Project Information, the project site is within the R-7.5 and R-10 zoning district, which does not include mineral resource collection or production as an approved use. Therefore, the proposed project would have no impact related to mineral resources.

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The following section describes how the short-term construction and long-term operational noise impacts of the proposed project would be less than significant with mitigation.

Short-Term (Construction) Noise Impacts. The closest sensitive receptors to the project site include single-family residences located immediately north, east, and south of the project site along Christie Drive, William Henry Way, Likins Avenue, Vineta Court, and Lindsey Drive. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table A lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the FHWA Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table A, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential

phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table A lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical maximum noise levels range up to 87 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table A: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet ¹
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

¹ Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.

L_{max} = maximum instantaneous sound level

Construction details (e.g., construction fleet activities) are not yet known; therefore, this analysis assumes that scrapers, bulldozers, and water trucks/pickup trucks would be operating simultaneously during construction of the proposed project. As discussed above, noise levels

associated with this equipment operating simultaneously would be approximately 88 dBA L_{max} at 50 feet.

As discussed in the Chapter 1.0, Project Information, construction activities would comply with the City of Martinez Noise Ordinance (Chapter 8.34 of the City of Martinez Municipal Code), which limits construction to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on weekends and holidays. Typically, construction would occur between 8:00 a.m. and 5:00 p.m. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to daytime hours and would reduce potential construction-period noise impacts to less-than-significant levels.

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on weekends and holidays.
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would limit construction hours and require the construction contractor to implement noise reducing measures during construction, which would reduce short-term construction noise impacts to a less-than-significant level.

Operational Noise Impacts. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the proposed project would result in new daily trips

on local roadways in the project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

The proposed project would develop a single-family residence and associated improvements on the project site. The proposed project is not expected to result in a significant increase in the generation of vehicle trips and would not result in a doubling of traffic volumes along any roadway segment in the project vicinity. As such, the proposed project would not result in a perceptible increase in traffic noise levels at receptors in the project vicinity.

In addition, with implementation of the proposed project, there would be an increase in activity at the project site. The project site itself is located in an area surrounded by single-family residential, school, and religious uses (considered sensitive receptors). Noise from the proposed project would be similar to existing conditions and would generally include noise from vehicles, air conditioner units, and other similar equipment. Due to its location near other residential land uses, it is not expected that the proposed project would result in a perceptible increase in noise to surrounding land uses. Therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions. Operation of the proposed project would result in similar noise levels as existing conditions and, therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions, and impacts would be less than significant.

The closest sensitive receptors to the project site include single-family residences located immediately north, east, and south of the project site along Christie Drive, William Henry Way, Likins Avenue, Vineta Court, and Lindsey Drive. Based on building setbacks, the closest sensitive receptors would be located over 25 feet from construction activities. Therefore, beyond 25 feet, construction activities associated with implementation of the proposed project are not expected to result in excessive groundborne vibration or groundborne noise levels. Once operational, no permanent noise sources would be located within the project site that would expose persons to excessive groundborne vibration or noise levels. Therefore, implementation of the proposed project would not permanently expose persons within or around the project site to excessive groundborne vibration or noise and the project impacts would be less than significant.

The project area is not located within an airport land use plan, or within two miles of a public airport or public use airport. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within 2 miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. There would be no impact.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The proposed project would consist of the construction of a new single-family residence within generally the same footprint as a previous residential use. Therefore, the proposed project would not result in any new unplanned population growth. The project site does not contain any existing residential units and therefore would not displace any existing people or housing. Therefore, the proposed project would have no impact related to population and housing.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The proposed project would result in the construction of a single-family residence in an area already served by police and fire services. The project site is zoned for single-family residential uses, and therefore would not result in an increase in population that would require the provision of new fire or police facilities, schools, parks, or other public facilities, or result in the need for physically altered facilities. Therefore, the proposed project would have no impact related to public services, parks, or other public facilities.

