

Initial Study

Hesperian Boulevard
Residential Project



CITY OF
HAYWARD
HEART OF THE BAY

April 2018



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ACRONYMS AND ABBREVIATIONS

BAAQMD	Bay Area Air Quality Management District
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
HOA	Homeowner Association
MND	Mitigated Negative Declaration
MRP	Municipal Regional Stormwater NPDES Permit
NOD	Notice of Determination
NPDES	National Pollutant Discharge Elimination System
RWQCB	Regional Water Quality Control Board
TAC	Toxic Air Contaminants
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Hayward as the Lead Agency, has prepared this Initial Study for the Hesperian Boulevard Residential Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Hayward, California.

The project proposes to construct 13 single-family homes on a 1.8-acre project site. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

City of Hayward
Planning Division
Attention: Leigha Schmidt, Senior Planner
777 B Street
Hayward, CA 94541

Ph. (510) 583-4113
Leigha.schmidt@hayward-ca.gov

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Hayward will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Hayward will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Hesperian Boulevard Residential Project

2.2 LEAD AGENCY CONTACT

Leigha Schmidt
Senior Planner, AICP
City of Hayward
777 B Street
Hayward, CA 94541

2.3 PROJECT APPLICANT

John Treble
Three Cedars, LLC
1440 Chapin Avenue, Suite 370
Burlingame, CA 94010
(650) 454-7854

2.4 PROJECT LOCATION

The 1.8-acre project site addressed at 24765 Hesperian Boulevard consists of one parcel (APN 441-0012-062-02), located on the west side of Hesperian Boulevard, between West Street and Chabot College to the south.

Regional and vicinity maps of the site are shown on Figures 2.0-1 and 2.0-2, and an aerial photograph of the project site and surrounding area is shown on Figure 2.0-3.

Much of Hayward including the project site and surrounding streets is oriented on an axis offset from “true” North. For clarity, this IS will reference Hesperian Boulevard as having a north-south orientation. Hesperian Boulevard is therefore considered to be situated along the eastern boundary of the site, Sangamore Street is considered to be located north of the site, and Chabot College is considered to be located south of the site.

2.5 ASSESSOR’S PARCEL NUMBER

APN 441-0012-062-02

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan: The General Plan designates the property as *Low Density Residential* which allows densities between 4.3 and 8.7 dwelling units per acre.

Zoning: The project is located in a *Single Family Residential (RS)* zoning district, which requires a minimum lot size of 5,000 square feet.

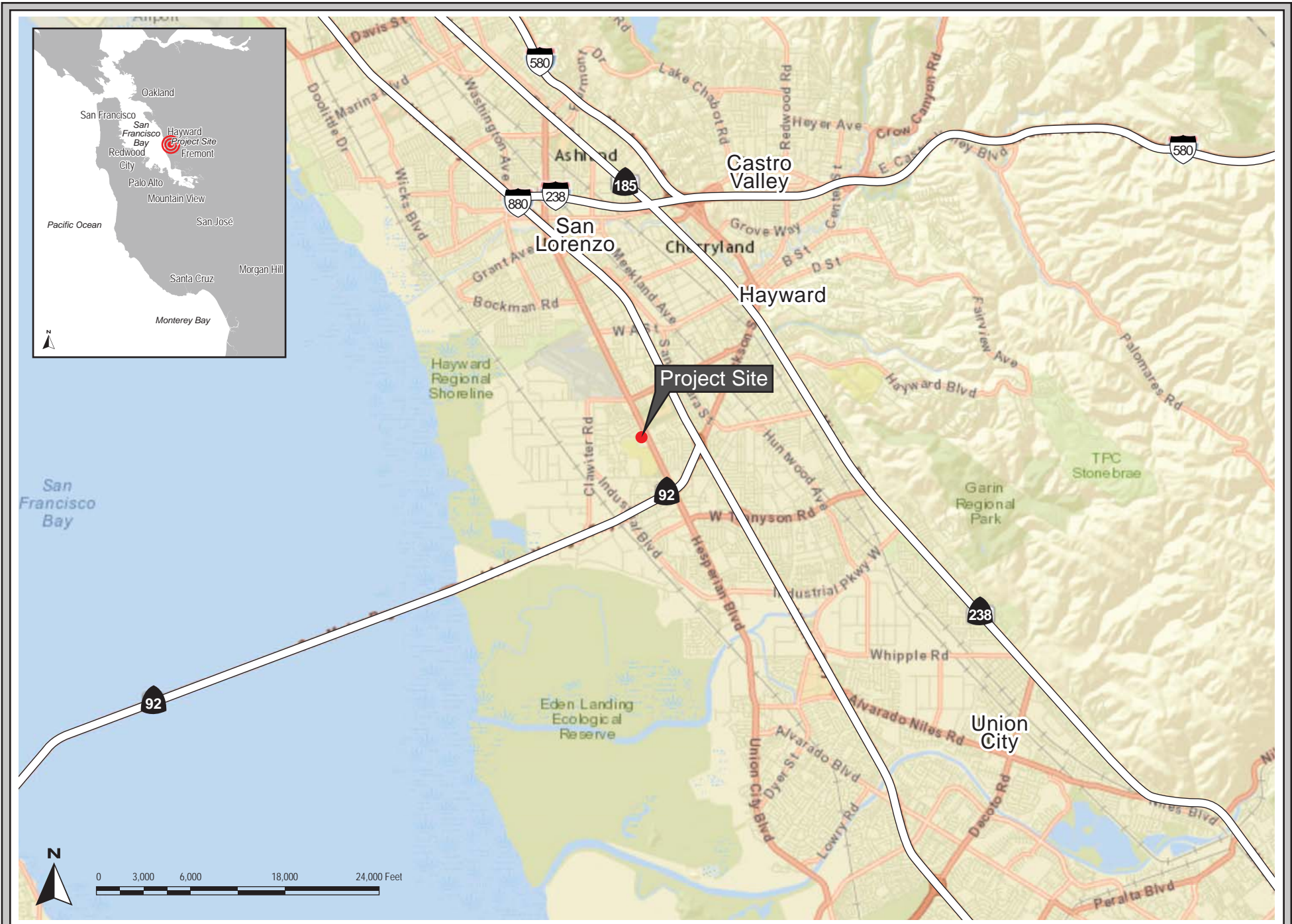
2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

The project would require the following approvals from the City of Hayward:

- Environmental Review
- Planned Development Rezoning
- Design Review
- Tree Removal Permit
- Grading Permit
- Building Permit
- Demolition Permit
- Tentative Map to Subdivide Parcel

In addition, the following responsible agencies may have a role in approving this project:

- Alameda County Public Works (Well Destruction Permit)



REGIONAL MAP

FIGURE 2.0-1



VICINITY MAP

FIGURE 2.0-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.0-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROPOSED DEVELOPMENT

The project proposes 13 single-family residences on a 1.8-acre project site located on the west side of Hesperian Boulevard, between West Street and Chabot College. Six of the proposed lots would include 350-square foot accessory dwelling units that would be incorporated into the floor plan of the residences (refer to Figures 3.0-1 and 3.0-3). The applicant, Three Cedars, LLC proposes a tentative tract map to subdivide the existing lot into a total of 13 single-family residential lots, one open space lot, and a private street.

The General Plan designates the property as *Low Density Residential* which allows densities between 4.3 and 8.7 dwelling units per acre. The proposed density of the development is 7.2 dwelling units per acre, and is therefore consistent with the General Plan designation.

The project is located in a *Single Family Residential (RS)* zoning district, which requires minimum lot sizes of 5,000 square feet. The applicant proposes to rezone the property to a Planned Development (PD) District to accommodate smaller lot sizes, ranging from 4,210 square feet to 6,129 square feet, as proposed by the residential development.

The proposed development would include two different two-story floor plans with two architectural styles each for up to four different elevation types in the subdivision. The proposed single-family residences each have four bedrooms that range in size from 2,240 to 2,550 square feet (refer to Figures 3.0-2 and 3.0-3). Lot coverage would vary from 25 percent to about 31 percent on the smaller lots. Each home would contain a two-car garage and a two-car driveway for additional off-street parking.

The project would include an eight-foot tall perimeter masonry wall along the northeastern property boundary at Hesperian Boulevard that reduces in height to six feet along a portion of the northern and southern property boundaries to match the height of existing adjacent walls.

3.1.1 Building Heights and Setbacks

The proposed single-family residences would be two stories and up to approximately 30 feet in height (refer to Figure 3.0-4). The residences would have varying setbacks. Lots 1 through 6 rear yards would range from approximately 18 to 31 feet from Hesperian Boulevard, front yards would range from about eight feet to 24 feet, and side yards would range between four feet and 11 feet. Lots 7 through 13 rear yards would range between 19 and 20 feet, front yards would range between approximately six to 13 feet and side yards would range from four to 11 feet.

3.1.2 Site Access and Easements

Vehicle access to the development would be provided from a private street (Acorn Street) entrance off of Sangamore Street/Yew Court intersection. Pedestrian access would be provided from sidewalks along Hesperian Boulevard and Sangamore Street/Yew Court intersection. The project would remove driveway access to the site from Hesperian Boulevard and replace the existing curb cut with a standard City sidewalk.

The project would include development of an approximately 46-foot-wide private roadway with approximately four and one-half foot wide private sidewalks on both sides of the street and a public utility easement (Acorn Street), and an approximately 10-foot-wide public utility easement extending east-west adjacent to Lot 5 from Hesperian Boulevard to Acorn Street. The private roadways would also include a 41-foot-wide emergency vehicle access easement which would be dedicated to the City of Hayward. Curb alignment would be adjusted to be continuous from Lot 5 to Lot 6 with curb cuts for the emergency vehicle access.

3.1.3 Landscaping

The proposed project would retain 10 existing trees along the southern and western property boundaries and remove 88 on-site trees (refer to Figure 3.0-5). The project would plant numerous trees of varying species including the Japanese Maple, Strawberry Madrone, Black Peppermint Tree, and the Chinese Flame Tree throughout the property. The proposed project would also plant drought tolerant and native shrubs, accent shrubs, and ornamental grasses throughout the property.

3.1.4 Grading and Demolition

The proposed project would require limited grading for building pads and roadway construction. The project would require an estimated 685 cubic yards of cut and 1,857 cubic yards of fill, with the remaining 1,172 cubic yards to be imported on-site. A portion of the soils exported from the site include lead impacted soils from the single-family uses on the site (refer to *Section 4.8 Hazards and Hazardous Materials*). Demolition activities on the project site involve the removal of an approximately 2,200 square-foot residence and an approximately 925 square-foot garage.

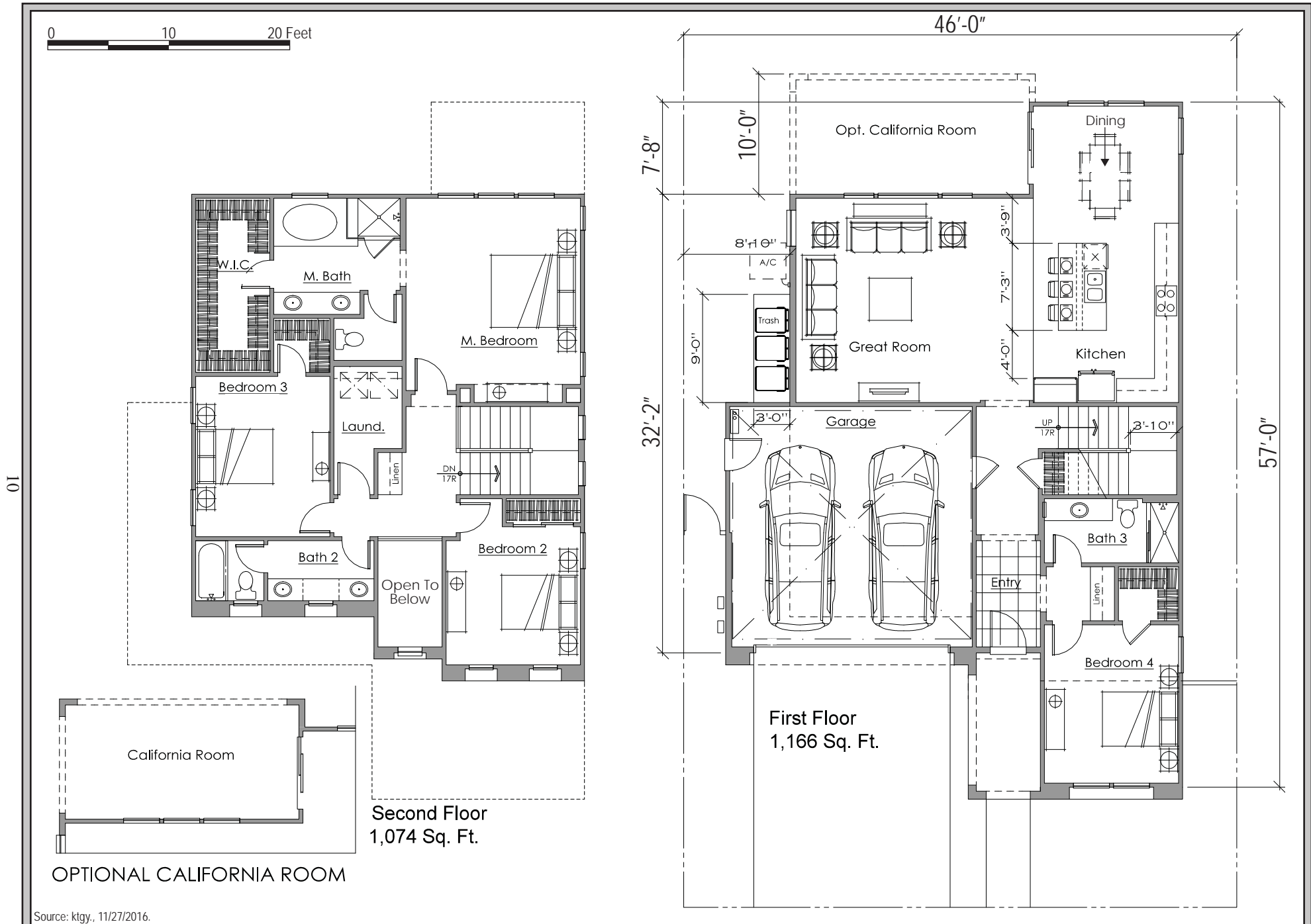
3.1.5 Utility and Drainage Improvements

The project proposes to connect to existing water lines in Hesperian Boulevard and Sangamore Street, and sanitary sewer lines and storm drain lines in Sangamore Street that are owned and maintained by the City of Hayward.

The project proposes to construct storm drain filter mechanisms that are landscaped to retain and minimize stormwater runoff. The stormwater runoff from building roofs and other impervious areas would be directed to a 1,400 square-foot bio-retention area located on the eastern portion of the site adjacent to Lots 5 and 6 (refer to Figure 3.0-1).

3.1.6 Project Construction

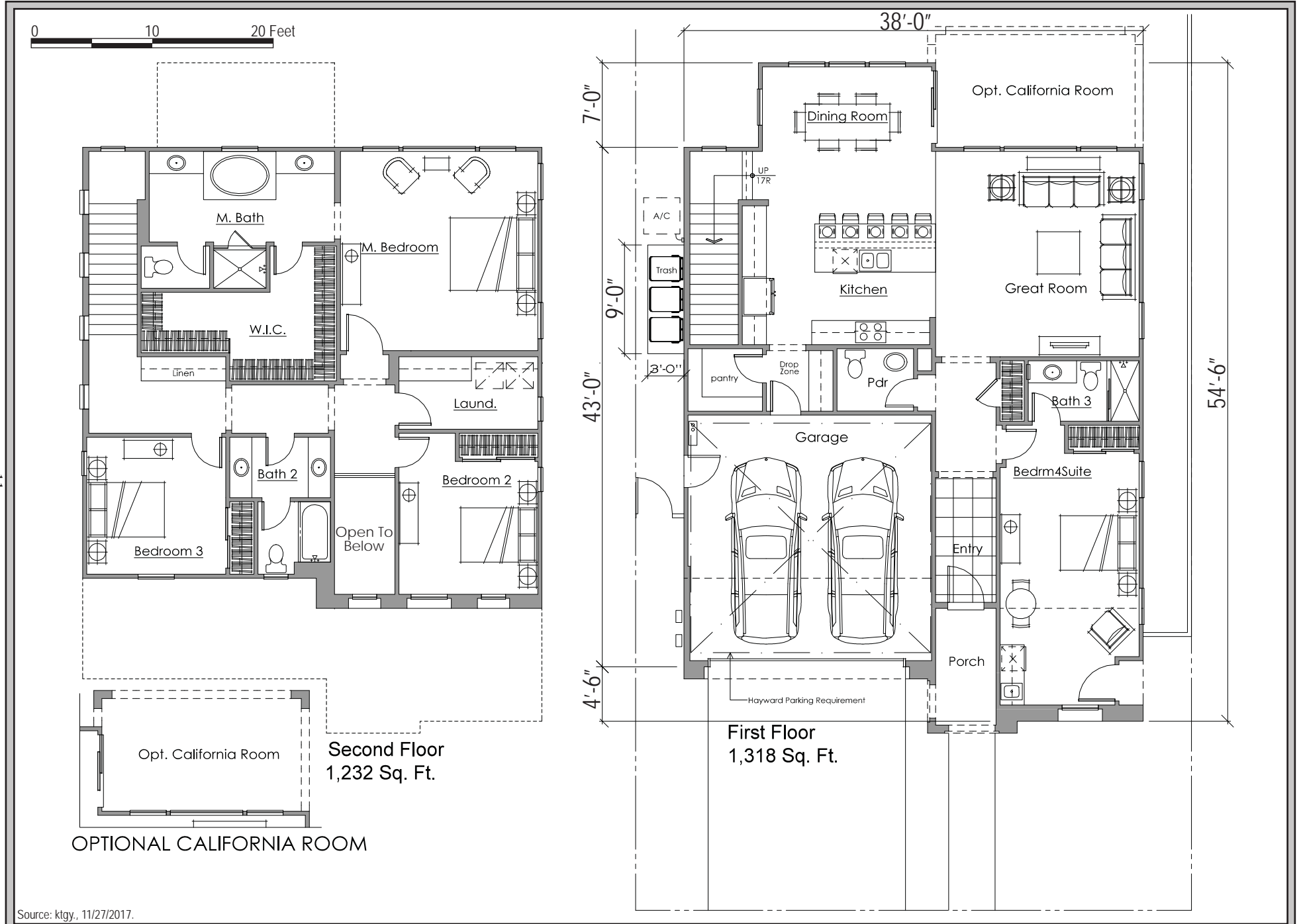
The construction schedule assumes that the project would be built out over a period of approximately 15 months beginning in 2019, or an estimated 450 construction workdays. The demolition and site preparation and grading phase would take approximately three (3) months. The building construction phase would take approximately 12 months. Construction vehicle access to the site would be provided from Sangamore Street.



Source: ktgy., 11/27/2016.