3.16 RECREATION

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

As described above, the project site is zoned for single-family residential uses, and therefore would not result in an increase in population that would result in the increase in use of existing neighborhood or regional parks such that substantial physical deterioration would occur. Therefore, the proposed project would have no impact related to recreational facilities.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The Governor’s Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA states that projects that generate fewer than 110 average daily trips can be presumed to have a less-than-significant impact related to vehicle miles traveled (VMT). The proposed project would consist of the construction of one single-family residence and therefore would generate fewer than 110 vehicle trips per day, and would have a less-than-significant impact related to VMT. The proposed project would not result in any modifications to the existing transportation network in the vicinity of the project site, and therefore would not conflict with any program, plan, ordinance or policy addressing the circulation system. The proposed project would also be required to be reviewed and approved by the applicable emergency services providers (i.e., fire and police), which would ensure adequate emergency access would be provided and there would not be any hazards related to site design. Therefore, the proposed project would have a less-than-significant impact related to transportation.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, 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:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

As noted in Chapter 1.0, Project Information, the City sent letters describing the project and maps depicting the project site via certified mail on August 30, 2021, to Native American tribes that had previously requested to be contacted by the City for potential consultation pursuant to AB 52. To date, tribal consultation is still ongoing.

As noted in Section 4.5, Cultural and Historic Resources, the project site is not listed on, or eligible for listing on, the California Register of Historic Resources. Additionally, the City, as Lead Agency, has not determined that there are any existing resources significant to Native American Tribes within the project site. Implementation of Mitigation Measure CUL-1 would ensure that any potential impacts to previously unknown tribal cultural resources would be less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed project would consist of the construction of a single-family residence and associated improvements. The existing building pad is currently served by utilities including water service; however, some work related to repair or upgrade of the existing utilities may be required, as needed to serve the proposed project. As previously described, the project site is zoned for single-family residential use and therefore the proposed project is not expected to result in an increase in demand for water, electrical power, or natural gas, or generate substantially more wastewater or solid waste beyond what was previously planned for. The proposed project would result in an increase in impervious surfaces on the project site; however, as described in Section 3.10, Hydrology and Water Quality, the project applicant would be required implement a Stormwater Control Plan (SCP), which would ensure that hydromodification on the project site is implemented to reduce stormwater runoff levels to below pre-project conditions. Therefore, the proposed project would not require the relocation of stormwater infrastructure. Impacts related to utilities and service systems would be less than significant.

3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The project site is not located within a State Responsibility Area (SRA) for fire service.⁹ Additionally, as noted in Section 3.9, Hazards and Hazardous Materials, the project site is not located within a high or very high fire hazard severity zone. Therefore, the proposed project would have a less-than-significant impact related to wildfire.

⁹ California Board of Forestry and Fire Protection. 2021. State Responsibility Area Viewer. Website: bof.fire.ca.gov/projects-and-programs/state-responsibility-area-viewer/ (accessed July 2021).

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

With implementation of Mitigation Measures BIO-1 through BIO-9, the proposed project would not threaten to eliminate a plant or animal species or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Implementation of Mitigation Measure CUL-1 would ensure examples of the major periods of California history or prehistory are not eliminated.

The proposed project would consist of the construction of a new residence on the same footprint and foundation as a previous residential use. Therefore, the proposed project’s impacts would be individually limited and not cumulatively considerable, as the project does not include a substantial increase in population or a change in use that would combine with other projects in the vicinity to result in considerable impacts.

As noted throughout this document, the proposed project would not have any adverse environmental impacts that could not be reduced through the implementation of mitigation measures, and this impact would be less than significant.

4.0 LIST OF PREPARERS

LSA Associates, Inc.

157 Park Place

Pt. Richmond, CA 94801

Theresa Wallace, AICP, Principal in Charge

Shanna Guiler, AICP, Project Manager

Matthew Wiswell, AICP, Planner

Cara Carlucci, Senior Planner/Air Quality and Noise Specialist

Patty Linder, Graphics

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APPENDIX A

ALAMEDA WHIPSNAKE (STRIPED RACER) REPORT

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February 12, 2021

Robb Romeo
280 Arthur Road, Suite B
Martinez, California 94553

Subject: Alameda Whipsnake (Striped Racer) Report
370 Lindsey Drive, Martinez

Dear Mr. Romeo:

This letter presents the results of LSA's assessment of Alameda striped racer (ASR, *Coluber lateralis euryxanthus*) on your 120-acre property at 370 Lindsey Drive in Martinez, Contra Costa County, California. The property (project site) is shown in Figure 1. The City of Martinez is requiring an assessment of the property's potential to support ASR, and measures that will be implemented to prevent the construction of a single-family home (project) from impacting ASR.