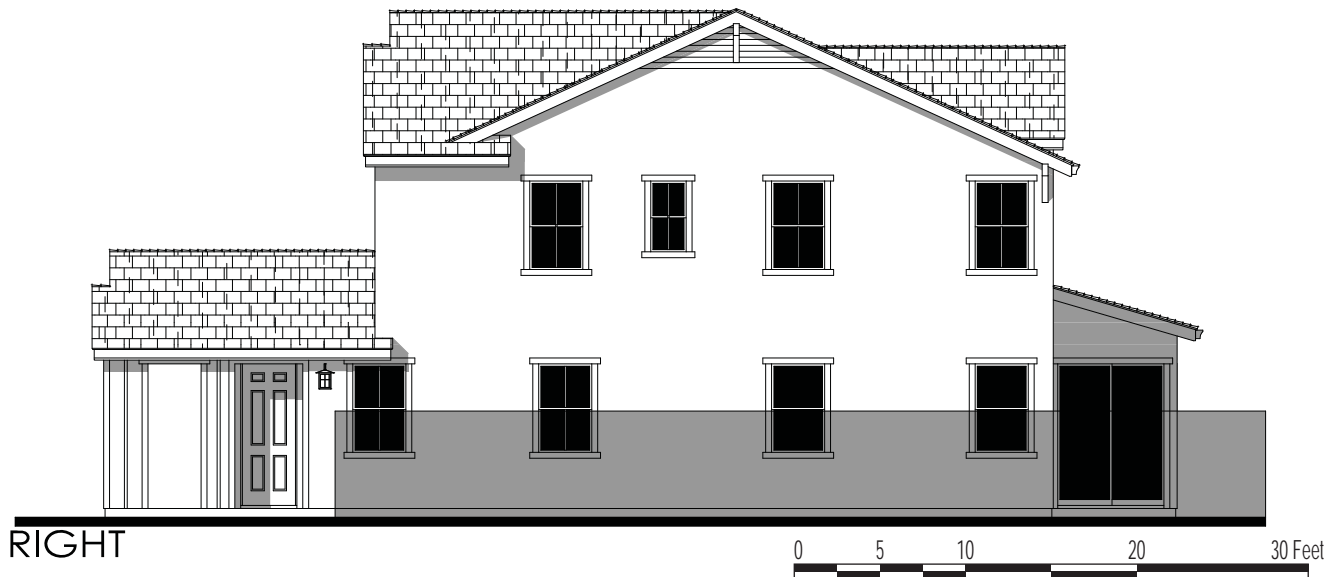
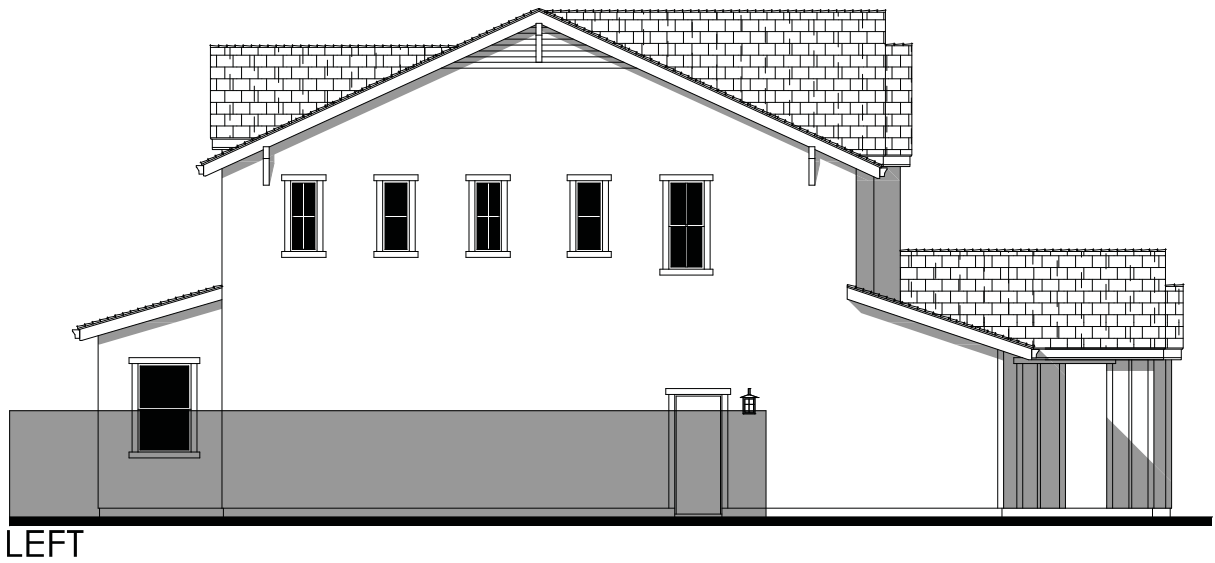
PROPOSED PLAN I FLOOR PLAN

FIGURE 3.0-2



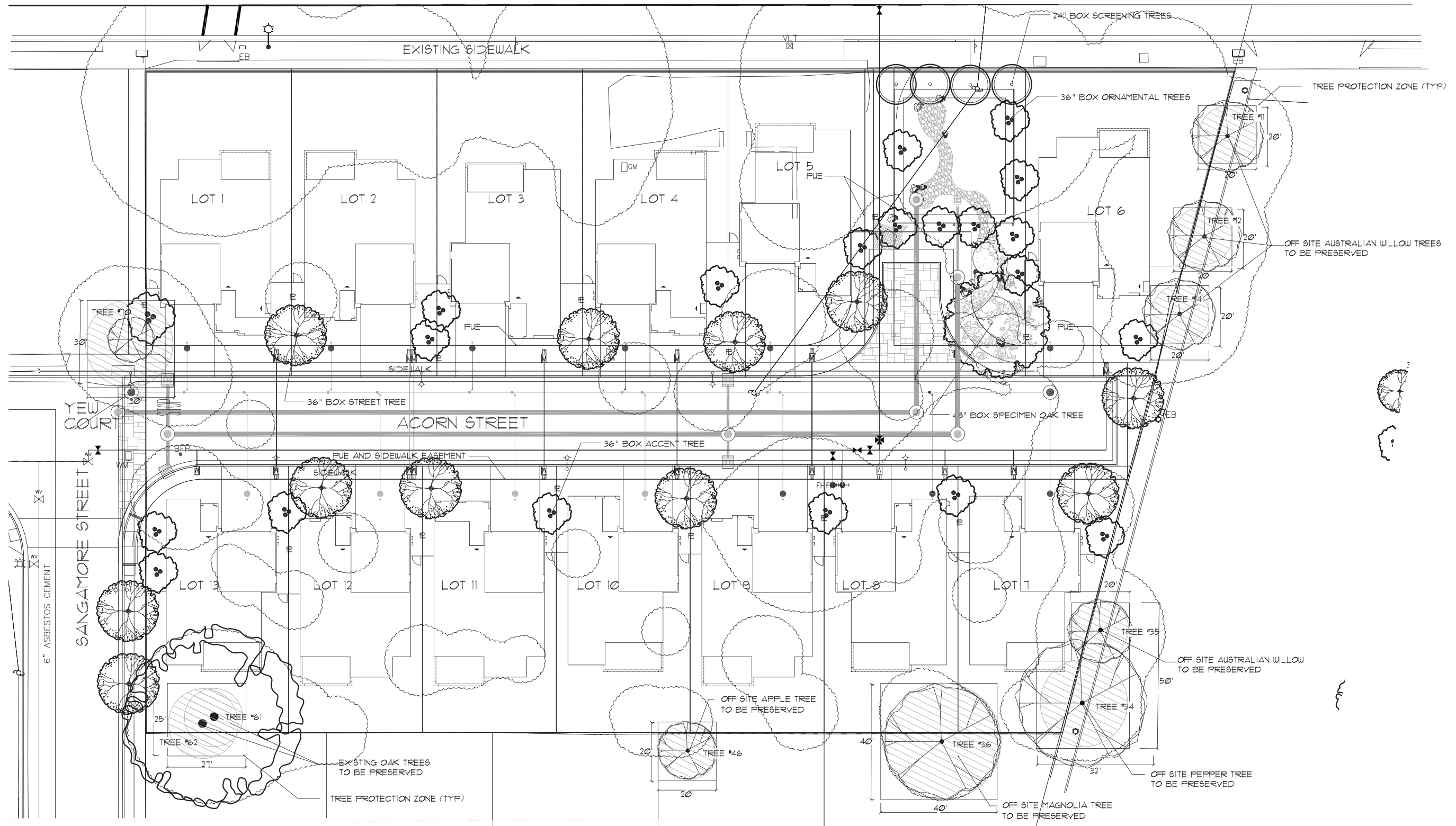
PROPOSED PLAN II FLOOR PLAN

FIGURE 3.0-3



CONCEPTUAL ELEVATIONS

FIGURE 3.0-4



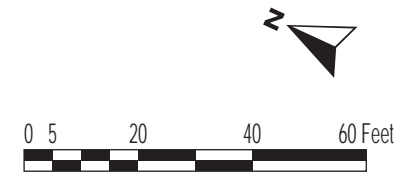
TREE LEGEND

36" BOX STREET TREE PYRUS CALLERYANA TILIA CORDATA	ORNAMENTAL PEAR LINDEN TREE	5 / MED 5 / MED
ACCENT TREES		
36" BOX ACER PALMATUM AREBUTUS THAUNIA AGONIS F. 'AFTERDARK' CERCIS R. 'OKLAHOMA' CHILOPSIS LINEARIS COTINUS COSSYGRIA KOELREUTERIA BIPINNATA VITEX AGNUS-CASTUS	JAPANESE MAPLE STRAUBERRY MADRONE BLACK PEPPERMINT TREE CERCIS R. 'OKLAHOMA' DESERT WILLOW SMOKE TREE CHINESE FLAME TREE CHAITE TREE	5 / MED 3 / LOW 3 / LOW 3 / LOW 2 / VL 3 / LOW 5 / MED 3 / LOW
14" BOX SCREENING TREE		

CARPINUS B. FRANS FONTANEI QUERCUS AGRIFOLIA	NARROW HORNBEAM COAST LIVE OAK	5 / MED 3 / LOW
EXISTING TREES	EXISTING MISC. TREES	
EXISTING NATIVE OAK TREE		

TREE PROTECTION ZONE

SEE HORTSCIENCE ARBORIST REPORT FOR COMPLETE TREE SURVEY. FOLLOW ARBORIST RECOMMENDATIONS FOR TREE PROTECTION MEASURES



Source: Borrecco/Kilian & Associates, Inc., 2/18.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.10	Land Use and Planning
4.2	Agricultural and Forestry Resources	4.11	Mineral Resources
4.3	Air Quality	4.12	Noise and Vibration
4.4	Biological Resources	4.13	Population and Housing
4.5	Cultural Resources	4.14	Public Services
4.6	Geology and Soils	4.15	Recreation
4.7	Greenhouse Gas Emissions	4.16	Transportation/Traffic
4.8	Hazards and Hazardous Materials	4.17	Utilities and Service Systems
4.9	Hydrology and Water Quality	4.18	Mandatory Findings of Significance

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Checklist and Discussion of Impacts** – This subsection includes a checklist for determining potential impacts and discusses the project’s environmental impact as it relates to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HYD-1** denotes the first potentially significant impact discussed in the Hydrology and Water Quality section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM BIO-2.3** refers to the third mitigation measure for the second impact in the Biological Resources section.
- **Conclusion** – This subsection provides a summary of the project’s impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of Hayward currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this section. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an “environmental impact” as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

4.1 AESTHETICS

4.1.1 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
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 checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.1.2 Existing Setting

The project site is generally rectangular in shape and located in an urban, developed area of Hayward. The project site is currently developed with a single-family residence and detached garage structure that was constructed circa 1920 (refer to Photo 1). The project site is bounded by Hesperian Boulevard to the east, residences to the north and west, and an agricultural parcel and Chabot College to the south (refer to Photos 2 through 8).

Given the generally flat topography of the site, the project site is primarily visible from Hesperian Boulevard, although thick stands of trees and shrubs limit views of the interior of the site, including existing structures. There are two street trees along Hesperian Boulevard and eight off-site trees along the southern and western fence lines. The remaining 88 trees are located on-site. The project site is located along Hesperian Boulevard, which is not a designated Alameda County Scenic Roadway, state scenic highway, or a rural scenic corridor.

4.1.2.1 Surrounding Land Uses

The project site is surrounded by commercial, residential, agricultural, and quasi-public uses. The single-family residences north and west of the property were constructed in the 1950s and are finished with wood and stucco. The commercial uses to the east across Hesperian Boulevard consist of a bank and several vacant parcels constructed of wood and stucco. An access roadway owned by Chabot College is directly south of the property, followed by an active agricultural parcel.



PHOTO 1: View of the existing single-family residence looking west from Hesperian Boulevard.



PHOTO 2: View of the existing driveway, detached garage, and residence from Hesperian Boulevard.



PHOTO 3: View of the adjacent access driveway to Chabot College and agricultural parcel located south of the project site.



PHOTO 4: View of the project site facing west from Hesperian Boulevard.



PHOTO 5: View of Hesperian Boulevard and commercial properties east of the project site.



PHOTO 6: View of the project site looking southwest from the Hesperian Boulevard and La Playa Drive intersection.



PHOTO 7: View of the project site looking south from the corner of Yew Court and Sangamore Street.



PHOTO 8: View of the adjacent residential neighborhood to the north.

4.1.2.2 *Applicable Plans, Policies, and Regulations*

City of Hayward General Plan

The Land Use and Community Character Element contains policies to preserve scenic views of the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy HQL-8.3	The City shall require the retention of trees of significance (such as heritage trees) by promoting stewardship and ensuring that project design provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or suitable mitigation.
Policy PFS-8.5	The City shall require that all new utility lines constructed as part of new development projects are installed underground or, in the case of transformers, pad-mounted.

4.1.3 **Impact Discussion**

a) *Have a substantial adverse effect on a scenic vista?*

According to the Hayward General Plan, there are no designated scenic vistas in the vicinity of the project and the project is not located within or visible from a designated scenic vista. Although individuals may consider replacement of the large, tree covered lot with 13 single family homes a significant difference from the existing condition, development of the site will not result in an impact based on the General Plan and State Law. Therefore, the project would not have an impact on scenic vistas. **(No Impact)**

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The project site is not located within a state scenic highway, nor does it contribute to views visible from a state scenic highway. Therefore, the construction of the project would not have impacts on state scenic highways. For further discussion on this topic, see *Section 4.5, Cultural Resources*, and Appendix B, Historic Resource Evaluation.

The project site contains structures from the 1920s that are not considered to be historic since the buildings are not associated with events or people that are important to the cultural heritage of California or the United States that would make the structures eligible under the California Register or Historic Resources (CRHR) or the National Register of Historic Places (NRHP). Therefore, the demolition of the existing single-family residence and detached garage would not be a loss of architecturally significant resources that would contribute to the aesthetic character of the site.

Some of the trees located on site may be considered scenic resources. Specifically, two of the seven oaks on-site are considered to be the largest, healthiest trees on the property and will be preserved with the project. A line of cedars planted along Hesperian Boulevard creates a hedge between the property and the street and will be removed. The largest on-site tree (65 inches in diameter break height (DBH)) is a blue gum in the northern corner of the property, which is in fair condition with slightly poor color indicating water stress, and will also be

removed. The project will preserve all off-site trees, including Australian willows, a Glossy privet, a California pepper, and a Southern magnolia (refer to Figure 3.0-5).

Of the total 88 trees on-site that are proposed to be removed, 69 are protected under the City of Hayward Tree Preservation Ordinance (refer to *Section 4.4 Biological Resources*). The trees proposed for removal, however, are not considered irreplaceable scenic resources since most of the species are not indigenous to the region. Further, the project will pay tree removal fees in accordance with Hayward Municipal Code Chapter 10, Article 15, Tree Preservation Ordinance, to fund tree replanting to offset the loss of on-site trees. The project includes new landscaping along the perimeter of the property and throughout the open space area which would be consistent with General Plan policies. **(Less Than Significant Impact)**

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

The project site is located in an urban setting with surrounding single-family development, commercial uses, agricultural uses, and quasi-public uses. The project proposes residential structures that would be primarily visible from existing neighborhoods and roads surrounding the site. The project also would construct an eight-foot masonry sound wall along the northeast property boundary at Hesperian Boulevard, and a six-foot wall along a portion of the northern and southern property boundaries. The sound wall along Hesperian Boulevard would be set back approximately five feet along Lots 1-6 and the open space to provide for a landscaped buffer along the wall which would be privately owned, and maintained by the homeowners association.

Given the range of uses, styles, and intensities of development in the project area which includes residential development and sound walls similar to that proposed with the development north of the project site along Hesperian Blvd and the large-scale Chabot College to the south of the project site, the proposed residential development would not significantly degrade the existing visual character of the site or project area and is in keeping with the scale of new development envisioned as part of the General Plan. Therefore, the proposed project would not result in a significant impact to aesthetic resources. **(Less Than Significant Impact)**

d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Since the project site is an infill development, the light and glare that exists within the vicinity of the project area is typical of an urban setting. Nighttime lighting impacts are considered significant when they interfere with or intrude into neighboring residences. Light pollution is typically related to the use of high voltage light fixtures with inadequate shields and improper positioning or orientation. Compliance with the standard conditions of approval, which require that general architectural considerations such as exterior lighting are compatible with the design and character of adjacent development and that light be confined to the property and not cast direct light upon adjacent properties, would ensure light and glare impacts are less than significant. Furthermore, the project would be primarily constructed with materials such as concrete and stucco, which are generally non-reflective

materials, and therefore would not create a new source of glare. For these reasons, the proposed project would not result in significant light and glare impacts. **(Less Than Significant Impact)**

4.1.4 Conclusion

The proposed project would not result in a significant impact to aesthetic resources. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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"/>	1,2,4
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"/>	1,2,4
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"/>	1,2,4
d) Result in a 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"/>	1,2,4
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"/>	1,2,4

4.2.2 Existing Setting

The project site has been developed with a single-family residence since circa the 1920s. According to the *Alameda County Important Farmland 2014* map, the project site is designated as *Urban and Built-Up Land*, meaning that the land is occupied by structures with a building density of at least one (1) to 1.5

Acres, or approximately six structures to a 10-acre parcel.

4.2.3 Impact Discussion

a, b) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?*

The project site is designated as *Urban and Built-Up Land* according to the Alameda County Important Farmland Map (2014), and is designated *Low Density Residential* according to the City's General Plan, therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. The proposed project would have no impact on agricultural resources or operations. **(No Impact)**

- c, d) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production? Result in a loss of forest land or conversion of forest land to non-forest use?*

“Forest land” is defined as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. “Timberland” means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

The 1.8-acre site and surrounding area is not used or zoned for timberland or forest land and has a *Low Density Residential* General Plan land use designation similar to the majority of land surrounding the development site. Although the site features numerous trees, none of the trees are commercial species, therefore, the project would not impact timberland or forest land. **(No Impact)**

- 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?*

According to the *Alameda County Important Farmland 2014* map, the project site and surrounding area are designated as *Urban and Built-Up Land*. Further, the site has a *Low Density Residential* General Plan land use designation. Thus, the development of the project site would not result in conversion of any officially designated forest or farmlands to other uses. **(No Impact)**

4.2.4 Conclusion

The project would not result in significant impacts to agriculture or forestry resources. **(No Impact)**

4.3 AIR QUALITY

4.3.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6

4.3.2 Existing Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as "criteria pollutants," because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter (PM).

4.3.2.1 *Climate and Topography*

The project is located in western Alameda County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

4.3.2.2 *Regional and Local Criteria Pollutants*

Major criteria pollutants, listed in "criteria" documents by the USEPA and CARB include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter. These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms.

Ambient air quality standards have been established at both the state and federal level. Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. Areas with air quality that exceed adopted air quality standards are designated as “nonattainment” areas for the relevant air pollutants. Nonattainment areas are sometimes further classified by degree (marginal, moderate, serious, severe, and extreme for ozone, and moderate and serious for carbon monoxide and PM₁₀) or status (“nonattainment-transitional”). Areas that comply with air quality standards are designated as “attainment” areas for the relevant air pollutants. “Unclassified” areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment, but are generally presumed to comply with the ambient air quality standard. State Implementation Plans must be prepared by states for areas designated as federal ambient air quality standard.

The Bay Area is considered a non-attainment area for ground-level ozone and fine particulate matter (PM_{2.5}) under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for respirable particulates or particulate matter with a diameter of less than 10 micrometers (PM₁₀) under the California Clean Air Act, but not the federal Act. High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling emissions of these precursor pollutants is the focus of the Bay Area’s attempts to reduce ozone levels. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort. Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (i.e. cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

4.3.2.3 *BAAQMD Guidelines*

The Bay Area Air Quality Management District (BAAQMD) is the regional agency tasked with managing air quality in the region. The BAAQMD is primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. As noted above, air quality standards are set by the federal government (the 1970 Clean Air Act and its subsequent amendments) and the state (California Clean Air Act and its subsequent amendments).

Regional air quality management districts such as BAAQMD must prepare air quality plans specifying how state air quality standards would be met. BAAQMD’s most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two closely-related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the Plan describes how the BAAQMD will continue its progress toward attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion. The BAAQMD has published CEQA Air Quality Guidelines that are used in this

assessment to evaluate air quality impacts of projects. The thresholds of significance for construction- and operation-related pollutant emissions are shown in Table 4.3-1.

Table 4.3-1 BAAQMD Air Quality Significance Thresholds			
Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Annual Daily Emissions (pounds/year)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82	82	15
PM _{2.5}	54	54	10
CO	Not Applicable	9.0 ppm (8-hour avg.) or 20.0 ppm (1-hour avg.)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or Acute Hazard Index	1.0	1.0	
Incremental Annual Average PM _{2.5}	0.3 µg/m ³	0.3 µg/m ³	
Health Risks and Hazards for Sensitive Receptors and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per one million		
Chronic Hazard Index	10.0		
Annual Average PM _{2.5}	0.8 µg/m ³		
Greenhouse Gas Emissions			
GHG Annual Emissions	1,100 metric tons or 4.6 metric tons per capita		
Notes: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5 (µm) or less, and GHG = greenhouse gas.			

4.3.2.4 Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). These contaminants tend to be localized and are found in relatively low concentrations in ambient air. Exposure to low concentrations over long periods, however, can result in adverse chronic health effects. Diesel exhaust is a predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average).

Fine Particulate Matter (PM_{2.5}) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to PM_{2.5} can cause a wide range of health effects. Common stationary sources of TACs and PM_{2.5} include gasoline stations, dry

cleaners, diesel backup generators, and motor vehicles. The other, more significant, common source is motor vehicles on roadways and freeways.

4.3.2.5 Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the single-family residences that border the site to the west, southwest, and northwest. In addition, Chabot College is located approximately 300 feet south of the site.

4.3.2.6 Construction TAC and PM_{2.5} Health Risks

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. The closest sensitive receptors to the project site are the single-family residences located approximately 200 feet west, southwest, and northwest of the project site.

4.3.2.7 Applicable Plans, Policies, and Regulations

City of Hayward General Plan

The City of Hayward’s General Plan Policy Document for Natural Resources contains several policies to support the goal to improve the health and sustainability of the community through continued local efforts to improve regional air quality, reduce greenhouse gas emissions, and reduce community exposures to health risks associated with toxic air contaminants and fine particulate matter (Goal NR-2). Policies pertaining to construction period emissions include the following:

Policies	Description
Policy NR-2.15	The City shall maintain and implement the General Plan as Hayward’s community risk reduction strategy to reduce health risks associated with toxic air contaminants (TACs) and fine particulate matter (PM _{2.5}) in both existing and new development.
Policy NR-2.16	The City shall minimize exposure of sensitive receptors to toxic air contaminants (TAC), fine particulate matter (PM _{2.5}), and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and PM _{2.5} -emitting sources and odor sources in order to minimize health risk.
Policy NR-2.17	The City shall coordinate with and support the efforts of the Bay Area Air Quality Management District, the California Air Resources Board, the U.S. Environmental Protection Agency, and other agencies as appropriate to implement source reduction measures and best

management practices that address both existing and new sources of toxic air contaminants (TAC), fine particulate matter (PM_{2.5}), and odors.

Policy NR-2.18 The City shall require development projects to implement all applicable best management practices that will reduce exposure of new sensitive receptors (e.g. hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to odors, toxic air contaminants (TAC), and fine particulate matter (PM_{2.5}).

4.3.3 Impacts Discussion

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The proposed project will not conflict with the latest 2017 Clean Air planning efforts since; (1) the project's operational emissions would be well below the BAAQMD thresholds of significance for air pollutants as discussed below in Section 4.3.3(b) and (2) development of the project site would be considered urban infill. Urban infill refers to the development of vacant parcels within previously built areas. These areas are already served by public infrastructure, such as transportation, water, wastewater, and other utilities. Per Section 40918(a)(4) of the 2017 Clean Air Plan, there are several transportation control measures that are intended to reduce emissions from indirect sources and promote infill development. Specifically, *TR10 Land Use Strategies* includes actions by the Air District and partner agencies to promote infill development that should also reduce emissions from indirect sources. **(Less Than Significant Impact)**

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

The 2017 BAAQMD *CEQA Air Quality Guidelines* contain a screening table that lists the minimum unit count for single-family residential projects, below which the project would not result in the generation of operational or construction criteria air pollutants that exceed the thresholds of significance.

The project proposes 13 single-family residences on the project site which does not exceed the screening threshold for operational or construction criteria pollutants of 325 units and 114 units, respectively. Therefore, the proposed development would result in a less than significant impact related to air quality standards. **(Less Than Significant Impact)**

c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?*

Non-attainment pollutants of concern for the San Francisco Bay Air Basin are ozone, PM₁₀ and PM_{2.5}. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed in impact (b) above, the project's operational and construction emissions would be less than significant since the project falls

well under the BAAQMD's screening thresholds. In addition, construction on the site will be required to implement BAAQMD's Best Management Practices for dust control in accordance with the City's General Plan policies, as discussed in impact (d) below. **(Less Than Significant Impact)**

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Construction Dust Emissions

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of respirable particulate matter (PM₁₀ and PM_{2.5}). The construction schedule assumes that the project would be built out over a period of approximately 15 months beginning in 2018, or an estimated 450 construction workdays. Construction activities would include a small amount of grading (approximately three months) and limited quantities of soil import to be used on-site.

Construction vehicle access to the site would be provided from Sangamore Street. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soil. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these construction-related impacts to be less than significant if Best Management Practices are employed to reduce these emissions. This analysis assumes that the project implements Best Management Practices recommended by BAAQMD, as indicated through General Plan Policy *NR-2.17 Source Reduction Measures*, listed above in *Section 4.3.2.7*.

SM AQ – 1.1: The project shall implement the following standard dust control measures during all phases of construction on the project site:

- 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 track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five (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.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

With the implementation of the Standard Measure AQ – 1.1 required by General Plan Policy *NR-2.17 Source Reduction Measures*, fugitive dust emission impacts would be reduced to a less than significant level. **(Less Than Significant Impact)**

Construction TAC and PM_{2.5} Health Risks

Construction activity is anticipated to include demolition, grading and site preparation, trenching, building construction, and paving. During grading and site preparation, the project would require an estimated 685 cubic yards of cut and 1,857 cubic yards of fill, with the remaining 1,172 cubic yards to be imported on-site. Approximately 70 cubic yards of soil in the northeast portion of the property and approximately 110 cubic yards of soil near the existing single-family house are lead-impacted and would be exported off-site.

The proposed project would generate toxic air contaminants (TACs) during construction that could adversely expose sensitive receptors (nearby residences and college students) that border the site to the north and west. In accordance with the City of Hayward's Community Risk Reduction Plan best management practices outlined in Table 7.9 of the City's General Plan¹, the proposed project would commit to the Standard Measure described below which would reduce construction TAC impacts to a less than significant level.

SM AQ – 1.2: The project shall use Tier 2 off-road diesel equipment to construct the project and thereby avoid exposing nearby residents and students to unhealthy levels of TACs.

With the implementation of the Standard Measure AQ – 1.2, the proposed project would have a less than significant impact on sensitive receptors adjacent to the project site. **(Less Than Significant Impact)**

Roadway TAC Health Risks

The project site is located along Hesperian Boulevard, which is a high-volume roadway that may result in increased cancer risk of approximately 31 cases per million according to BAAQMD's Roadway Screening Analysis. In accordance with the City of Hayward's

¹ Table 7.9 Hayward 2040 General Plan Community Risk Reduction Strategy Source Reduction Measures and Best Management Practices

Community Risk Reduction Plan best management practices outlined in the General Plan, the project would commit to installing MERV 13 filters and thereby reduce the exposure of project residents to vehicular exhaust TACs from Hesperian Boulevard and other stationary TAC sources in the vicinity to a less than significant level.

SM AQ – 1.3: The project shall commit to installing MERV 13 filters to reduce the exposure of project residents to vehicular exhaust TACs from Hesperian Boulevard and other stationary TAC sources in the vicinity.

e) *Create objectionable odors affecting a substantial number of people?*

Implementation of the proposed project which includes development of a new 13-unit single-family neighborhood would not create objectionable odors affecting a substantial number of people near the site. No new stationary odor sources are anticipated as part of the project and there are no odor sources near the site that would affect the project. **(Less Than Significant Impact)**

4.3.4 **Conclusion**

With the implementation of the Standard Measures AQ – 1.1, AQ – 1.2, and AQ – 1.3 that are required by City Policy, the project would have a less than significant impact on air quality.

4.4 BIOLOGICAL RESOURCES

The following discussion is based in part on an Arborist Survey and Homeowners Guide prepared by *Hortscience, Inc.* in January and February 2018, respectively. These reports are included as Appendix A of this Initial Study.

4.4.1 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
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 CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
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, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,7,8
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 type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

4.4.2 Existing Setting

The project site is located in an urban neighborhood and is developed with a single-family residence and detached garage dispersed with native, ornamental, and fruit trees throughout the property. Habitats in developed, urban areas are extremely low in species diversity. Common species that occur in urban environments include rock pigeons, mourning doves, house sparrows, finches, and European starlings. Raptors and other avian species could forage in the project area or nest in surrounding landscaping.

There are no sensitive habitats or wetlands on or adjacent to the project site. Due to the lack of sensitive habitats, human disturbance, and the developed nature of the project site, special-status plant and animal species are not expected to occur. The primary biological resources on-site are landscape trees.

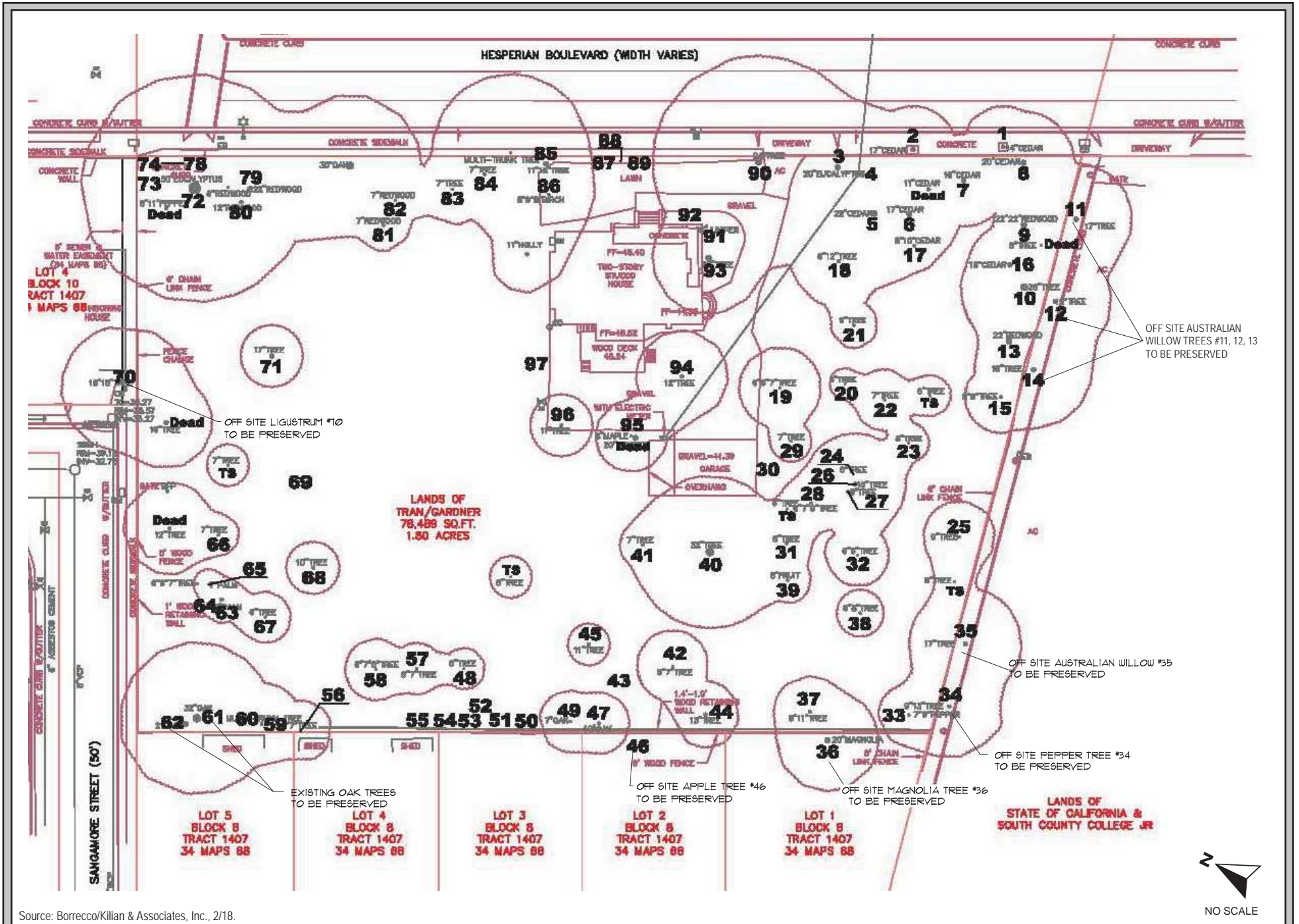
Mature Trees

A tree survey (Appendix A) was completed for the project area and identified 98 trees in total, representing 39 species. For all species combined, approximately 75 percent of the trees were in fair to poor condition, and approximately 25 percent of the trees were in good condition. Of the 98 total trees assessed, 78 trees are protected by the Hayward Tree Preservation Ordinance (defined in *Section 4.4.2.1*, below). Of the 78 Protected Trees, 11 trees are native species, and 67 trees are non-native species. Of the 98 trees analyzed, two street trees were identified along Hesperian Boulevard, and eight off-site trees are along the northern, southern, and western fence lines. The remaining 88 trees were located on-site.

Species on-site included California native trees (coast live oak and coast redwood), fruit trees (pears, plums, and apples), common landscape trees (California pepper and Japanese maple) and trees less common in Bay Area landscapes (yew, pineapple guava, and English holly). The Arborist Report (Appendix A) describes in detail the maturity and condition of all trees on-site, along the property boundary, and nearby off-site trees.

Two mature coast live oaks are present on-site, and four young coast live oaks are growing along the southwestern fence. The red oak is mature and in good condition. A line of deodar cedars along Hesperian Boulevard were in good condition and creates a hedge between the property and the street. Several California native species, including the incense cedars and coast redwoods (which are not native to this region) are in poor condition.

Construction of the proposed project would require the removal of 88 trees on-site, 69 of which are protected trees. The remaining ten trees (nine of which are protected) include eight off-site trees and two on-site trees, and would be preserved. A summary of the trees that are indicated whether to remain or be removed are shown on Figure 4.4-1.



TREE REMOVAL MAP

FIGURE 4.4-1

4.4.2.1 *Applicable Plans, Policies, and Regulations*

Federal Endangered Species Act and California Endangered Species Act

The federal Endangered Species Act and California Endangered Species Act protect listed wildlife species from harm or “take,” which can include habitat modification or degradation that directly results in death or injury to a listed wildlife species. The long-term purpose of these laws is to ultimately restore their numbers to where they are no longer threatened or endangered.

Federal Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 703, Supp. I, 1989) is part of a coordinated effort between the United States, Canada, Mexico, Japan, and Russia to help protect migratory birds. It prohibits killing, taking, selling, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

State Fish and Game Code

Birds of prey, such as owls and hawks, are protected in California under provisions of the State Fish and Game Code, Section 3503.5 (1992), which states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the California Department of Fish and Wildlife.

City of Hayward Tree Preservation Ordinance

Hayward Municipal Code Chapter 10, Article 15 Tree Preservation Ordinance establishes conditions and regulations for the removal and replacement of existing trees and the installation of new trees in new construction and development. A Protected Tree is defined as (1) any tree with a single stem of eight inches in diameter or greater when measured at 54 inches above natural grade; (2) a multi-stemmed tree with cumulative diameters of the three largest stems equal to eight inches or greater; (3) any street tree; or (4) any of several native species with a diameter of four inches or greater.

The Ordinance states that “no person shall remove, destroy, perform cutting of branches over one inch in diameter, or disfigure or cause to be removed or destroyed or disfigured any Protected Tree without having first obtained a permit to do so.” All removed or disfigured trees shall also require replacement with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape Architect. If a replacement tree is unavailable in like size or kind, the value of the original Protected Tree shall be determined using the latest edition of “Guide for Plant Appraisal” by the International Society of Arboriculture. The valuation shall be used to determine the number and size of replacement trees required.

The replacement trees shall be located on site wherever possible. Where there is not sufficient room on site for the replacement trees in the judgment of the City Landscape Architect or his or her

designated representative, another site may be designated that is mutually agreeable. These replacement trees shall not be counted as part of the required trees to meet zoning standards for the original site.

4.4.3 Impact Discussion

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

The project site is located in an urban area surrounded by commercial and residential development. The project site is developed with several buildings, pavement, and landscaping. No sensitive habitats or habitats suitable for special-status plants or wildlife species occur within or adjacent to the project site. The project would not directly result in impacts to special-status species.

The mature trees on and adjacent to the project site could provide nesting habitat for birds, including migratory birds and raptors. Nesting birds are among the species protected under provisions of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 2800.

Construction of the project during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute an impact. Construction activities such as tree removal and site grading that disturb a nesting bird or raptor on-site or immediately adjacent to the construction zone would also constitute an impact.

Impact BIO – 1: The project may disturb nesting birds on and adjacent to the site during construction. **(Significant Impact)**

Mitigation Measures: The project will be required to implement the following mitigation measures to reduce impacts to raptors and migratory birds to a less than significant level:

MM BIO – 1.1: In order to protect nesting birds on and adjacent to the project site the following measures will be implemented:

- Pre-construction nesting bird surveys shall be completed prior to tree removal if removal or construction is proposed to commence during the breeding season (February 1 to August 31) in order to avoid impacts to nesting birds. Surveys shall be completed by a qualified biologist no more than seven (7) days before construction begins. During this survey, the biologist or ornithologist shall inspect all trees and other possible nesting habitats in and within 250 feet of the project boundary.

- If an active nest is found in an area that would be disturbed by construction, the ornithologist shall designate an adequate buffer zone (~250 feet) to be established around the nest, in consultation with the California Department of Fish and Wildlife (CDFW). The buffer would ensure that nests shall not be disturbed until the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts.
- The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Community Development, prior to any tree removal, or the issuance of a grading permit or demolition permit.

With the implementation of MM BIO – 1.1, the proposed project would have a less than significant impact on raptors and migratory birds. **(Less Than Significant Impact With Mitigation)**

- 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 CDFW or USFWS?*

The project site is developed with urban uses and does not contain any identified riparian habitats or other sensitive natural communities. **(No Impact)**

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

The project site is developed and devoid of any identified wetlands, marshes, or vernal pools. The project would not impact any federally protected wetlands under the Clean Water Act. **(No Impact)**

- 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, impede the use of native wildlife nursery sites?*

The project site is located in a developed urban area and does not support any watercourse, river, or provide substantial habitat that facilitates the movement of any native resident or migratory fish or wildlife species, other than birds which are discussed in Section 4.4.3(a) above. The project site is fully developed and contains limited potential to serve as a migratory corridor for wildlife. **(No Impact)**

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

A tree survey and appraisal was completed for the project site by *Hortscience, Inc.* in January 2018 (refer to Appendix A). Of the 98 trees on or immediately adjacent to the site, 78 are protected under the City of Hayward Tree Preservation Ordinance. The City of Hayward protects trees having a minimum trunk diameter of eight inches or more (measured 54 inches

above the ground), street trees, memorial trees, trees that were planted as replacements for protected trees, and trees of certain species. Construction of the proposed project would require the removal of 88 trees on-site, 69 of which are protected trees. Ten trees, including eight off-site trees and two on-site trees, shown on Figure 4.4-1 above, would be preserved by the project.

The project will be required to comply with the Tree Preservation Ordinance, which includes submittal of an application for a Protected Tree Removal or Cutting permit. The ordinance also requires replacement of removed or disfigured trees with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape Architect. The replacement trees shall be located on site wherever possible. Where there is not sufficient room on-site for the replacement trees in the judgment of the City Landscape Architect or his or her designated representative, another site may be designated that is mutually agreeable.

Impact BIO – 2: Development of the proposed project would result in significant impacts to 88 trees, 69 of which are protected trees. **(Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures would reduce impacts to protected trees before and during construction to a less than significant level:

MM BIO – 2.1: All applicable requirements shall be followed and all permits obtained as required by the City's Tree Ordinance (HMC Chapter 10, Article 15). Per that ordinance, every effort shall be made to preserve the character of the area and the more valuable tree specimens on site to the greatest extent practicable. Final landscape plans shall be reviewed and approved by the City of Hayward Landscape Architect prior to issuance of any grading, trenching, encroachment, demolition, or building permit for development. Final landscape plans shall clearly identify all "protected trees," as defined in the Tree Preservation Ordinance, and all trees to be removed from the project site and the size, location, type, value of trees and specify the species of all replacement trees.