METHODS

Prior to conducting fieldwork, LSA reviewed the Biological Assessment (May and Associates 2005) and Biological Opinion (United States Fish and Wildlife Service 2005) for the adjacent Alhambra Highlands project. We also reviewed unpublished biological information for the site and immediate area. LSA has been the biological consultant for the adjacent Alhambra Highlands project for over 15 years and has conducted extensive plant and wildlife surveys in the surrounding area. We reviewed the project site plan prepared by JW Design, LLC, most recently revised on February 15, 2020.

LSA Senior Biologist John Kunna surveyed the site on January 25, 2021. Mr. Kunna has extensive experience conducting ASR habitat assessments and trapping studies. He holds an Endangered Species Act section 10(a)(1)(A) recovery permit (#TE-40218B-O) issued by the United States Fish and Wildlife Service (USFWS), which authorizes him to conduct permitted activities with the species.

Mr. Kunna walked the property, paying particular attention to the area immediately surrounding the existing building pad. He recorded all plant and wildlife species observed in a notebook and took representative photographs.

REGULATORY STATUS

The ASR was formerly known as the Alameda whipsnake (*Masticophis lateralis euryxanthus*). The name was changed in 2005, based upon new genetic studies (Crother 2012). This name change did not change its regulatory status or legal protections.

ASR was listed as threatened under the California Endangered Species Act in 1971. ASR was federally listed as threatened under the Endangered Species Act of 1973 in 1997. The USFWS designated Final Critical Habitat for the species in 2006.

HABITAT

Alameda Striped Racer Habitat Requirements

ASR primarily occur in areas that support scrub plant communities, including mixed chaparral and coastal scrub. This species also occurs in annual grassland and oak woodlands that lie adjacent to scrub habitats. Within these plant communities, specific habitat features needed by ASR include, but are not limited to, small mammal burrows, rock outcrops, talus, and cover types that provide temperature regulation, shelter from predators, egg-laying sites, and winter hibernation refuges. Many of these same elements are important in maintaining preferred prey species (e.g., western fence lizard [*Sceloporus occidentalis*]). ASR likely eat any small animals they can capture and swallow, including other species of lizards, small rodents, birds, and amphibians.

ASR tend to avoid densely shaded wooded areas, which do not support prey species and do not allow them to bask in the sun to maintain their body temperature. They also avoid large areas with very short and sparse vegetation, which does not provide them cover or escape from potential predators such as raptors, bobcats, coyotes, and feral cats. However, ASR are often observed basking on roads and trails adjacent to scrub or chaparral (Miller and Alvarez 2016). ASR are active during the daytime, and they maintain a high body temperature by basking in the sun. Radio telemetry data for six snakes tracked by Swaim (1994) indicated that their home ranges were centered on shrub or chaparral communities but that they also travelled into adjacent annual grasslands, oak savannahs, and oak-bay woodlands. The snakes' activity was also correlated to areas with significant rock outcroppings or talus. A review of 129 observations of ASR found that 82 of the observations were made in scrub or chaparral vegetation (Alvarez et al. 2005). ASR are most likely to be active aboveground in the spring and fall. There is less of a chance of encountering ASR during the hottest parts of summer or coldest parts of winter, when they are less likely to leave deep burrows, rock crevices, or other refuges that protect them from temperature extremes.

Habitat on the Site

The site topography is hilly, and the natural vegetation consists of annual grassland, oak savannah, mixed oak woodland, and small patches of scrubland. The steep terrain encompasses several small ephemeral drainages.

A portion of the property is developed. The site has an existing building pad (site of a former home), partially paved driveway as well as a few dirt ranch roads. Ditches run along the shoulder of some of the roads. Approximately 20 feet of erosion control wattle with monofilament netting had been installed in the ditch along the driveway.

The building pad area is mostly devoid of vegetation. A fifth wheel trailer is present on the building pad as well as a large shipping container that is used for storage. A smaller flat pad has a pen suitable for goats or sheep, and some construction materials are stored there as well. The property perimeter is fenced with barbed wire. Cattle were observed grazing on the adjacent property.

Annual Grasslands are the only cover in much of the site and occur as an understory in oak savannah and mixed oak woodland habitats. Annual grasslands are characterized by a dominance of naturalized non-native grasses that cover the hilltops and well-drained uplands of the site and

surrounding areas. Annual grasslands on the site are dominated by grasses including wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and barley (*Hordeum* spp.). Forbs such as wild lettuce (*Lactuca serriola*), miner's lettuce (*Claytonia perfoliata*), and broadleaf filaree (*Erodium botrys*) are also present. Grasslands also support the invasive plant artichoke thistle (*Cynara cardunculus*).