Ten trees, including eight off-site trees and two on-site trees, would be preserved by the project. The two coast live oaks (#61 and #62) would become part of the rear yard of Lot 13, and if not properly cared for and maintained, could decline over time. They could be damaged if a future homeowner sought to construct or improve the backyard in ways that damaged the trees' canopy, root system, or structure. The measures presented below are intended to protect the trees during construction and long-term once the homes are sold and occupied.

Impact BIO – 3: Trees #61 and #62 that would be preserved with the project on Lot 13 could decline over time due to poor care or be damaged by improper construction. **(Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures from the Homeowners Guide would ensure the long-term maintenance and longevity of the preserved coast live oak trees that would be in a future homeowner's backyard, and therefore reduce impacts to the preserved oak trees to a less than significant level:

MM BIO – 3.1: The project applicant shall implement all tree protection measures recommended in the Arborist Report prepared for the project for the ten trees to be preserved, eight off-site and two on-site, which include the following:

Design Measures

- A Tree Protection Zone shall be established around each tree to be preserved, as measured from the trunk of each tree. No grading, excavation, construction or storage of materials shall occur within that zone.
- Include trees to be preserved and Tree Protection Zones on all construction plans.
- Project plans affecting the trees shall be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, site plans, improvement plans, utility and drainage plans, grading plans, and landscape and irrigation plans.
- No underground services including utilities, sub-drains, water or sewer shall be placed in the Tree Protection Zone.
- Irrigation systems must be designed so that no trenching will occur within the Tree Protection Zone.
- As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings, and placements on expansive soils near trees should be designed to withstand differential displacement.

Pre-Construction Treatments

- Fence all trees to be retained prior to demolition, grubbing or grading. Tree protection fencing should be placed at the edge of the Tree Protection Zone. Fences shall be six (6) feet chain link or equivalent as approved by the Consulting Arborist. Fences are to remain until all grading and construction is completed.
- Prune trees to be preserved to clean the crown of dead branches one-inch and larger in diameter, raise canopies as needed for construction activities. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning and adhere to the most recent editions of the American National Standard for Tree Care Operations and Pruning. The Consulting Arborist will provide pruning specifications prior to site

demolition. Branches extending into the work area that can remain following demolition shall be tied back and protected from damage.

- Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified arborist and not by construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Tree stumps shall be ground 12-inches below ground surface.

Protection Measures During Construction

- Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
- All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
- Any grading, construction, demolition or other work that is expected to encounter tree roots should be monitored by the Consulting Arborist.
- Tree protection fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.
- Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
- Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Consulting Arborist.
- If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
- No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the tree protection zone.
- Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.
- All trees shall be irrigated on a schedule to be determined by the Consulting Arborist (every 3 to 6 weeks April through October is typical). Each irrigation shall wet the soil within the tree protection zone to a depth of 24”.

MM BIO – 3.2:

The future homeowner of Lot 13 shall follow the instructions of the Homeowner Guide, which would be included on the title of the property, for the coast live oaks (#61 and #62) to determine responsibilities, conditions and construction restrictions that will ensure long-term success of the protected oak trees that are to remain with the project.

By complying with the City's Tree Preservation Ordinance, implementing tree protection measures, and ensuring that the future homeowner of Lot 13 would follow the Homeowner's Guide (which would be included on the title of the property) to protect the coast live oaks that are to remain with the project, the project would not conflict with any local policies or ordinances protecting biological resources. **(Less Than Significant With Mitigation)**

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?*

There are no habitat conservation plans affecting the property, specifically, the project site is not located in an area covered by an adopted Habitat Conservation Plan or Natural Community Conservation Plan. **(No Impact)**

4.4.4 Conclusion

The proposed project, with the implementation of the MM BIO – 1.1, MM BIO – 2.1, MM BIO – 3.1, and MM BIO – 3.2 would have a less than significant impact on biological resources. **(Less Than Significant Impact With Mitigation)**

4.5 CULTURAL RESOURCES

The following discussion is based upon a Historic Resource Evaluation prepared by *Garavaglia Architecture, Inc.* in August 2016. A copy of this report is included as Appendix B of this Initial Study.

4.5.1 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9
e) 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:					
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9

4.5.2 **Setting**

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or underground and have significance in the history, prehistory, architecture, or culture of the nation, State of California, or local or tribal communities.

Paleontological resources are fossils, the remains or traces of prehistoric life preserved in the geologic record. They range from the well-known and well publicized (such as mammoth and dinosaur bones) to scientifically important fossils.

The property is comprised of a single-family house and detached garage building located on the west side of Hesperian Boulevard in the Mt. Eden neighborhood of Hayward.

4.5.2.1 ***Prehistoric Context and Resources***

The rich marshlands and freshwater streams in southern Alameda County have been important to humans from an early point in civilization. For thousands of years a large Native American population, collectively called the Ohlone, thrived on the rich plant, animal and sea life of the San Francisco Bay area. The arrival of European explorers in the mid-eighteenth century brought rapid changes for the Ohlone and for the land upon which they lived. Soon, Missionary fathers and Spanish soldiers overwhelmed the native population, and land cultivation was introduced. The state-sponsored Mission system set up a pattern of settlement that shaped the identity of what would eventually become California. These Missions became centers of trade, travel and settlement for Spanish, Mexican and then American settlers. While the transitions from Ohlone land to Spanish control to Mexican governance to American statehood were not all accomplished peacefully, each left its lasting mark on the identity of the region. Very little architectural fabric is left from any of these groups. Therefore, it is important to understand how they lived on the land, as their artifacts and impacts on the land may be the most direct evidence that can be gathered to complete the historical record.

Assembly Bill (AB) 52

Assembly Bill (AB) 52 was approved by the Governor September 25, 2014. It adds a new category of resources to CEQA that must be considered during project planning – Tribal Cultural Resources. It also establishes a framework and timeline for consultation. AB 52 applies to projects that have a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. At the time of preparation of this Initial Study, the City of Hayward received request for consultation by the Ione Band of Miwok Indians.

4.5.2.2 *Historic Resources*

Hayward's pioneering settlers were entrepreneurs that were hard working individuals and families that adapted to the rapidly changing economic and political climate of early California. The western bay lands were first settled by avid hunters and farmers who saw great potential in the abundant wild life and rich soils at the waters edge. They first developed ports or landings, then they cultivated land to provide products to ship from their ports. Soon others followed and more specialization of occupation developed; farmers farmed a variety of crops, shippers further developed the ports to handle the increasing amount of goods and people coming to the area, and businessmen started to set up services for the growing population.

Agriculture was the foundation of the regional economy for nearly 100 years. It began with goods being shipped from the landings from both local farms and from areas far inland. Geography made the coastal areas near Hayward, the closest shipping point for much of the Livermore and Amador Valleys. When railroads diminished the importance of Hayward's ports, it increased Hayward's importance as a regional rail hub. This spurred the development of vast orchards by Meek and Lewelling and a host of smaller farmers. Truck farming became a mainstay of the local and regional economy. Such quantities and quality of produce made location of food processing plants in the area a highly advantageous venture. Hunts Brothers eventually recognized this (with help from locally sponsored incentives) and built the largest canning and manufacturing plant in the country in 1896.

This growth continued to accelerate in the beginning of the 20th century, as Hayward became a regional food processing and commercial center. Workers were drawn to the growing number of industries located along the railroad corridor just west of town. This resulted in growth of the school system, further formalization of the fire department, construction of a dedicated City Hall building and the further expansion of the streetcar system. Even though this period was marked by substantial growth of many commercial and community sectors, it still occurred at a reasonable pace that was mirrored by similar communities in the Santa Clara Valley where food processing and agriculture drew a variety of immigrant groups and settlers.

History of the Mt. Eden Neighborhood

The project site is located in the former Township of Mt. Eden, which was settled in the mid-1800s and annexed into Hayward in 1958. Mt. Eden was located south and west of downtown Hayward, near the current Chabot College campus. It had a long and largely independent history from the City of Hayward. Early histories of Alameda County discuss Mt. Eden as a separate settlement, on par with San Leandro, Hayward, and San Lorenzo. All were included as part of Eden Township by 1878. At this time, only San Leandro and Hayward were incorporated. This remains the case today with Mt. Eden being annexed into Hayward in 1958, and San Lorenzo remaining an unincorporated section of Alameda County.

Mt. Eden had a thriving commercial district that served the many agricultural enterprises in the area as well as travelers venturing inland from the wharfs along the coastline. Eric Ruus constructed the Danish Hotel or Denmark Hotel, which later became the Mt. Eden House. Ruus built upon his success in the hotel business by constructing the Majestic Movie House nearby to the site.

The site’s existing home was constructed circa 1920 for Otto Edward Oliver, whose father had settled in Mt. Eden in 1868, not long after the founding of the Township. The Olivers were one of the main salt producers in the Hayward area from the late 1800s to the mid-20th century.

According to a Historic Resource Evaluation prepared by *Garavaglia Architecture, Inc.* in August 2016, the historic integrity of the single-family residence and detached garage have been compromised because of significant alternations to the original windows, doors, and exterior trim of the residence. The structures do not have significant associations with local themes or cultural patterns of significant, and therefore are not eligible for the California Register of Historical Resources (CRHR) or listed on the City of Hayward List of Officially Designated Architecturally and Historically Significant Buildings.

4.5.2.3 Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments ground in geologic strata. Most of the city of Hayward is located on Quaternary sedimentary deposits which are from the most recent geologic periods (i.e., Holocene, Pleistocene) dating back to 1.6 million years ago. Some of eastern Hayward is located on Mesozoic sedimentary rocks from the Mesozoic period dating back to 245 million years ago, when dinosaurs roamed the earth. Both types of geologic rocks may contain fossils of flora and fauna, particularly marine species.

A search of the University of California Museum of Paleontology, University of California, Berkeley Database identified 1,563 paleontological resources in Alameda County. Five of these resources were discovered within the City of Hayward, including four mammalian fossils (e.g., bison, prehistoric horse) and one gastropod fossil (i.e., marine snail) from the Quaternary period. The Bison fossil was discovered near Interstate 880 (I-880), the two prehistoric horse fossils were discovered in the Hayward gravel pit, the marine snail was discovered at Hayward Landing, and an additional unidentified mammalian fossil was discovered near the Hayward Motel.²

4.5.2.4 Applicable Plans, Policies, and Regulations

City of Hayward General Plan

City of Hayward Relevant Cultural Resources Policies

Policies	Description
Policy LU-8.4	The City shall maintain and expand its records of reconnaissance surveys, evaluations, and historic reports completed for properties located within the City.
Policy NR-7.1	The City shall prohibit any new public or private development that damages or destroys a historically or prehistorically-significant fossil, ruin, or monument, or any object of antiquity.
Policy NR-7.2	The City shall develop or ensure compliance with protocols that protect or mitigate impacts to paleontological resources, including requiring grading and construction projects to cease activity when a paleontological resource is discovered so it can be safely removed.

² Hayward 2040 General Plan Background Report. January 2014.

4.5.3 Impacts Discussion

a) *Cause a substantial adverse change in the significance of an historical resource?*

The project proposes to demolish the existing circa 1920s single-family residence and detached garage structure on the project site, subdivide the lot into 13 residential lots, and construct 13 single-family residences.

As detailed in Appendix B, Historic Resource Evaluation, the existing residence and detached garage structure are not eligible for the CRHR because they lack historic integrity and are not contributing resources to a CRHR eligible historic district. Additionally, there are no historic adjacent properties that could be impacted by the project. Therefore, the project would not result in an impact to an historic resource. **(Less Than Significant Impact)**

b – d) *Cause a substantial adverse change in the significance of an archaeological resource? Would the project disturb any human remains, including those interred outside of formal cemeteries? Would the project directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?*

According to the General Plan Background Report, the project site is not located in an archaeologically sensitive area, and therefore no archaeological sites are located on the project site. During excavation and grading activities associated with construction of the project, a remote possibility exists that buried archaeological resources may be discovered. If that should occur, the following standard measures consistent with General Plan Policies *NR-7.1 and NR-7.2* (see *Section 4.5.2.4*, above) would be taken to stop all work adjacent to the find and an archaeologist would be brought on-site to investigate the find and contact the City of Hayward Development Services Department to determine how to preserve and record the uncovered materials.

SM CUL – 1.1: *Unique Paleontological and/or Geologic Features and Reporting.* Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City Planning Manager notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. The identified mitigation measures shall be implemented. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is carried out. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

SM CUL – 1.2: *Undiscovered Archaeological Resources.* If evidence of an archaeological site or other suspected cultural resource as defined by

CEQA Guideline Section 15064.5, including darkened soil representing past human activity (“midden”), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City Planning Manager shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City Planning Manager shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior’s Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.

SM CUL – 1.3: *Report of Archaeological Resources.* If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the City’s Planning Manager prior to issuance of building permits. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.

SM CUL – 1.4: *Human Remains.* If human remains are discovered at any project construction site during any phase of construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the City Planning Manager and the Alameda County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Hayward shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation,

to be verified by the City of Hayward, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.

With the implementation of Standard Measures CUL – 1.1 to CUL – 1.4, impacts to archaeological resources would be less than significant. **(Less Than Significant Impact)**

- e) *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: (1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.*

As noted above, the City of Hayward received a formal request for tribal consultation in March 2016 from the Ione Band of Miwok Indians. On July 25, 2017, the City provided project information to the Ione Band of Miwok Indians pursuant to Public Resource Code (PRC) Section 231080.3.1(b), and did not receive a request for consultation. No known tribal cultural resources are located at the project site. However, in the event an accidental discovery of tribal cultural resources occurs during construction, Standard Measures CUL – 1.1 to CUL – 1.4 would be implemented. For these reasons, the project would result in a less than significant impact to tribal cultural resources. **(Less Than Significant Impact)**

4.5.4 **Conclusion**

Construction of the proposed development, with the implementation of Standard Measures CUL – 1.1 to CUL – 1.4, would not result in a significant impact to buried cultural resources. **(Less Than Significant Impact)**

The project would not result in a significant impact to historic architectural resources, or to tribal cultural resources. **(Less Than Significant Impact)**

4.6 GEOLOGY AND SOILS

The following discussion is based upon a Geotechnical Exploration prepared by *ENGEO, Inc.* in January 2016. A copy of this report is included as Appendix C of this Initial Study.

4.6.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as described 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"/>	1,2,10
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,10
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,10
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,10
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,10
c) Be located on a geologic unit or soil that is unstable, or that will 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"/>	1,2,10
d) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,10
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,10

4.6.2 Existing Setting

4.6.2.1 *Regional Geology*

The City of Hayward is located within the Coast Ranges geologic province of California, which is dominated by a series of northwest-trending ridges and valleys. Bedrock in the province has been folded and faulted during regional uplift beginning in the Pliocene, roughly four million years before

present. Regional geologic mapping indicates that the site is underlain by alluvial deposits near the eastern margin of the San Francisco Bay. The San Francisco Bay is located in a fault bound, elongated structural trough that has been filled with a sequence of Quaternary age sedimentary deposits derived from the surrounding Coast Ranges.

4.6.2.2 *On-Site Geologic Conditions*

Soil and Groundwater

The project site ranges in elevation from 40 to 43 feet above mean sea level (msl). The near-surface soil materials present on-site consist of medium to very stiff lean clay and sandy lean clay, silt, and medium dense to dense sand and silty clay that extend to depths of about 30 feet below ground surface (bgs). The clayey soils have medium to high plasticity and moderate to high expansion potential.

The upper 10 feet of surficial soils included approximately two to three feet of lean to fat clay over a medium dense sand. Layers of stiff sandy and clayey silt were encountered at various depths during the geotechnical investigation.

Groundwater was encountered at depths ranging from approximately 18.5 to 20.5 feet bgs. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors.

Expansive Soils

Expansive soils are susceptible to shrink and swell resulting from variations in moisture content. Expansive soils and bedrock may cause heaving and cracking of slabs-on-grade, pavements and foundations.

The expansive nature of the near-surface native soils is of geotechnical concern in this region. The clayey soil at the site is considered moderately expansive.

Seismicity and Seismic Hazards

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with the crustal movements along well-defined active fault zones of the San Andreas Fault system, which regionally trend in the northwesterly direction.

The site is not located within a designated Alquist-Priolo Earthquake Fault Zone or a City of Hayward Fault Hazard Zone. Nearby active or potentially active faults include the Hayward Fault located approximately 4.5 miles northeast of the project site, the Calaveras Fault located approximately 10 miles east/northeast of the project site, and the San Andreas Fault is located approximately 16 miles west/southwest of the project site. Because of the proximity to the site to the nearby active or potentially active faults, ground shaking, ground failure, or liquefaction due to an earthquake could cause damage to structures.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level.

The project site contains clayey soils with medium to high plasticity. Review of the State of California Seismic Hazard Zone Map for the Hayward Quadrangle indicates the site is located within a mapped liquefaction zone. According to the Geotechnical Analysis, the liquefaction potential for the soils encountered on-site indicate that the medium dense to dense sand layers are potentially liquefiable.

Seismically-Induced Differential Settlements

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform densification of loose to medium dense cohesionless soil layers. This results in movement of the near surface soils.

As described previously, the upper 10 feet of surficial soils included approximately two to three feet of lean to fat clay over a medium dense sand. Due to the medium dense and potentially liquefiable soils present at the surface on-site, the total liquefaction-induced settlements across the site would be less than three and one-half inches. Therefore, there is potential for damaging structures on-site due to seismically-induced differential settlement.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane and may often be associated with liquefaction.

There is low potential for lateral spreading due to the lack of open-face water channels on-site.

Landslides

The site is not located within an area zoned by the State of California as having potential for seismically induced landslide hazards nor is it located within an Alameda County Hazard Zone. For these reasons, the probability of landsliding occurring at the site during a seismic event is low.

4.6.3 Impact Discussion

- a, c) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, ii) strong seismic ground shaking, iii) seismic-related ground failure, or iv) landslides? Would the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Seismic Shaking and Liquefaction

While the likelihood of fault rupture at the project site is low, the project site is located in a seismically active region and strong ground shaking would likely occur at the project site during seismic activity throughout the life of the project. The Hayward Fault is located approximately 4.5 miles northeast of the property. In addition, potentially liquefiable soils present at the surface on-site could cause liquefaction-induced settlements across the site of up to three and one-half inches.

The project would conform to the standard engineering and building practices and techniques specified in the California Building Code (CBC). The proposed buildings would be designed and constructed in accordance with the recommendations of a geotechnical report prepared for the site (refer to Appendix C), which identifies the specific design features related to geologic and seismic conditions. The buildings would meet the requirements of appropriate Building and Fire Codes, as adopted by the City of Hayward.

The project, in conformance to applicable regulations and with the implementation of the recommendations in the geotechnical report, would not result in significant impacts from seismicity and seismic-related hazards including ground shaking and liquefaction. **(Less Than Significant Impact)**

Landslides

The site and surrounding areas are generally level. Therefore, the hazard due to landsliding is very low for the site. **(Less Than Significant Impact)**

- b, d) *Result in substantial soil erosion or the loss of topsoil? Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?*

Soil Impacts

The more clayey, moderately to highly expansive surface soil materials present on-site will be subject to volume changes during seasonal fluctuations in moisture content. To reduce the potential for post-construction distress to the proposed structures resulting from swelling and shrinkage of these materials, the proposed residences would be supported on a post-tensioned slab foundation system that is designed to reduce the effects of expansive soils on the site.

In conformance with standard practices in the City of Hayward, the proposed buildings shall be designed and constructed in accordance with a final design-level geotechnical investigation to be completed for the project by a qualified professional and submitted to the Building Division with the application for a building permit. The final design-level geotechnical investigation shall identify requirement for the placement of fill on the project site and building foundations.

Due to the relatively flat topography of the site and surrounding area, the project would not result in substantial erosion, or loss of topsoil. **(Less Than Significant Impact)**

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project would connect to the municipal wastewater conveyance and treatment system, and does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact. **(No Impact)**

4.6.4 **Conclusion**

The proposed project would not result in significant geology and soil impacts. **(Less Than Significant Impact)**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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"/>	1,2
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"/>	1,2

4.7.2 Existing Setting

The project site is developed with a single-family residence. Residential development typically results in greenhouse gas (GHG) emissions from building and operations (e.g., heating/cooling and lighting) and vehicular travel to and from the site.