Oak Savannah forms the transition zone between the grasslands and oak woodland. Individual scattered coast live oaks (*Quercus agrifolia*) and valley oaks (*Quercus lobata*) are found in this habitat. The large oaks growing along the southwest property line were marked with aluminum tags, indicating they have been inventoried in the past.

Mixed Oak Woodlands occur on the slopes. This habitat is characterized by a moderate to dense canopy of mature oaks with an understory of poison oak (*Toxicodendron diversilobum*), forbs, ferns, and annual grasses. In wetter areas toward the bottom of the canyons there are more California bay laurel (*Umbellularia californica*) and California buckeye trees (*Aesculus californica*), which tend to prefer more soil moisture.

Scrubland habitats in the project area are characterized by a dominance of endemic shrubs occurring on steep slopes with thin soils or even exposed rock. The patches of scrubland on the site are relatively small and occur primarily on southern or western facing exposures. Shrubs in these areas include poison oak, California sage (*Artemisia californica*), sticky monkeyflower (*Mimulus aurantiacus*), coyote brush (*Baccharis pilularis*), and cudweed (*Pseudognaphalium californicum*).

The site is within Designated Critical Habitat Unit 1 for ASR, indicating that on the landscape scale the property is within the range of the species and provides suitable habitat. The Critical Habitat designation confers additional legal restrictions on projects that involve a federal agency. This project does not require any federal action.

Wildlife on the Site

Due to the time of year of the survey, only a few of the many native wildlife species expected or known to occur on the site were directly observed. A colony of California ground squirrels (*Otospermophilus beecheyi*) was seen near the bottom of the driveway. One coyote was observed.

The biologist also noted active San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) houses in the woodlands. The San Francisco dusky-footed woodrat is a California Department of Fish and Wildlife (CDFW) Species of Special Concern. They are nocturnal so they are rarely seen by people, even where woodrat houses are numerous.

STATUS OF ASR ON THE PROJECT SITE

ASR were captured on this site during trapping surveys conducted in 2001 for the adjacent Alhambra Highlands project (Figure 2). The figure has been reproduced from the *Alhambra Highlands AWS Mitigation Plan* (Swaim Biological Consulting 2005). Several ASR were caught on the property and on adjacent parcels.

It is assumed that a breeding population of ASR has persisted on the property, as there has been no change in habitat conditions on or adjacent to the project site since the 2001 trapping survey was

conducted. The building pad itself is unlikely to be used by ASR, because it contains no burrows and is mostly devoid of vegetation. ASR may avoid the pad due to human activity and the presence of a pet dog. In unvegetated areas ASR are vulnerable to predators such as raptors, coyotes, and bobcats. ASR could use either of the two brush piles on the pad for cover from predators and protection from temperature extremes.

DESCRIPTION OF THE PROPOSED SINGLE-FAMILY RESIDENCE PROJECT

The new home, swimming pool, and in-law unit will be built on the existing pad within the footprint of the old house. The pad will be excavated to remove rubble from the old house that was buried and to build the foundation. The driveway will be resurfaced, but no additional grading is required. To build the house, one coast live oak tree may need to be removed. There are no rock outcroppings or visible small mammal burrows in the building pad. No San Francisco dusky-footed woodrat houses are present in the immediate vicinity of the building pad.

MEASURES TO AVOID TAKE OF ASR

The potential for ASR to be impacted by construction of the project is a function of the likelihood the species is present when the house is constructed, as well as the type and duration of construction activities. ASR occur in low densities and spend most of their time in chaparral or scrub communities. They are unlikely to venture into the building pad area, which is nearly devoid of vegetation. The probability of an ASR occurring on the building pad during construction is low. Any ASR that happens to be in the area or basking on the driveway would likely move away before they were in danger. Potential direct effects on ASR could result from crushing of individuals by construction equipment, vehicles, or crews while working within suitable habitat. Due to the small size of the construction area relative to the surrounding open space, the temporary disturbance during construction would be a negligible impact. There are no burrows or rock outcrops within the building pad, but there is a potential to affect ASR that may be sheltering in the wood and brush piles on the building pad. These piles also provide ideal habitat for the western fence lizard, a preferred prey item.