4.7.2.1 *Background*

Unlike emissions of criteria and toxic air pollutants, which are discussed in *Section 4.3 Air Quality* and have local or regional impacts, emissions of greenhouse gases (GHGs) have a broader, global impact. Global warming associated with the “greenhouse effect” is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth’s atmosphere over time. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors. The Bay Area Air Quality Management District’s (BAAQMD) approach to developing a Threshold of Significance for GHG emissions occurring on or before 2020 is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation (AB 32) adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would contribute substantially to a cumulative impact, and would be significant.

The Thresholds of Significance for operational-related GHG emissions are as follows:

- For land use development projects, the 2020 threshold is compliance with a qualified GHG reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO₂e; or 4.6 MT CO₂e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.

BAAQMD has established project level screening criteria to assist in the evaluation of impacts. If a project meets the screening criteria and is consistent with the methodology used to develop the screening criteria, then the project’s GHG impacts would be considered less than significant. For

multi-family development, BAAQMD CEQA Air Quality Guidelines set a screening threshold of 56 dwelling units. The proposed project consists of development of 13 single-family residences with six accessory units and would not exceed BAAQMD's operational greenhouse gas screening level threshold.

4.7.2.2 *Applicable Plans, Policies, and Regulations*

State of California

Assembly Bill 32 and Executive Order S-3-05

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce GHG emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long-term objective to reduce GHG emissions to 90 percent below 1990 levels by 2050. The CalEPA is the state agency in charge of coordinating the GHG emissions reduction effort and establishing targets along the way.

In December 2008, the California Air Resources Control Board (CARB) approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the *Climate Change Scoping Plan*, must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 were signed into law in September 2016. SB 32 legislation amends provisions of AB 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code Division 25.5), to require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by December 31, 2030. This legislation incorporates the Executive Order B-30-15 target discussed above into state law. Changes to the California Health and Safety Code under the companion AB 197 legislation call for each scoping plan update to identify emissions reduction measures and include the range of projected GHG emissions reductions as well as the range of projected air pollution reductions that result from the emission reduction measures.

The mid-term target established under SB 32 is considered critical by the state to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing GHG emissions. SB 32 applies to projects that are completed after 2020.

On September 8, 2016, Governor Brown signed Senate Bill (SB) 32 into law, amending the California Global Warming Solution Act. SB 32 requires the California Air Resources Board to ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. As a part of this effort, CARB is required to update the *Climate Change Scoping Plan* to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. The most recently plan update was approved by CARB in December of 2017.

Senate Bill 375

Senate Bill 375 (SB 375), known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 in comparison to 2005 emissions. The per capita reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035. The four major requirements of SB 375 are:

1. Metropolitan Planning Organizations (MPOs) must meet greenhouse gas emission reduction targets for automobiles and light trucks through land use and transportation strategies.
2. MPOs must create a Sustainable Communities Strategy (SCS), to provide an integrated land use/transportation plan for meeting regional targets, consistent with the Regional Transportation Plan (RTP).
3. Regional housing elements and transportation plans must be synchronized on eight-year schedules, with Regional Housing Needs Assessment (RHNA) allocation numbers conforming to the SCS.
4. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC).

MTC and ABAG adopted *Plan Bay Area* in July 2013 in response to SB 375, and adopted an updated Plan Bay Area 2040 on July 26, 2017. The strategies in the Plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The project site is not located within a PDA.

Regional and Local

Bay Area 2017 Clean Air Plan

On April 19, 2017, the BAAQMD Board of Directors adopted a new air quality plan, called the 2017 Clean Air Plan, *Spare the Air, Cool the Climate* (2017 CAP). This plan updates the previous Bay Area 2010 Clean Air Plan and focuses on two closely-related goals: protecting public health and protecting the climate. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

City of Hayward

General Plan

The Natural Resources Element of the City’s General Plan contains policies, recommendations, and actions to promote energy conservation. Through energy conservation, GHG emissions are reduced.

All future development allowed by the project would be subject to conformance with applicable General Plan policies, including the policies listed below.

Policies	Description
Policy NR-2.4	The City shall work with the community to reduce community-based GHG emissions by 20 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.
Policy NR-2.5	The City shall reduce municipal greenhouse gas emissions by 20 percent below 2005 baseline level by 2020, and strive to reduce municipal emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.
Policy NR-2.6	The City shall reduce potential greenhouse gas emissions by discouraging new development that is primarily dependent on the private automobile; promoting infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; and improving the regional jobs/housing balance ratio.
Policy NR-2.7	The City shall coordinate with the Bay Area Air Quality Management District to ensure projects incorporate feasible mitigation measures to reduce greenhouse gas emissions and air pollution if not already provided for through project design.

City of Hayward Climate Action Plan

Hayward’s Climate Action Plan (CAP) was adopted by the City Council on July 28, 2009 and then incorporated into the City’s General Plan in 2014. The 2009 CAP was designed to reduce communitywide emissions 12.5 percent below 2005 levels by the year 2020, and to set the City on a course to achieve a long-term emission reduction goal of 82.5 percent below 2005 levels by the year 2050.

4.7.3 Impacts Discussion

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The project proposes 13 units and six accessory dwelling units and is well below the 56 dwelling units screening level specified in BAAQMD’s CEQA Air Quality Guidelines for projects completed by 2020. Further, the proposed development is considered infill development that is located in close proximity to commercial services, Chabot College and existing bus lines along Hesperian Boulevard. Therefore, it is not anticipated that the project will create significant operational GHG emissions.

Additionally, the project would include solar panels on each of the 13 units which would reduce greenhouse gases emitted by the project. **(Less Than Significant Impact)**

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As described previously, the project would not result in GHG emissions above thresholds that were established by BAAQMD to identify projects that require additional mitigation measures to achieve statewide GHG targets contained in Assembly Bill (AB) 32.

The infill project is within an urban area and would be constructed in accordance with CalGreen (Part 11 of Title 24 of the California Code of Regulations) requirements for Residential Development.

Hayward's Climate Action Plan (CAP) was adopted by the City Council on July 28, 2009. The purpose of the CAP is to make Hayward a more environmentally and socially sustainable community by:

- Reducing Greenhouse Gas emissions - the primary contributor to global warming;
- Decreasing the community's dependence on non-renewable resources;
- Increasing Hayward's potential for "green" economic development; and,
- Enhancing the health of all who live and work in Hayward.

The Climate Action Plan was adopted prior to modifications to the CEQA Guidelines and adoption of guidance from BAAQMD on what qualifies as a quantified greenhouse gas reduction strategy used for tiering.³

The project would not conflict with the state's Climate Change Scoping Plan developed per AB 32, or regulations in the City of Hayward Climate Action Plan and General Plan to reduce greenhouse gas emissions. The project is expected to be complete prior to 2021 and therefore is not subject to SB 32 targets for 2030 statewide GHG emissions. **(Less Than Significant Impact)**

4.7.4 Conclusion

The proposed project would result in a less than significant impact from GHG emissions. **(Less Than Significant Impact)**

³ "Tiering" in the context of CEQA refers to the coverage of general environmental matters in broad program-level Environmental Impact Reports (EIRs), with subsequent focused environmental documents for individual projects that implement the program.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based upon a Phase I Environmental Site Assessment, Phase II Environmental Site Assessment, and a Soil Management Plan prepared by *ENGEO, Inc.* in December 2015, February 2016, and February 22, 2016, respectively. Copies of these reports are included in Appendix D of this Initial Study.

4.8.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,10-12
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,10-12
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"/>	1,10-12
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, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,10-12
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,13,14
f) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,13,14
g) 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"/>	1

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

4.8.2 Existing Setting

4.8.2.1 *Background*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include motor oil and fuel, metals (e.g., lead, mercury, arsenic), asbestos, pesticides, herbicides, and chemical compounds used in manufacturing and other activities. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

4.8.2.2 *Site Conditions*

Current Uses

The approximately 1.8-acre site is currently developed with a vacant, two-story single-family residence and detached garage. The site also contains open grass areas, shrubs, and trees.

Historic Uses and Known Contamination

According to the 1939 aerial photograph of the property, the project site was developed with the existing structures since circa 1920. In the 1939 photograph, the property also appeared to contain a residential building in the northeastern area, which was demolished in 1955. The project site was developed in its current configuration following the 1958 aerial photograph. No known contamination has been recorded on the property.

On-Site Hazardous Materials

The project site has been residential since between 1918 and 1922. Therefore, residents would likely use and store small quantities of household hazardous wastes (i.e., ammonia, paints, oils) which would not be considered significant. Since the existing residence was constructed circa 1920, there are lead based paint and/or asbestos containing materials on-site. There are no hazardous materials releases assumed to be associated with the project site.

According to the Phase II Environmental Site Assessment prepared by *ENGEO, Inc.*, which screened for potential soil impacts from possible past agricultural uses and from lead paint and asbestos-containing materials used on the existing structures, the analytical results found detectable concentrations of organochlorine pesticides (OCPs) in four samples taken on-site. However, the reported concentrations which ranged from non-detectable to 8.1 micrograms per kilogram ($\mu\text{g}/\text{kg}$) were below the applicable Regional Screening Levels (RSLs) of 34 $\mu\text{g}/\text{kg}$ established by the United States Environmental Protection Agency (USEPA) Region IX for residential land use thus the property was not significantly impacted due to past agricultural uses.

The reported arsenic concentrations from the samples ranged from 3.2 milligrams per kilogram (mg/kg) to 7.5 mg/kg . Although the reported arsenic concentrations exceed the current residential RSL of 0.67 mg/kg , these concentrations are consistent with background soil concentrations found in this region of the State of California.

The reported lead concentration from the samples ranged from 85 mg/kg to 530 mg/kg , which is above the respective RSL of 80 mg/kg for residential land use. The elevated lead levels in the shallow soil are likely due to the past use of lead paint on the past and current structure on the property.

Based on the results of the Phase II analysis, the shallow soil in the vicinity of the existing two-story house and the former residential structure in the northeastern area contain contaminated soil due to the presence of lead, and is proposed to be off-hauled. It is anticipated that the initial excavation areas will be total about 70 cubic yards in the northeast portion of the property and approximately 110 cubic yards beneath and in the vicinity of the existing house. These volumes are estimated using an excavation depth of six (6) inches. The exact dimensions will be determined in the field during excavation activities.

Off-site Hazardous Materials

According to the Phase I Environmental Site Assessment conducted for the site, a closed leaking underground storage tank (LUST) is listed at the Equity Property Development Company at 24688 Hesperian Boulevard, approximately 340 feet northeast of the property. A site summary report by Harding Lawson Associates (HLA) from 1989 describes two pump islands, two 7,500- and 5,000-gallon underground gasoline storage tanks (USTs), and a 280-gallon waste oil UST that were removed from the site in 1978.

A Phase II evaluation for petroleum hydrocarbons was performed by HLA, in which detectable levels of TPH-gasoline were found in the soil and groundwater and detectable amounts of toluene was found in an off-site groundwater monitoring well (MW-2). The detected contaminants are below the environmental screening level (ESL) for residential development, with the exception of toluene in the groundwater. The report indicates that the lateral extent of the contamination in the south-south west direction is unknown. However, laboratory testing of a groundwater sample collected from an off-site monitoring well MW-1, located south of MW-2, did not detect any contaminants. Based on this finding, it appears that the potential for soil or groundwater impacts on the property from the adjacent site is low. Subsequent soil and groundwater sampling and laboratory testing was performed until the case was closed on February 12, 2004.

A former LUST case was documented at the Chevron Service Station at 24350 Hesperian Boulevard, Hayward, approximately ¼-mile north/northeast of the property. The case closure document shows that four 2,000-, 5,000, 6,000-, and 10,000-gallon USTs, and a 550-gallon waste oil UST were removed from the site. The 2,000-gallon UST was removed in the 1960s and the remaining three fuel USTs and the waste-oil UST were replaced and relocated during station reconstruction in 1992. Subsequent soil and groundwater sampling and laboratory testing was performed until the Regional Water Quality Control Board issued a case closure letter dated June 6, 2011.

The closure letter stated that detectable levels of TPH-gasoline, BTEX, and MTBE were found in the soil and groundwater above the ESL for residential use. An analysis performed by Conestoga-Rovers & Associates in June 2009 determined that the contamination of TPH-gasoline, BTEX, and MTBE in soil and groundwater was focused in the northwestern region of the Chevron Service Station site, where the former USTs were located. Very low to non-detectable levels of the contaminants were found in the groundwater dispersing in the south and southwest directions. Therefore, the potential for soil or groundwater contamination impacts to the property from this off-site source is low to negligible.

4.8.2.3 *Other Hazards*

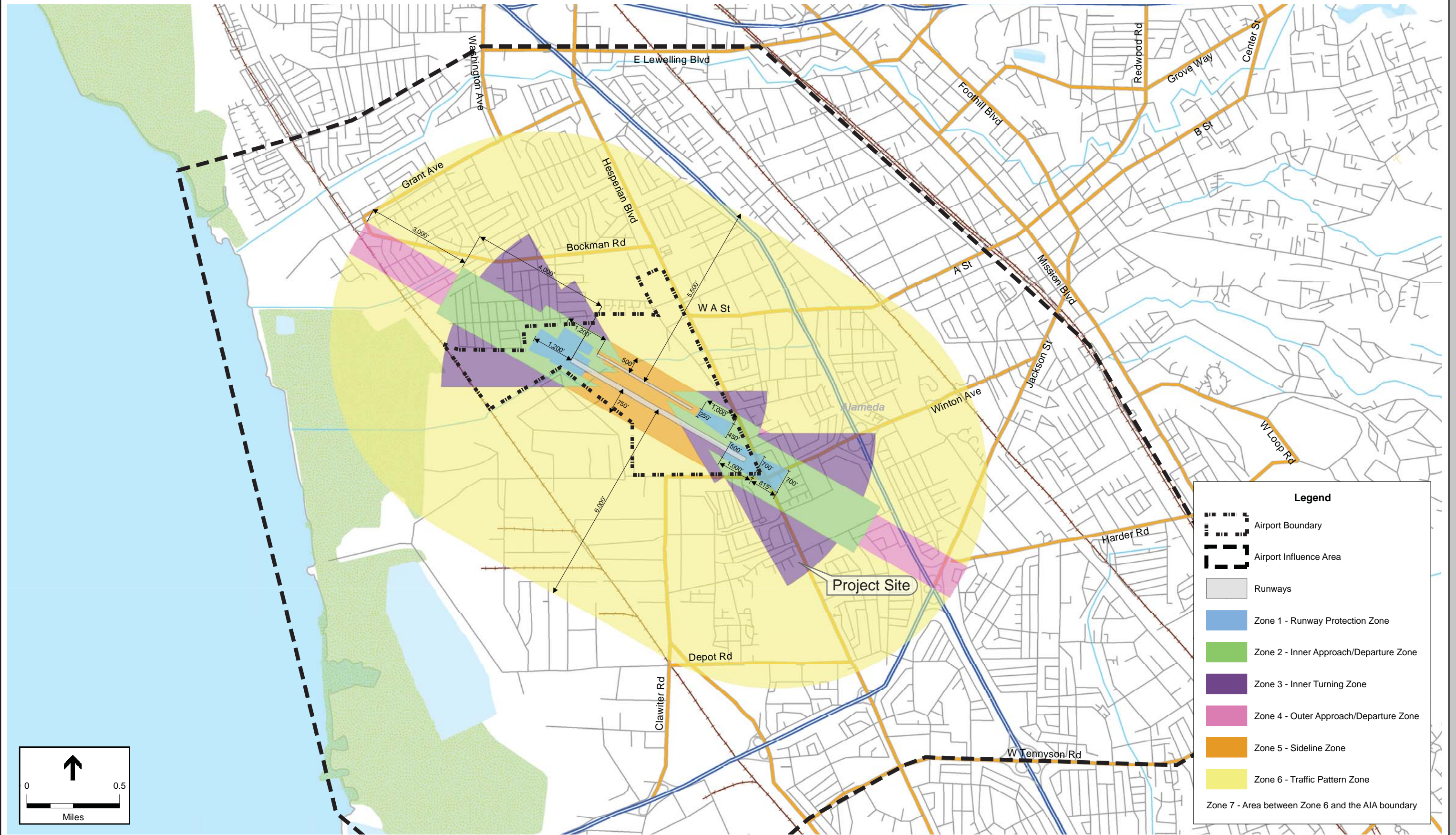
Airports

The Hayward Executive Airport is approximately 0.6 miles northwest of the project site. The Oakland International Airport is approximately 8 miles northwest of the project site. The project site is within the Airport Influence Area (AIA) for both the Hayward Executive Airport and the Oakland International Airport.

The project site is located within Safety Zone 3 – Inner Turning Zones for the Hayward Executive Airport (refer to Figure 4.8-1, below). The Airport Overlay Zone Ordinance of the City of Hayward requires that new single-family residential development in Safety Zone 3 shall not exceed nine (9) dwelling units per acre.

According to the Hayward Executive Airport Land Use Compatibility Plan (ALUCP), new dwelling units are not recommended within Safety Zone 3. However, due to the existing urban nature of the surrounding environs and the existing residential land uses, infill may be allowed up to an average of the surrounding residential use if it meets the safety criteria detailed in the Hayward Executive ALUCP (refer to *Section 4.8.2.4*, below).

In 2014, the City adopted the 2040 Hayward General Plan which was deemed consistent with the Airport Land Use Compatibility Plan (ALUCP). In June 2017, the City of Hayward City Council approved Ordinance No. 17-10, amending the Hayward Municipal Code to establish new airport overlay ordinance. Pursuant to HMC Section 10-6.20, only zoning amendments or other actions that impact density or intensity of development within the Airport Overlay Zone shall be referred to the Airport Land Use Commission for a determination of compatibility with the ALUCP. Because the proposed development is within the density envisioned by the General Plan (maximum of 8.7 units per acre), it is consistent with the ALUCP and does not require review or referral to the ALUC.



Source: Hayward Executive Airport Land Use Compatibility Plan

SAFETY COMPATIBILITY ZONES

FIGURE 4.8-1

Wildland Fire Hazards

According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located in a fire hazard zone or the Wildland Urban Interface, as identified by the Hayward Fire Department, which is defined as the hill area south of D Street and east of Mission Boulevard.

4.8.2.4 *Applicable Plans, Policies, and Regulations*

Resources Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), initially authorized in 1976, gives the U.S. EPA the authority to control hazardous waste from “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled the U.S. EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) regulates hazardous waste, remediation of existing contamination, and evaluates procedures to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning. From these laws and regulations, DTSC develops guidelines and regulations that define what those who handle hazardous waste must do to comply with the laws. These rulemakings are subject to public review and comment.

Government Code §65962.5 (Cortese List)

Section 65962.5 of the Government Code requires the California Environmental Protection Agency (Cal EPA) to develop and update (at least annually) a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and the Department of Resources Recycling and Recovery (CalRecycle).

Based on a Phase I report prepared by *ENGEO, Inc.*, the project site is not included on the hazardous materials sites list compiled per Government Code (Section 65962.5).

Federal Aviation Regulations, Part 77

Federal Aviation Regulations, Part 77, “Objects Affecting Navigable Airspace” (referred to as FAR Part 77), requires that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport’s runways, or which would otherwise stand at least 200 feet in height above ground. For the project site, any structure exceeding 202 feet in height above ground would require submittal to the FAA for airspace safety review. As the proposed project would be approximately 73 feet in amsl height, notification to the FAA would not be required.⁴

Hayward Executive Airport Land Use Compatibility Plan

The proposed project is within Safety Zone 3 – Inner Turning Zones, and thus is restricted in density and development size as defined in the Hayward Executive ALUCP. A parcel can be considered for infill development if it meets all of the following safety criteria plus the applicable provisions below:

- The parcel size is 20 acres or less.
- The site is at least 65% bound (disregarding roads) by existing uses that are similar to, or more intensive than, those proposed.
- The proposed project would not extend the perimeter of the area defined by the surrounding, already developed, incompatible uses.
- Further increases in the density, intensity, and/or other incompatible design or usage characteristics (e.g., through use permits, density transfers, addition of second units on the same parcel, height variances, or other strategy) are not included.
- The area to be developed cannot previously have been set aside as open land in accordance with open land policies presented in the ALUCP unless replacement open land is provided within the same compatibility zone.

City of Hayward General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to hazards and hazardous materials and are applicable to the proposed project.