With the implementation of the following eight avoidance and minimization measures, LSA believes the proposed project will present a negligible risk of take of ASR:

- **Measure 1:** A USFWS accredited biologist will conduct an environmental education program for all persons working on brush clearing, fence installation, earthmoving, and/or utility construction activities on the project site before they perform any work. The program shall consist of a presentation from the biologist that includes a discussion of the biology and behavior of the ASR; information about the distribution and habitat needs of the species; sensitivity of the species to human activities; the status of the species pursuant to the Federal Endangered Species Act, including legal protection; recovery efforts; and penalties for violations. The biologist shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on the site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all the protection measures.

- **Measure 2:** A USFWS accredited biologist will be on the site to monitor exclusion fence installation and initial vegetation clearing, particularly the piles of wood or brush on the building pad.
- **Measure 3:** The USFWS accredited biologist(s) will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site otherwise associated with the project. The accredited biologist will have oversight over implementation of all these measures, and, through the applicant, will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled.
- **Measure 4:** The project applicant shall install a fence to deter ASR from entering the work site. The exclusion fence shall be installed prior to the initiation of any construction activities. Unless alternative (equivalent or more effective) specifications are recommended by the accredited biologist, the fence shall be constructed as follows: Plywood sheets at least 3 feet in height, above ground. Alternatively, heavy-duty geotextile fabric or plastic materials designed for wildlife exclusion fencing such as Ertec or Animex may also be used for the snake exclusion fence. Standard silt fence material is not adequate and will not be used. Fence specifications include:
 - a) Base buried 4 to 6 inches into the ground;
 - b) Soil back-filled against the fence to create a solid barrier at the ground;
 - c) Fence material maintained in an upright position with t-posts or stakes;
 - d) Ends of plywood sheets overlapped with no gaps to ensure a complete barrier;
 - e) Escape funnels installed in the fence every 200 linear feet;
 - f) Work site shall be completely enclosed by the exclusion fence with the exception of the driveway; and
 - g) The fence shall be installed and remain in place throughout the construction period. All construction activities and equipment/materials/debris storage shall take place on the project side of the fence.
- **Measure 5:** To prevent the entanglement of ASR and other wildlife, no erosion control devices containing plastic monofilament netting shall be used or stored on the site. Any existing wattle on the site that is wrapped in monofilament netting should be removed. Acceptable alternatives include wattle that is wrapped in burlap or jute netting with large holes.
- **Measure 6:** To reduce the potential for vehicle strikes of ASR basking on the driveway, all construction related traffic shall not exceed 5 miles per hour.
- **Measure 7:** If an ASR is seen within the work area, all nearby work that could harm the snake will stop until the project biologist has been contacted and the snake has left the site of its own volition. In no circumstances shall anyone handle or attempt to capture an ASR.

- **Measure 8:** In the event an ASR is inadvertently killed or injured or is observed to be injured, dead, or entrapped, the construction crew will stop work and notify the project biologist who will then contact the USFWS and CDFW.

SUMMARY

Alameda striped racers have been observed on the property and it supports suitable habitat. To prevent harming ASR, the eight avoidance and minimization measures above should be implemented. Please contact Malcolm Sproul or me if you have any questions regarding this report.

Sincerely,

LSA Associates, Inc.



John Kunna
Senior Biologist

Attachments: Figure 1: Project Site
Figure 2: Alameda Striped Racer Occurrences on and Near Project Site

REFERENCES

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1 OVERALL SITE PLAN
SCALE: 1" = 100'-0"



Figure 1: Project Site

Design By: **JLW Design, LLC**
134 Saturn Court, Pittsburg, CA 94565
Telephone: (925) 843-0214
Sign: *[Signature]*

NEW RESIDENCE
ROBERT ROMEO
370 LINDSEY DR, MARTINEZ, CA

JLW-2018-86

Rev	Date	Issue
3	2/15/20	Design Review
2	5/10/19	Addendum #1
1	2/28/19	Plan Check
0	11/5/18	Issued for Permit
A		Conceptual Design

DATE: 11/5/18
SCALE: AS NOTED
DRAWN BY: JLW

OVERALL SITE PLAN
A102

Figure 2: Alameda Striped Racer Observations