City of Hayward Relevant Hazardous Materials Policies

Policy NR-6.15	The City shall encourage private property owners to plant native or drought-tolerant vegetation in order to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.
Policy LU-18.1	The City shall maintain its status as a Certified Unified Program Agency and implement the City’s Unified Hazardous Materials and Hazardous Waste Management Program, which includes: <ul style="list-style-type: none">• Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans - HMBP);• California Accidental Release Prevention (CalARP) Program;

⁴ The existing elevation of the site is 43 feet above mean seal level, and the proposed project height in approximately 30 feet. Therefore, the total height of the proposed residences would not exceed 73 feet in height above mean sea level.

City of Hayward Relevant Hazardous Materials Policies

- Underground Storage Tank (UST) Program;
- Above-ground Petroleum Storage Act (APSA) Program, including Spill Prevention, Control, and Countermeasure (SPCC) Plans;
- Hazardous Waste Generator Program;
- On-site Hazardous Waste Treatment (Tiered Permit) Program; and
- California Fire Code Hazardous Material Management Plans (HMMP) and Hazardous Materials Inventory Statements (HMIS).

Policy SE-4.6 The City shall require site investigations to determine the presence of hazardous materials and/or waste contamination before discretionary project approvals are issued by the City. The City shall require appropriate measures to be taken to protect the health and safety of site users and the greater Hayward community.

4.8.3 Impacts Discussion

a, b, d) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to [Government Code Section 65962.5] and, as a result, would it create a significant hazard to the public or the environment?

Lead and Asbestos Building Materials

The project site has been residential since circa 1920. Redevelopment of the proposed project will require the demolition of the two-story single-family residence and detached garage structure on the site, which may contain asbestos building materials and/or lead-based paint. In conformance with State and Local laws, a pre-demolition survey, and possible sampling, will be conducted prior to the demolition of the building to determine the presence of asbestos-containing materials and/or lead-based paint. The project will be required to implement the following measures in conformance with existing regulations:

- Asbestos is regulated as a hazardous air pollutant and as a potential worker safety hazard. The Bay Area Air Quality Management District's (BAAQMD) Regulation 11 and the California division of Occupational Safety and Health (Cal/OSHA) regulations restrict asbestos emissions from demolition and renovation activities and specify safe work practices to minimize the potential for release of asbestos fibers.
- Fluorescent light ballasts may contain PCBs, and if so, are regulated as hazardous waste and must be transported and disposed of as hazardous waste.
- Cal/OSHA standards establish a maximum safe exposure level for types of construction work where lead exposure may occur, including demolition of structures where materials containing lead are present; removal or encapsulation of materials containing lead; and new construction, alteration, repair, or renovation of structures with materials containing lead.

- Lighting tubes typically contain concentrations of mercury that may exceed regulatory thresholds for hazardous waste and, as such, must be managed in accordance with hazardous waste regulations. Elemental mercury also can be found in many electrical switches which also must be managed in accordance with hazardous waste regulations.

Demolition done in conformance with these federal, State and local laws and regulations, will avoid significant exposure of construction workers and/or the public to asbestos and lead-based paint.

Soil Contamination

The proposed single-family development would not involve the transport, use, storage or disposal of reportable quantities of hazardous materials. Residents would likely use and store small quantities of household hazardous wastes (i.e., ammonia, paints, oils) which would not be considered significant. During construction, the project may store fuels and chemicals used in the construction of the proposed buildings. Temporary use of fuels and other chemicals associated with construction on the site and residential use of small quantities of hazardous materials would not result in a significant hazard to the public or environment.

Based on a Soil Management Plan (SMP) prepared by *ENGEO, Inc.* in February 2016, the project would require implementation of appropriate measures for the excavation and management of impacted soil that might be encountered during grading activities on-site. Exposure to impacted soils by construction workers, students at Chabot College, or nearby residents has the potential to cause lead or asbestos-related illnesses if impacted soils disperse to neighboring properties by means of wind or construction activities.

Impact HAZ – 1: Contaminated soil on-site may be encountered during grading and excavation activities on the property.

Mitigation Measures: The following mitigation measures would reduce impacts induced by contaminated soils to a less than significant level:

MM HAZ – 1.1: *Field Monitoring.* ENGEO shall provide as-needed testing and observation services during excavation work. Soil encountered during construction activities will be observed for discoloration/staining or olfactory evidence of contaminant impacts. In addition, a Photoionization Detector (PID) will be available for use as necessary to further screen soils for potential contaminants, as well as check ambient air during the excavation work. If considered necessary, the locations of air monitoring will be field-adjusted based on potential access and safety limitations, but will commonly include the excavation area, along with the perimeter of the excavation. PID readings will generally be taken whenever suspect material is encountered.

MM HAZ – 1.2: *Health and Safety Plan.* The initial Personnel Protection Equipment (PPE) will be Level D (modified) which includes safety glasses, hard hat, steel-toed boots, gloves, hearing protection and high visibility vests. In the unlikely event significant unforeseen environmental conditions are discovered, work will stop and City of Hayward will be contacted.

MM HAZ – 1.3: *Soil Excavation and Stockpile Management.* Impacted soils will be excavated, stockpiled onsite, covered with 10-mil plastic sheeting and secured to prevent dust or runoff during storm events. Appropriate dust control and stormwater best management practices (BMPs) will be implemented during the soil mitigation activities. For disposal, soil is determined to be non-hazardous or hazardous based on the soluble threshold limit concentrations (STLC). The soil stockpiles will be profiled in accordance with the relevant regulations and the receiving facility's requirements. The specific laboratory profile will be determined at the completion of the excavation activities based on the requirements of the offsite landfill or receiving facility; however, it is anticipated as a minimum, the stockpile samples will be analyzed for CAM 17 Metals.

MM HAZ- 1.4: *Confirmation Sampling.* Where the currently known lead impacted soil is identified, the soil will be removed with discrete soil samples recovered from the base and from each of the sidewalls of the excavation for laboratory testing to check for lead. If the confirmation samples report concentrations exceeding applicable residential screening levels according to the DTSC or RWQCB standards, additional material will be excavated with subsequent confirmation sampling and testing. The process will continue until concentrations are below residential screening levels. Soil samples will be retrieved using a hand sampler with two-inch by six-inch stainless steel liners. During sampling, retrieved soils will be screened for visual and olfactory evidence of impact as well as with a photoionization detector (PID). The sample liners will be sealed using Teflon® sheets secured by tight-fitting plastic end caps. Upon collection, a label will be placed on the sample including a unique sample number, sample location, time/date collected, and the sampler's identification. The soil samples will be placed in an ice-cooled chest and submitted under documented chain-of-custody to a State-certified testing laboratory.

MM HAZ- 1.5: Submittal of Confirmation Letter shall be prepared by a qualified professional confirming that the sampling was conducted as directed in the above MM HAZ-1.4 and that soil remediation is complete.

With the implementation of the above mitigation measures, the proposed project would have a less than significant impact on the exposure of hazardous materials. **(Less Than Significant Impact With Mitigation)**

The project is not located on a site which is included on a list of hazardous materials sites. According to the Phase I and Phase II Environmental Site Assessments, the property has been residential since the 1920s and thereby does not create a significant hazard to the public or environment. **(Less Than Significant Impact)**

- c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Chabot College is located approximately 200 feet south of the project site. Future residents on-site would likely use and store small quantities of household hazardous wastes (i.e., ammonia, paints, oils) which would not be considered significant. Therefore, the proposed residential uses would not use or emit significant quantities of hazardous materials that would have an impact on Chabot College. **(Less Than Significant Impact)**

- e, f) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

The project site is located within the Airport Influence Area (AIA) the Oakland International Airport and the Hayward Executive Airport. Although the project site is within both the Oakland International Airport and the Hayward Executive Airport AIA, the Oakland International Airport is approximately eight (8) miles northwest of the site and therefore does not restrict the project's height limitations or density allowances.

As described above in *Section 4.8.2.3* and *4.8.2.4*, the proposed project would meet the applicable criteria required for infill development as defined by the Hayward Executive ALUCP. According to an aeronautical map published in the Hayward Executive ALUCP, the project site cannot exceed maximum building heights above 202 feet above mean sea level (amsl). The height of the proposed structures would not exceed 30 feet. Therefore, the total maximum allowable building height on the property would be approximately 73 feet in height amsl, which would not exceed the maximum allowable height of 202 feet according to the aeronautical map designation. Therefore, the project complies with the airport land use plan maximum allowable height limitations and would not result in any hazard associated with airport operations.

According to the AOZ Ordinance, the applicant would be required to apply for an FAA Form 7460 (per proposed HMC Section 10-6.40(a)(1)). In addition, all properties would be required to have a notice on the deed related to aircraft overflight notices (proposed HMC Section 10-6.60). Proposed development of undeveloped land contiguous to, and surrounded by, existing land uses ("infill") shall be subject to the approval of the Development Services Director, in accordance with the following criteria: (1) whether the proposed development is

a conforming or nonconforming use; (2) size of the parcel proposed for infill; (3) the extent to which the parcel is bounded by uses of similar type and dimension, so as not to extend the perimeter of incompatible uses; (4) the density and intensity of the uses proposed for development; and (5) applicable development conditions to be imposed (e.g., aviation easements).

Therefore, the project would be required to meet the provisions of the AOZ Ordinance and the Hayward Executive ALUCP and impacts would be less than significant. **(Less Than Significant Impact)**

The project is not located in the vicinity of a private airstrip. Therefore, private airstrip uses would not be a hazard to people working or residing on the project site. **(No Impact)**

- g) *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

The project would not interfere with an adopted emergency response plan or emergency evacuation plan. The project has an ingress and egress driveway on Sangamore Street. **(No Impact)**

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is not located in a fire hazard zone or the Wildland Urban Interface. **(No Impact)**

4.8.4 **Conclusion**

With the implementation of the above mitigation measures, the proposed project would not have a significant impact on hazardous materials. **(Less Than Significant Impact With Mitigation)**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,15
h) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,15
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,15
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

4.9.2 **Existing Setting**

4.9.2.1 ***Hydrology and Water Quality***

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Under existing conditions, the project site consists of a single-family home and detached garage, and a gravel driveway. Runoff from the site could contain sediment, fertilizers, and pesticides from landscaped areas, and metals, trash, oils and grease from the paved areas.

4.9.2.2 ***Surface Water***

The project site is located within an area described as the Alameda Creek Watershed. The Alameda Creek Watershed consist of a 600-square-mile area. Surface runoff from the project site is conveyed to the City's storm drainage system and ultimately flows to the San Francisco Bay.

The project site is minimally developed with a single-family residence, detached garage, and driveways, which equates to approximately 3,125 square feet of impervious surfaces. Runoff from the site flows to 18-inch storm drain lines in Sangamore Street.

4.9.2.3 ***Groundwater***

The City of Hayward is located in the Santa Clara Valley Groundwater Basin. Two sub basins coincide with the land within its boundaries: the East Bay Plain Sub basin and the Niles Cone Sub basin. The Niles Cone Sub basin corresponds with southern portions of Hayward, and is bisected by the Hayward fault. The Hayward fault is relatively impermeable and impedes groundwater flow, as demonstrated by the varying water groundwater levels on either side. As part of the site investigation completed to evaluate potential soil and groundwater contamination from past uses, groundwater was encountered at depths of 18.5 to 20.5 feet below ground surface.

4.9.2.4 ***Flooding***

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, the site is located within Zone X, which is an area determined to be outside the 500-year floodplain and outside the 1% and 0.2% annual chance floodplains.

4.9.2.5 ***Other Hazards***

Dam Failure

The Association of Bay Area Governments (ABAG) compiles the dam failure inundation hazard maps submitted to the State Office of Emergency Services by dam owners throughout the Bay Area.

The City of Hayward also maintains dam inundation maps of their dam facilities. The Hayward Dam Inundation Area map shows that the project site is not located within a dam failure inundation zone.⁵

Sea Level Rise

The project site is located at an elevation of approximately 40 to 43 feet above sea level (ASL). The project site is not within a shoreline area vulnerable to projected sea level rise from global climate change of up to 55 inches.

Earthquake-Induced Waves and Mudflow Hazards

The site is not located near a large body of water, near the ocean, or in a landslide hazard zone, and therefore, is not subject to inundation by seiche, tsunami, or mudflow.

4.9.2.6 *Applicable Plans, Policies, and Regulations*

National Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The Federal Emergency Management Agency (FEMA) manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one in 100 (one percent) chance of being flooded in any one year based on historical data. As discussed in more detail in *Section 4.9.2.2 above*, the project site is not located in a 100-year floodplain.

City of Hayward Municipal Code

City of Hayward Municipal Code Chapter 9, Article 4, implements building standards to comply with the Cobey-Alquist Flood Plain Management Act (Water Code sections 8400 set seq.) and National Flood Insurance Program established pursuant to Federal law (42 U.S.C. section 4001 et seq.).

City of Hayward Municipal Code Chapter 10, Article 8, requires a permit for grading or clearing activities. Applicants must submit a description of the grading or clearing activities to take place, a site map or grading plan, an erosion or sediment plan, a work schedule, and other applicable materials.

City of Hayward Municipal Code, Chapter 11, Article 5, protects water quality by eliminating non-stormwater discharges, controlling illicit discharges, minimizing industrial and commercial pollutants, reducing municipal pollutants, improving construction site controls, and improving erosion control.

⁵ City of Hayward General Plan Background Report, Figure 9-5 Hayward Dam Inundation Areas. January, 2013.

City of Hayward General Plan

The City of Hayward General Plan includes policies applicable to all development projects in Hayward. The proposed project would be subject to conformance with the following General Plan policies, including the ones listed below.

Policies	Description
Policy NR-6.4	The City shall minimize grading and, where appropriate, consider requiring on-site retention and settling basins.
Policy NR-6.5	The City shall concentrate new urban development in areas that are the least susceptible to soil erosion into water bodies in order to reduce water pollution.
Policy NR-6.6	The City shall promote stormwater management techniques that minimize surface water runoff and impervious ground surfaces in public and private developments, including requiring the use of Low-Impact Development (LID) techniques to best manage stormwater through conservation, onsite filtration, and water recycling.

4.9.3 Impact Discussion

a, f) *Violate any water quality standards or waste discharge requirements? Otherwise substantially degrade water quality?*

The project would result in the disturbance of more than one acre of soil; therefore, prior to commencement of construction the applicant is required to obtain permit coverage under the Construction General Permit by filing a Notice of Intent (NOI) and a Storm Water Pollution Prevention Plan (SWPPP) with the State Water Resources Control Board (SWRCB). Implementation of construction Best Management Practices identified in the SWPPP would ensure the project would not substantially degrade water quality during construction.

The proposed project would also be subject to the county-wide Municipal Regional Permit (MRP) because it would add or replace more than 10,000 square feet of impervious surfaces. Stormwater on the site would be directed to the proposed bio-retention area in the eastern portion of the site for treatment. Treated stormwater exiting the bio-retention area would flow to an 18-inch storm drain line in Sangamore Street. Stormwater treatment provided by the bio-retention area would ensure water quality would not be substantially degraded. **(Less Than Significant Impact)**

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?*

The project would be connected to the existing City of Hayward's water supply and would not involve the use of on-site water wells and will not deplete groundwater supplies. According to the Phase I, a water supply well used for irrigation on the property still exists on the site. Improperly abandoned and unused wells can be prime sources for transferring contaminants from the upper to the lower aquifer.

Impact HYD – 1: The project site has a water supply well on-site which could result in long-term contribution of pollutants in the groundwater if improperly abandoned. **(Significant Impact)**

Mitigation Measure: The following mitigation measure will reduce impacts to groundwater from the on-site well to a less than significant level:

MM HYD – 1.1: The on-site well shall be abandoned with oversight from the Alameda County Public Works district. A well destruction permit shall be obtained from the ACPW and the well decommissioned prior to the issuance of building permits.

The project would increase the amount of impervious surfaces on the site; however, the site is not located in a groundwater recharge area and therefore would not interfere with groundwater recharge of water supply aquifers. Thus, there would be a less than significant impact with mitigation incorporated. **(Less Than Significant Impact with Mitigation)**

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on- or off-site?*

The project would not alter drainage patterns in that runoff from the primarily developed site flows overland towards the City storm drainage system. Under the proposed project, storm water runoff would be conveyed to an on-site bio-retention area for filtration prior to discharge into the City's storm drainage system. Therefore, the project would not alter the course of a nearby stream or river and modifications to the on-site drainage patterns would not result in substantial erosion or siltation on- or off-site. Thus, there would be a less than significant impact. **(Less Than Significant Impact)**

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or off-site?*

The 1.8-acre project site is developed with a 2,200 square-foot single-family residence and a 995 square-foot detached garage, for a total of approximately 3,195 square feet of impervious surfaces on-site. The proposed project would increase the amount of impervious surfaces to approximately 44,562 square feet on-site.

All drainage from the site is required to be treated and managed on-site before it enters the storm drain system to ensure that post-development runoff rates do not exceed pre-development runoff rates. Therefore, the existing drainage pattern of the site would not be altered and thereby runoff impacts would be less than significant. **(Less Than Significant Impact)**

- e) *Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The proposed project site was envisioned for single-family residential development in the General Plan. All drainage from the site is required to be treated before it enters the storm drain system and the project would limit runoff from the site so that there is no net increase compared to pre-development levels. The project would employ a stormwater control plan with the use of a bio-retention area and is not anticipated to exceed the City's storm drainage system capacity. Therefore, the project would have a less than significant impact. **(Less Than Significant Impact)**

- g, h) *Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Place within a 100-year flood hazard area structures which will impede or redirect flood flows?*

The project site is not located within a 100-year flood hazard area and, therefore, would not affect flood hazard areas in the City of Hayward. **(No Impact)**

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

According to the City's General Plan, the project site is not located in an area subject to inundation resulting from dam failure. **(No Impact)**

- j) *Result in inundation by seiche, tsunami, or mudflow?*

The project site is not located in a tsunami inundation area, an area subject to mudflow, nor would it be vulnerable to seiche because there are no nearby enclosed water bodies. **(No Impact)**

4.9.4 Conclusion

With the implementation of mitigation measure MM HYD-1.1, the proposed project would not result in significant impacts to hydrology and water quality. **(Less Than Significant Impact with Mitigation)**

4.10 LAND USE AND PLANNING

4.10.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.10.2 Existing Setting

The project site is located in an urban area of Hayward with residential development to the northwest, commercial uses to the northeast, and the campus of Chabot College to the south and southwest of the project site. The project site fronts on Hesperian Boulevard and Sangamore Street is located to the northwest of the project site.

The project site is currently developed with a single-family residence and a detached garage. The site is not located within an adopted habitat conservation plan or natural communities conservation plan.

4.10.2.1 *Applicable Plans, Policies, and Regulations*

General Plan Designation and Zoning

The project site is designated in the General Plan as *Low Density Residential*. This allows for the construction of detached single-family homes with a density of 4.3 to 8.7 dwelling units per acre. The *Low Density Residential* designation generally applies to suburban areas located throughout the Hayward Planning Area. Typical building types include single-family homes, second units, and ancillary structures. Typical lot sizes generally range from 5,000 to 10,000 square feet. However, Planned Developments may include the clustering of units on smaller lots to preserve common open space. Future changes to *Low Density Residential* areas are expected to be limited to additional residential development, building and landscaping improvements, and neighborhood enhancements that create more complete, walkable, and sustainable neighborhoods.

The project site is zoned in the RS (Single Family Residential) District. All uses permitted in the RS District include single-family dwellings, group homes of six or fewer residents, day care homes, or public agency facilities. The minimum lot sizes required by the RS District include 5,000

square feet for an interior lot, or 5,914 square feet for a corner lot. The project proposes to rezone the property to a Planned Development (PD) District to accommodate smaller lot sizes, generally ranging from 4,173 square feet to 5,129 square feet.

4.10.3 Impacts Discussion

a) *Physically divide an established community?*

The project site is located in a developed urban area with residential development to the northwest, commercial uses to the northeast, and the campus of Chabot College to the south of the project site. Implementation of the proposed project would result in the demolition of the existing single-family residence and detached garage and the construction of 13 single-family residences on the site. The layout and design of the project does not include any features that would physically divide the community (e.g., impeding roadways or sidewalks). Therefore, the project would not physically divide an established community. **(Less Than Significant Impact)**

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?*

According to the City's General Plan, the project site is designated as *Low Density Residential*, which allows for a minimum density of 4.3 to 8.7 dwelling units per acre. Approximately six of the proposed lots would include accessory dwelling units incorporated in the ground floor of the home which do not count as separate units for density calculation purposes pursuant to the HMC Section 10-1.2740 and in accordance with State Law. The project site has a density of approximately 7.2 units per acre, therefore it is consistent with General Plan.

The project site is currently zoned in the RS District. All uses permitted in the RS District include single-family dwellings, group homes of six or fewer residents, day care homes, or public agency facilities. The minimum lot sizes required by the RS District include 5,000 square feet for an interior lot, or 5,914 square feet for a corner lot. The project proposes to rezone the property to a Planned Development (PD) District to accommodate smaller lot sizes, ranging from 4,210 square feet to 5,129 square feet, and reduced setbacks from the standard RS District requirements.

The project would not result in a fundamental conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect (refer to prior discussion of Hayward Airport ALUCP in *Section 4.8 Hazardous Materials*). Therefore, the project would result in a less than significant land use impact. **(Less Than Significant Impact)**

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

The project site is not located within an adopted habitat conservation plan or natural community conservation plan. **(No Impact)**

4.10.4 **Conclusion**

The proposed project would not conflict with existing land use policies and therefore would not have a significant impact. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Result in the loss of availability of a known mineral resource that will 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"/>	1,2
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"/>	1,2

4.11.2 Impact Discussion

a, b) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The only State-designated mineral resource "sector" of regional significance in Hayward is the La Vista Quarry. All operations at the site have been terminated, and the Surface Mining Permit for the La Vista Quarry issued by Alameda County expired in 2008.⁶ The project site has been developed since the 1920s and there was previously no mineral resource recovery occurring on the site. Therefore, there would be no impact on mineral resources. **(No Impact)**

4.11.3 Conclusion

There would be no adverse impacts on mineral resources resulting from the proposed project. **(No Impact)**

⁶ City of Hayward General Plan EIR, page 9-2.

4.12 NOISE AND VIBRATION

The following discussion is based on a Traffic Noise Analysis prepared by *Illingworth & Rodkin, Inc.* in June 2017. A copy of this report is attached in Appendix E of this Initial Study.

4.12.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,16
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.12.2 Existing Setting

4.12.2.1 *Background*

Noise may be defined as unwanted sound. Acceptable levels of noise vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA.⁷ This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, different types of noise descriptors are used to account for this variability. Typical noise descriptors include maximum noise level (L_{max}), the energy-equivalent noise level (L_{eq}), and the day-night average noise level (L_{dn}). The L_{dn} noise descriptor is commonly used in establishing noise exposure guidelines for specific land uses. For the energy-equivalent sound/noise descriptor called L_{eq} the most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable.

Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Day/Night Average Sound Level, L_{dn} (sometimes also referred to as DNL), is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the nighttime between 10:00 p.m. and 7:00 a.m. The Community Noise Equivalent Level (CNEL) is a 24-hour A-weighted noise level from midnight to midnight after the addition of five dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

Construction Vibration

Construction operations are potential sources of substantial ground vibration depending on the distance from sensitive receptors, and the type of construction. Ground vibration from construction may consist of rapidly fluctuating motions or waves, which are also measured in decibels.⁸ The abbreviation “VdB” is used in this document for vibration decibels to reduce confusion with sound decibels.

Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for most humans. Perceptible vibration levels inside residences are attributed to the operation of heating and air conditioning systems, door slams and foot traffic. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside residences. The FTA criteria that interior vibration levels are evaluated against are presented in Table 4.12-1.

⁷ The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted, unless otherwise stated.

⁸ Decibels of ground vibration refer to peak vertical velocities of the floors of affected structures. In contrast, sound decibels refer to the time-averaged magnitudes of fluctuations in air pressure levels.

Table 4.12-1 Groundborne Vibration Impact Criteria			
Land Use Category	Groundborne Vibration Impact Limits (VdB re 1μ inch/sec, RMS)		
	Frequent Events¹	Occasional Events²	Infrequent Events³
Category 1 Buildings where vibration would interfere with interior operations	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴
Category 2 Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3 Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB
Notes: ¹ “Frequent Events” is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category. ² “Occasional Events” is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. ³ “Infrequent Events” is defined as fewer than 30 vibration events per day. This category includes most commuter rail branch lines. ⁴ This limit is based on levels that acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration limits. Ensuring low vibration levels in a building requires special design of HVAC systems and stiffened floors.			
Source: U.S. Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006, FTA-VA-90-1003-06.			

4.12.2.2 Existing Noise Conditions

The project site is bounded by Hesperian Boulevard to the east, Sangamore Street to the north, Chabot College to the south, and single-family residences to the west. Residential units proposed adjacent to Hesperian Boulevard (Lots 1 through 6) would have private outdoor use areas oriented toward the roadway. Future traffic noise levels in the rear yards of Lots 1 through 6 are calculated to range from 70 to 71 dBA L_{dn}. The proposed open space area (also functioning as a stormwater basin) would be depressed relative to the roadway elevation and exposed to noise levels of about 65 dBA L_{dn}.

The private outdoor use areas of residential units proposed along the site’s westernmost boundary (Lots 7 through 13) would be located over 260 feet from the centerline of Hesperian Boulevard and shielded by two intervening rows of residential units. Future traffic noise levels at the outdoor use areas of Lots 7 through 13 would be below 60 dBA L_{dn} assuming the shielding provided by the proposed noise barrier and residential units themselves.

The project site is located outside of the 65 dB CNEL noise contours for Hayward Executive Airport and Oakland International Airport.

4.12.2.3 *Applicable Plans, Policies and Regulations*

City of Hayward General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to noise and vibration and are applicable to the proposed project.

City of Hayward Relevant Noise and Vibration Policies

Policies	Description
Policy HAZ-8.1	The City shall strive to locate noise sensitive uses, (e.g., residences, schools, hospitals, libraries, religious institutions, and convalescent homes) away from major sources of noise.
Policy HAZ-8.2	The City shall require development projects in areas where they may be exposed to major noise sources (e.g. roadways, rail lines, and airport, or other non-transportation noise sources) to conduct a project level environmental noise analysis. The noise analysis shall determine noise exposure and noise standard compatibility with respect to the noise standards identified in Table HAZ-1 and shall incorporate noise mitigation when located in noise environments that are not compatible with the proposed use of the project. The study shall use Table HAZ-1 (Exterior Noise Standards for Various Land Uses) and Figure HAZ-1 (Future Noise Contour Map) to determine the potential noise exposure impacts, noise compatibility thresholds, and the need for mitigation. The City shall determine mitigation measures based on project-specific noise studies and may include sound barriers, building setbacks, the use of closed windows and the installation of heating and air condition ventilation systems, and the installation of noise attenuating windows and wall/ceiling insulation.
Policy HAZ-8.4	The City shall consider the visual impact of noise mitigation measures and shall require solutions that do not conflict with urban design goals and standards.
Policy HAZ-8.5	<p>The City shall require the design of new residential development to comply with the following noise standards:</p> <ul style="list-style-type: none"> <li data-bbox="431 1236 1416 1329">• The maximum acceptable interior noise level for all new residential units (single-family, duplex, mobile home, multi-family, and mixed use units) shall be an L_{dn} of 45 dB with windows closed. <li data-bbox="431 1373 1416 1499">• For project locations that are primarily exposed to aircraft, train, and BART noise, the maximum instantaneous noise level in bedrooms shall not exceed 50dB(A) at night (10:00 pm to 7:00 am), and the maximum instantaneous noise level in all interior rooms shall not exceed 55dB(A) during the day (7:00 am to 10:00 pm) with windows closed. <li data-bbox="431 1543 1416 1837">• The maximum acceptable exterior noise level for the primary open space area of urban residential infill and mixed-use projects (private rear yards for townhomes; and common courtyards, roof gardens, or gathering spaces for multi-family or mixed-use projects) shall be an L_{dn} of 70 dB. Urban residential infill would include all types of residential development within existing or planned urban areas (such as Downtown, The Cannery Neighborhood, and the South Hayward BART Urban Neighborhood) and along major corridors (such as Hesperian Boulevard). This standard shall be measured at the approximate center of the primary open space area. This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.

- Policy HAZ-8.17 The City shall maintain, implement, and enforce a community noise control ordinance to regulate noise levels from public and private properties, vehicles, construction sites, and landscaping activities.
- Policy HAZ-8.20 The City may require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.
- Policy HAZ-8.21 The City shall limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00am to 7:00pm Monday through Saturday and 10:00 am to 6:00 pm on Sundays and holidays).

City of Hayward Municipal Code

Hayward Municipal Code, Chapter 4, Article 1 (Public Nuisances) contains the City’s Noise Regulations (as amended by Ordinance 11-03, adopted March 22, 2011). The Regulations are applicable to all noise sources in the city limits, with the exception of Hayward Executive Airport, which is regulated separately under the City’s Airport Noise Ordinance (addressed separately in this section below); and from animals, which are administered under the City’s Animal Control Ordinance. The Regulations establish quantitative noise limits based on measured dBA for activities occurring on residential, commercial and industrial, and public property; noise from vehicles; construction, alteration of structures and landscaping activities. The Regulations also establish a separate and independent qualitative method of determining “unreasonable noise” emanating from private property. Categorical Exemptions to the Regulations are specified for certain activities or source categories, including Alarms and Warning Devices, Emergency Response Activities, Special Events, Generators Required for Medical Purposes and Power Outages, and so forth. In some cases, a permit from the City is required to qualify for an exemption.

4.12.3 Impacts Discussion

- a) *Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The Noise Element of the General Plan establishes 60 dBA CNEL as the maximum suggested exterior noise level for land uses that include single-family residences. Based on the noise measurements taken by *Illingworth & Rodkin Inc.* at the project site, the northeastern property line facing Hesperian Boulevard may experience noise levels up to 71 dBA CNEL. The primary common open space for the single-family residences would be located along the eastern portion of the site. The project would include an eight-foot tall perimeter masonry wall along the northeastern property boundary that reduces in height to six feet along a portion of the northern and southern property boundaries.

According to the Traffic Noise Analysis, an eight-foot wall would reduce noise levels along Lots 1 through 6 between 58 and 60 dBA, and reduce noise levels at the open space area to 58 dBA. This would meet the General Plan Policy HAZ-8.2 which states that the goal for noise attenuation for a single-family residence outdoor open space is 60 dBA. The wall would be setback approximately five feet from the back of sidewalk to allow for a landscaped buffer along Hesperian Boulevard.

Assuming typical construction methods, interior noise levels are approximately 15 dBA lower than exterior levels within residential units with the windows partially open and approximately 20 to 25 decibels lower than exterior noise levels with the windows closed. Based on the City's noise compatibility standards, typical construction methods would ensure interior noise levels in the proposed residences would be maintained at or below 45 dBA DNL. **(Less Than Significant Impact)**

- b) *Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?*

Construction of the proposed single-family development would not require pile driving or other significant vibration caused by construction activity. Therefore, the construction of the proposed development would not generate vibration levels that exceed limits defined by the City of Hayward. **(Less Than Significant Impact)**

- c) *Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

The proposed single-family residences would include air conditioning units that generate noise and residences also would result in some additional vehicle trips in the project area. Increased vehicle trips would not result in a significant increase in ambient noise levels as new traffic volumes from 13 single-family homes would be low compared to existing traffic volumes on Hesperian Boulevard and surrounding streets. In order to be considered a significant noise impact, roadway noise volumes must double for a perceptible noise increase of 3 dBA, which would not be achieved with the proposed 13 single-family residences.⁹ The proposed project air conditioning units will be designed to meet the City's 60 dBA L_{eq} noise levels at adjacent residential property lines. **(Less Than Significant Impact)**

- d) *Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Project implementation would result in intermittent short-term noise impacts resulting from construction-related activities. The nearest off-site sensitive receptors are located to the north and west of the project site, approximately 10 feet from the perimeter of the project site.

The General Plan Goal HAZ-8 and Policies HAZ-8.17, HAZ-8.20, and HAZ-8.21 establish the overall goal and intentions of the City with regards to construction-related noise. Policy HAZ-8.17 refers to a community noise control ordinance for the purposes of regulating community noise levels. The City has adopted Section 4-1.03.4 of the Municipal Code (Construction and Alteration of Structures; Landscaping Activities), which states that individual devices/pieces of construction equipment are not to exceed 83 dB at a distance of 25 feet from the source and 86 dB at any point of the property plane Monday through Saturday from 7:00 AM to 7:00 PM and Sundays from 10:00 AM to 6:00 PM, "unless otherwise provided pursuant to a duly-issued permit or a condition of approval." Policy

⁹ Traffic Noise Analysis. *Illingworth & Rodkin, Inc.* June 2017.

HAZ-8.21 establishes limits on construction noise-generating activities to the less sensitive times of the day, when people are less likely to be disturbed.

The construction schedule assumes that construction activity on the site would occur for 15 months, or an estimated 450 construction workdays. The demolition and site preparation and grading phase would take approximately three (3) months. The building construction phase would take approximately 12 months. Construction vehicle access to the site would be provided from Sangamore Street.

Temporary construction-related impacts would be reduced to a less than significant level via implementation of Best Management Practices (BMPs). BMPs are required at the time of building permit issuance for all development and would reduce any impacts of additional noise level exposure to less than significant levels. Such BMPs include requirements for construction vehicles and equipment to be properly muffled. Construction hours would be limited from 7:00 am to 7:00 pm Mondays through Saturdays, and 10:00 am to 6:00 pm on Sundays and holidays consistent with the City's Noise Ordinance.

The following Standard Measures will be implemented by the project to ensure impacts from construction noise are reduced to a less than significant level:

SM NV – 1.1: The project applicant shall incorporate the following practices into the construction documents to be implemented by the project contractor:

- Limit construction activity to the hours identified in the City's Noise Ordinance (10:00 am to 6:00 pm on Sundays and holidays and 7:00 am to 7:00 pm on all other days).
- Schedule highest noise-generating activity and construction activity away from noise-sensitive land uses, to the greatest extent possible.
- Equip internal combustion engine-driven equipment with original factory (or equivalent) intake and exhaust mufflers which are maintained in good condition.
- Prohibit and post signs prohibiting unnecessary idling of internal combustion engines.
- Locate all stationary noise-generating equipment such as air compressors and portable generators as far as practicable from noise-sensitive land uses.
- Utilize "quiet" air compressors and other stationary equipment where feasible and available.
- Designate a noise disturbance coordinator who would respond to neighborhood complaints about construction noise by determining the cause of the noise complaints and require implementation of reasonable measures to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site.
- The project sponsor shall designate a "disturbance coordinator" for construction activities. The coordinator would be responsible

for responding to any local complaints regarding construction noise and vibration. The coordinator would determine the cause of the noise or vibration complaint and would implement reasonable measures to correct the problem.

- The construction contractor shall send advance notice to neighborhood residents within 300 feet of the project site regarding the construction schedule and including the telephone number for the disturbance coordinator at the construction site.

With the implementation of the following Standard Measure NV-1.1, the proposed project would reduce noise impacts to a less than significant level. **(Less Than Significant Impact)**

e, f) For a project located within an airport land use plan or, where such a plan has not yet been adopted, within 2 miles of a public use airport, would the project expose people residing or working in the project area to excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The Hayward Executive Airport is approximately 0.6 miles northwest of the project site. The Oakland International Airport is approximately 8 miles northwest of the project site. The project site is within the Airport Influence Area (AIA) for both the Hayward Executive Airport and the Oakland International Airport.

Although aircraft-related noise would occasionally be audible at the project site, the project site lies outside of the 65 dB CNEL contour for both the Hayward Executive Airport and Oakland International Airport, as established in the subsequent ALUCPs for both airports. In addition, the vehicular traffic noise levels measured at the project site exceed 65 dBA L_{dn}, therefore, any overhead aircraft noise would not be significant in relation to the existing, local traffic noise. **(Less Than Significant Impact)**

The project is not located within the vicinity of a private airport. **(No Impact)**

4.12.4 Conclusion

The proposed project, with the implementation of Standard Measure NV – 1.1, would ensure that construction noise impacts would be less than significant. **(Less Than Significant Impact)**

4.13 POPULATION AND HOUSING

4.13.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.13.2 Existing Setting

According to California Department of Finance 2016 Census data, Hayward’s population for 2016 was 158,985 persons.¹⁰ In 2016, there were 49,292 households with an average of 3.22 persons per household.¹¹

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The jobs/employed residents’ ratio for Hayward in 2010 was 1.06, which means that there were 1.06 jobs for every employed resident in the City.¹²

4.13.3 Impacts Discussion

a) *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The project site is developed with one single-family residence. Implementation of the project will create more housing by adding a net increase of 12 single-family residences and six

¹⁰ State of California, Department of Finance. E-1 Population Estimates for Cities, Counties, and the State—January 1, 2015 and 2016. January 2016. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>

¹¹ State of California, Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State—January 1, 2016. January 2016. Available at:

<http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>

¹² General Plan Draft Environmental Impact Report, page 385. February 2014.

accessory dwelling units. This increase in housing would result in a net increase in local population by approximately 47 residents.¹³ This minor increase in population associated with the project was assumed as part of the General Plan buildout, and would not induce substantial growth in the City of Hayward.

The project will provide a new private street to serve the new residences, however, the street would not connect to adjacent vacant property nor would the project include any additional infrastructure (water, sewer, storm utilities) that would be sized to serve development beyond the project itself. No infrastructure would be provided by the project beyond what is necessary to serve the project; the project would not remove an existing infrastructure capacity deficiency that serves as a constraint on growth. The infrastructure provided by the project would not connect to or otherwise facilitate development of the large vacant parcel to the south of the site. The project's impact due to population growth would be less than significant. **(Less Than Significant Impact)**

b, c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Construction of the proposed project would result in the demolition of a vacant, single-family residence. Since the existing residence is vacant and would therefore not displace any existing residents, the impact from loss of the current residence would be less than significant. The project adds 12 net residences to the site and six accessory dwelling units. **(Less Than Significant Impact)**

4.13.4 **Conclusion**

Implementation of the proposed project would result in a less than significant impact on the City's population and housing supply. **(Less Than Significant Impact)**

¹³ Based on the latest Department of Finance data, the average number of residents per household is 3.22. The average number of residents per accessory dwelling unit is 1.5. $3.22 \text{ residents per household} \times 12 \text{ net new units} = 38 \text{ residents}$. $1.5 \text{ residents per accessory dwelling unit} \times \text{six (6) accessory dwelling units} = \text{nine residents}$. $\text{Thirty-eight single-family residents} + \text{nine accessory dwelling unit residents} = 47 \text{ total net new residents}$.

4.14 PUBLIC SERVICES

4.14.1 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
- Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
- Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
- Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
- Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
- Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.14.2 Existing Setting

4.14.2.1 *Fire Service*

The City of Hayward is served by the Hayward Fire Department (HFD) which provides fire, paramedic advanced life support (ALS)/emergency medical (EMS), and emergency services to all areas within the City limits. The closest station to the project site is Station No. 6, located at 1401 W. Winton Avenue, approximately 1.4 miles north of the project site.

4.14.2.2 *Police Protection*

Police protection services for the project site are provided by the City of Hayward Police Department (HPD), which is headquartered at 300 West Winton Avenue, approximately 1.7 miles northwest of the project site. The Hayward Police Department employs over 190 sworn officers in a staff of approximately 300.

4.14.2.3 *Schools*

The project site is located within the Hayward Unified School District. Students in the project area would attend Eden Gardens Elementary School, Ochoa Middle School, and Mt. Eden High School. Eden Gardens Elementary School is located approximately 1.3 miles south of the project site. Ochoa Middle School is located approximately two miles southwest of the project site. Mt. Eden High School is located approximately two miles south of the project site.

4.14.2.4 *Parks*

The Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD) provide parks and recreation services in the City. HARD operates 57 parks within the City and provides 159.85 acres of local parkland, 36.71 acres of school parks, 91.74 acres of community parkland, 271.29 acres of districtwide parkland, 1,627 acres of regional parkland, and 145.7 acres of open space, trails, and linear parkland. Within the City of Hayward, there are currently (2012) 1.02 acres of local parkland per 1,000 residents, which is just above HARD's minimum standard for local parks (1.0 acres per 1,000 residents).

The nearest local park, Greenwood Park, is approximately 0.4 miles northwest of the project site.

4.14.2.5 *Libraries*

The City of Hayward library system includes the Main Library at 835 C Street (approximately 2.4 miles northeast of the site) and Weekes Branch Library (approximately 2.4 miles southeast of the site) at 27300 Patrick Avenue.

The City's General Plan does not identify a service ratio goal, or other performance standard for library services.

4.14.2.6 *Applicable Plans, Policies, and Regulations*

Government Code Section 65996

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities as the payment of a school impact fee prior to issuance of a building permit. California Government Code Sections 65995-65998, sets forth provisions for the payment of school impact fees by new development as exclusive means of "considering and mitigating impacts on school facilities that occur or might occur as a result of any legislative or adjudicative act, or both, by any state or local agency involving, but not limited to, the planning, use, or development of real property" [§65996(a)]. The legislation goes on to say that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA [§65996(b)]. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would mitigate project-related increases in student enrollment.

Quimby Act

The 1975 Quimby Act (California Government Code section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act states that the dedication requirement of parkland can be a minimum of three (3) acres per thousand residents or more, up to five (5) acres per thousand residents if the existing ratio is greater than the minimum standard. Revenues generated through in lieu fees collected and the Quimby Act cannot be used for the operation and maintenance of park facilities. In 1982, the Act was substantially amended. The amendments further define acceptable uses of or restrictions on Quimby funds, provide acreage/population standards and formulas for

determining the exaction, and require that the exactions must be closely tied (nexus) to a project's impacts as identified through studies required by CEQA.

City of Hayward General Plan

The Land Use and Community Character Element of the City's General Plan contain policies, recommendations, and actions to protect and enhance existing and future open space areas within the City. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including those listed below.

Policy	Description
Policy LU-1.3	The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.
Policy LU-3.1	The City shall promote efforts to make neighborhoods more complete by encouraging the development of a mix of complementary uses and amenities that meet the daily needs of residents. Such uses and amenities may include parks, community centers, religious institutions, daycare centers, libraries, schools, community gardens, and neighborhood commercial and mixed-use developments.

4.14.3 Impacts Discussion

4.14.3.1 *Fire and Police Protection Services*

Station No. 6 is closest to the project site and is located approximately 1.4 miles north of the site. Although construction of the proposed project may incrementally increase the demand for fire and medical services, the project would not require the construction or expansion of fire protection facilities as the proposed project site within City limits and was envisioned for residential development in the City's General Plan. The proposed project would be designed to comply with City requirements for fire access and onsite fire prevention facilities (e.g. fire hydrants and/or sprinkler systems). For these reasons, the project will have less than a significant impact and not require new or physically altered fire station facilities. **(Less Than Significant Impact)**

The police headquarters are located at 300 West Winton Avenue, approximately 1.7 miles northwest of the project site. The proposed project would not result in an increased demand for police services or require the expansion or construction of police facilities in that the development is a small infill project that was envisioned for the proposed development in the City's General Plan. The project's potential impact on police services would be less than significant and not require new or physically altered police facilities. **(Less Than Significant Impact)**

4.14.3.2 *Schools*

The proposed project would add 13 single-family residences and six accessory dwelling units on-site thereby increasing the potential number of school-aged children. According to a Demographic Report on Student Population Projections estimated between the fall of 2015 to 2021 for Hayward Unified School District, single-family detached units yield approximately 0.143 elementary school students, 0.033 middle school students, and 0.050 high school students. Using the student yield rates above, the proposed 13 single-family homes and six

accessory dwelling units would generate approximately three (3) elementary school students, one (1) middle school student, and one (1) high school student.

The students would attend Eden Gardens Elementary School, Ochoa Middle School, and Mt. Eden High School. Under Section 65996 of the State Government Code, payment of school impact fees established by SB 50 is deemed to constitute full and complete mitigation for school impacts from development. Developer(s) of new housing units are required to pay these school impact fees at the time of building permit issuance. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. Fulfillment of this requirement would mitigate the development of residential uses' impacts to schools to a less than significant level. **(Less Than Significant Impact)**

4.14.3.3 *Parks*

The City of Hayward provides and maintains parkland and open space within the City for residents and visitors to enjoy. The nearest park to the project site is Greenwood Park, located 0.4 miles northwest of the project site. Project residents would also have access to other open space and recreational facilities at nearby schools including Chabot College adjacent to the site, and Ochoa Middle School approximately one mile south of the site. Further, the proposed development will be required to park dedication fees in accordance with HMC Chapter 10, Article 16, Property Developers – Obligations for Parks and Recreation, which are intended to off-set impacts related to new development. **(Less Than Significant Impact)**

4.14.4 Conclusion

The proposed project would not have a significant impact on public services. **(Less Than Significant Impact)**

4.15 RECREATION

4.15.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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 will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
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 checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.15.2 Existing Setting

The Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD) provide parks and recreation services in the City. HARD operates 57 parks within the City and provides 159.85 acres of local parkland, 36.71 acres of school parks, 91.74 acres of community parkland, 271.29 acres of districtwide parkland, 1,627 acres of regional parkland, and 145.7 acres of open space, trails, and linear parkland. Within the City of Hayward, there are currently (2012) 1.02 acres of local parkland per 1,000 residents, which is just above HARD’s minimum standard for local parks (1.0 acres per 1,000 residents).

The nearest local park, Greenwood Park, is approximately 0.4 miles northwest of the project site. In addition, project residents would have access to substantial recreational space at nearby school facilities including Chabot College, and Ochoa Middle School.

4.15.3 Impacts Discussion

a, b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The City of Hayward provides and maintains parkland and open space within the City for residents and visitors to enjoy. Based on the latest US Census data for the City, it is estimated that the project would generate approximately 47 net new residents. The project residents would be served by existing parks in the project area and other open space and recreational facilities in the region. Project residents would also have access to other open space and recreational facilities at nearby schools including Chabot College adjacent to the site, and Ochoa Middle School approximately one mile south of the site.

It is not anticipated that the project’s incremental demand for park and recreational facilities in the area would result in the substantial, physical deterioration of existing park and

recreational facilities or require the expansion or construction of new facilities. The developer will be required to pay applicable park in-lieu fees; thus the impact is considered less than significant. Pursuant to HMC Section 10-16.30, collected fees shall be committed by the City Council for a specific park or recreational project to serve residents of the development. **(Less Than Significant Impact)**

4.15.4 Conclusion

The proposed project would not substantially deteriorate existing park facilities or expand recreational facilities that would adversely affect the existing environment. **(Less Than Significant Impact)**

4.16 TRANSPORTATION/TRAFFIC

4.16.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

4.16.2 Existing Setting

4.16.2.1 *Existing Conditions*

Roadway Network

Regional Access

Hesperian Boulevard is a four-lane to six-lane, north-south major arterial roadway that traverses the City. Land uses along Hesperian Boulevard include a mixture of commercial and residential.

West Street is a two-lane, east-west roadway that functions as a minor collector that connects Hesperian Boulevard to Clawiter Road.

Local Access

Sangamore Street is a two-lane, east-west residential street with parking allowed on both sides of the street and connects Yew Court to West Street.

Pedestrian and Bicycle Facilities

In the project vicinity, pedestrian facilities include sidewalks on both sides of Sangamore Street, Yew Court, and Hesperian Boulevard.

There are no designated bike lanes on Sangamore Street, Yew Court, or along the stretch of Hesperian Boulevard abutting the project site. However, there are designated Class II bike lanes on Depot Avenue and Clawiter Road approximately 0.5 miles south, and 0.7 miles west of the project site, respectively.

Transit Service

Alameda-Contra Costa Transit District (AC) Transit operates 20 bus routes in Hayward connecting the city north to San Pablo and south to Fremont through direct and connection services. AC Transit Route 22 provides bus service along Hesperian Boulevard to the Hayward and South Hayward BART stations, Mission Boulevard, and the Kaiser Permanente Hayward Medical Center seven days a week. Route S provides service during the weekdays in Hayward, San Lorenzo, and San Leandro.

4.16.3 Impacts Evaluation

- a, b) *Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

Redevelopment of the site with the proposed 13 single-family homes and six accessory dwelling units would result in additional traffic in the project vicinity. Based on the ITE's *Trip Generation* 9th Edition, the average daily trip generation rates for single-family residences are 9.52 trips per dwelling unit, and for townhouses/condominiums (assumed for the accessory dwelling units) are 5.81 trips per dwelling unit. Therefore, 12 (net new) single-family homes and six accessory dwelling units (as shown in Table 4.16-1) would generate approximately 149 net average daily vehicle trips, of which approximately 12 peak hour trips would result during the morning and 15 trips during the afternoon peak hour.¹⁴

¹⁴ The morning weekday peak hour is typically between 7:00 AM and 10:00 AM, and the evening weekday peak hour is typically between 4:00 PM to 7:00 PM. A peak hour is defined as the busiest 60-minute period sometime during the morning and evening peak hour windows.

Table 4.16-1					
Project Trip Generation Estimates					
	Dwelling Units/Rooms	AWDT¹	AM Peak Hour	PM Peak Hour	Weekday Daily Total
Existing Uses					
Single-Family Home	1	9.52	1	1	10
Proposed Uses					
Single-Family Home	13	9.52	10	13	124
Accessory Dwelling unit ³	6	5.81	3	3	35
Total Project Trips			13	16	159
Total Net Project Trips			12	15	149
Sources/Notes:					
¹ Average Weekday Daily Trip					
² Single-Family Detached Housing (210) rate					
³ Residential Condominium/Townhouse (230) rate					
ITE Trip Generation, 9 th Edition, fitted curve equations.					

Table 4.16-2				
Average Daily Trip Percentage Increase				
Roadway	Existing ADT	Project ADT	Existing + Project ADT	Percentage Increase
Yew Court/Sangamore Street	495	149	644	30%

According to Table 4.16-2, the existing average daily trip volume (ADT) on Yew Court/Sangamore Street is estimated to be approximately 495 trips. The proposed project would generate approximately 149 additional daily trips resulting in a total of 644 daily trips, or an increase of the daily traffic volumes on Yew Court/Sangamore Street by approximately 30 percent.

During the most heavily traveled hour in the weekday morning and afternoon commute period, referred to as the ‘peak hour’ (typically the most congested 60 minute period between 7AM-9AM and 4PM-6PM), the existing peak hour volumes on Yew Court/Sangamore Street are approximately 39 AM peak hour trips and 52 PM peak hour trips, respectively. This means currently during the busiest hour in the afternoon commute period, roughly a trip per minute occurs on Yew Court/Sangamore Street and during the morning peak hour a trip occurs every 1.5 minutes. The project, with 12 AM peak hour trips and 15 PM peak hour trips, would contribute an additional car every five minutes in the morning commute and every four minutes in the evening commute. With project traffic, the total morning peak hour volumes on Yew Court/Sangamore Street would be approximately 51 trips, or slightly less frequent than one car per minute. With project traffic, the total afternoon peak hour volumes

on Yew Court/Sangamore Street would be approximately 67 trips, or slightly more frequent than one car per minute.

Neither CEQA nor the City of Hayward have a threshold to evaluate the significance of changes in roadway volumes beyond level of service on small, local, and quiet residential streets. According to the Caltrans Highway Manual, a typical two-lane residential street such as Yew Court/Sangamore Street is designed to carry an average of approximately 1,500 vehicles over a 24-hour period. The current roadway volume on Yew Court/Sangamore Street is approximately 495 vehicles per day, which is substantially below the roadway capacity of 1,500 vehicles. The proposed project would add approximately 149 vehicles over a 24-hour period, increasing the overall daily roadway volume to 644 vehicles per day which is still well below the identified capacity. Thus, Yew Court/Sangamore Street would maintain a low volume to capacity ratio, and therefore remain a low volume, residential street.

With only 12 AM and 15 PM peak hour trips, the project is too small to warrant a traffic level of service analysis. The Congestion Management Program requires a traffic impact analysis when a project would result in 100 or more peak hour trips. The project, therefore, does not require a detailed traffic impact analysis to show conformity to the CMP. The project would not result in a conflict with any other adopted plan, ordinance, or policy related to the effectiveness of the circulation system. **(Less Than Significant Impact)**

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The project would not affect air traffic patterns in the vicinity of the site, as described previously in *Section 4.8 Hazardous Materials* of this document. **(No Impact)**

- d) *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?*

Development in accordance with City design standards will ensure that hazards due to a design feature would be avoided. The proposed private street would form the third leg of the Yew Court/Sangamore Street intersection. **(Less Than Significant Impact)**

- e) *Would the project result in inadequate emergency access?*

The residential development proposed on the site will be reviewed and approved by the Hayward Fire Department to ensure adequate emergency access. **(No Impact)**

- f) *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

The proposed project would not conflict with existing or planned multimodal transportation facilities or conflict with the City of Hayward's General Plan policies and regulations.

The project will include sidewalks and pedestrian access to Hesperian Boulevard to allow access to the bus stops and sidewalks to improve pedestrian and transit utilization. **(Less Than Significant Impact)**

4.16.4 Conclusion

The proposed project would not generate a substantial amount of new vehicle trips that would exceed the capacity of the street system serving the site, nor would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The project would not result in inadequate emergency access, nor change in air traffic patterns. **(Less Than Significant Impact)**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
e) 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"/>	1,2
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.17.2 Existing Setting

4.17.2.1 *Water*

Water service to the project site is provided by the City of Hayward. The City owns and operates its own water distribution system and purchases water from the San Francisco Public Utilities Commission (SFPUC). The City receives water through two aqueducts along Mission Boulevard and Hesperian Boulevard that have a total capacity of 32 million gallons per day (mgd).¹⁵ The aqueducts deliver potable water through a pressurized distribution system with over 360 miles of pipelines, 14 water storage reservoirs, seven pump stations, transmission system pressure regulating valves, numerous zonal pressure reducing valves, and two booster pump stations.

¹⁵ City of Hayward 2040 General Plan EIR. February 2014.

The water supplied to Hayward is predominantly from the Sierra Nevada, delivered through the Hetch-Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watershed and facilities in Alameda County.

There are existing water lines in Hesperian Boulevard and Sangamore Street. The existing house is served by an on-site well.

4.17.2.2 Storm Drainage

As discussed in *Section 4.9 Hydrology and Water Quality*, there is an existing 18-inch storm drain line in Sangamore Street. Storm drain lines in the project area are provided and maintained by the City of Hayward. Surface runoff from the project site is conveyed to the City's storm drainage system and ultimately flows to the San Francisco Bay.

4.17.2.3 Wastewater/Sanitary Sewer System

The City of Hayward owns and operates the wastewater collection and treatment system that serves almost all of the residential, commercial, and industrial users within the incorporated City limits, and limited portions of the adjacent unincorporated areas of Alameda County by contract. The City of Hayward Water Pollution Control Facility (WPCF) treats municipal wastewater and conveys it to the East Bay Dischargers Authority (EDBA) disposal facility. The EDBA disposes of the treated wastewater into the San Francisco Bay.

The City of Hayward 2015 Urban Water Management Plan estimates that Hayward collected and treated 10.1 mgd of wastewater.¹⁶ The Hayward WPCF is permitted to provide treatment for up to 18.5 million gallons per day (mgd), which is anticipated to be reached by 2035.

There is an existing eight-inch sanitary sewer line in Sangamore Street.

4.17.2.4 Solid Waste

The City of Hayward Department of Public Works, Utilities and Environmental Services Division, provides weekly garbage collection and disposal services through a Franchise Agreement with Waste Management of Alameda County (WMAC) for residential and commercial collection of recyclables.

Altamont Landfill is the designated disposal site in the City's Franchise Agreement with Waste Management, Inc. (WMI). In 2001 Altamont Landfill received County approval to increase capacity, adding 25 years to the life of the landfill and extending the expected closure date to the year 2040.

Hayward has exceeded the State population and employee per capita solid waste diversion targets of 50 percent established by Senate Bill (SB) 1016. When the Hayward City Council approved the current Franchise Agreement with WMAC in January 2015, the City set a goal of reaching 80% diversion by 2018.

¹⁶ City of Hayward Urban Water Management Plan. *Table 6-3: Wastewater Treatment and Discharge Within Service Area in 2015*. June 2016.

4.17.2.5 *Applicable Plans, Policies, and Regulations*

Assembly Bill 939

Assembly Bill 939 (AB 939) established the California Integrated Waste Management Board (now CalRecycle) and required all California counties to prepare integrated waste management plans. AB 939 required all municipalities to divert 50 percent of the waste stream by the year 2000.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupant.

City of Hayward General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects with the City. The following policies are specific to utilities and service systems and are applicable to the proposed project.

Policies	Description
Policy PFS-1.2	The City shall annually review and update the Capital Improvement Program to ensure adequate and timely provision of public facility and municipal utility provisions.
Policy PFS-1.4	The City shall, through a combination of improvement fees and other funding mechanisms, ensure that new development pays its fair share of providing new public facilities and services and/or the costs of expanding/upgrading existing facilities and services impacted by new development (e.g., water, wastewater, stormwater drainage).
Policy PFS-4.6	The City shall strive to adopt innovative and efficient wastewater treatment technologies that are environmentally-sound.
Policy NR-6.9	The City shall require water customers to actively conserve water year-round, and especially during drought years.
Policy NR-6.10	The City shall support efforts by the regional water provider to increase water recycling by residents, businesses, non-profits, industries, and developers, including identifying methods for water recycling and rainwater catchment for indoor and landscape uses in new development.
Policy NR-6.15	The City shall encourage private property owners to plant native or drought-tolerant vegetation in order to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.

Policy PFS-4.9 The City shall ensure the provision of adequate wastewater service to all new development, before new developments are approved, and support the extension of wastewater service to existing developed areas where this service is lacking.

4.17.3 Impact Discussion

a, b, e) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? 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?

Pursuant to the Federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the RWQCB regulates wastewater discharges to surface waters, such as San Francisco Bay, through the NPDES program. Wastewater permits contain specific requirements that limit the pollutants it discharges. As required by the RWQCB, the EDDBA monitors its wastewater to ensure that it meets all requirements. The RWQCB routinely inspects treatment facilities to ensure permit requirements are met.

Sewage from development on the project site would be treated at the WPCF and conveyed to the EDDBA for discharge to San Francisco Bay in accordance with the existing NPDES permit. The estimated total project demand for water is approximately 89 gallons per capita per day, for a net total of 4,183 GPD. The approximately 47 net new project residents would contribute an estimated additional average base wastewater flow of 3,556 GPD gallons per day (GPD).¹⁷

The flow from the proposed project would be conveyed to an existing eight-inch sanitary sewer line in Sangamore Street. The Hayward WPFC currently treats 10.1 mgd of wastewater and is permitted to provide treatment for up to 18.5 million gallons per day (mgd), which is anticipated to be reached by 2035. Therefore, the Hayward WPFC has adequate capacity to serve the project site. **(Less Than Significant Impact)**

c) Require or result in the construction of stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The 1.8-acre project site is developed with a 2,200 square-foot single-family residence and a 995 square-foot detached garage, for a total of approximately 3,195 square feet of impervious surfaces on-site. The proposed project would increase the amount of impervious surfaces to approximately 44,632 square feet on-site.

All drainage from the site is required to be treated and managed on-site before it enters the storm drain system to ensure that post-development runoff rates do not exceed pre-development runoff rates. The project would employ a stormwater control plan with the use of a bio-retention area and all site drainage would be treated before discharged into the storm

¹⁷ Wastewater demand is estimated as 85% of the total water demand, which is 3,382 GPD. Therefore, the wastewater GPD for residences is estimated to be 3,556 GPD.

drain system. The project would convey runoff from the site to an existing 18-inch storm drain line in Sangamore Street. Therefore, the existing storm drain system would continue to adequately serve the project site and the project would not require the construction of new or expanded storm drain facilities. **(Less Than Significant Impact)**

- d) *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

The water supplied to Hayward is predominantly from the Sierra Nevada, delivered through the Hetch-Hetchy aqueducts, but also includes treated water produced by the San Francisco Public Utilities Commission (SFPUC) from its local watershed and facilities in Alameda County. The City receives water through two aqueducts along Mission Boulevard and Hesperian Boulevard that have a total capacity of 32 million gallons per day (mgd). The aqueducts deliver potable water through a pressurized distribution system with over 360 miles of pipelines, 14 water storage reservoirs, seven pump stations, transmission system pressure regulating valves, numerous zonal pressure reducing valves, and two booster pump stations.

Although the project proposes an increased population on the project site, the project water demand has been accounted for in the City's Urban Water Management Plan, which is based on the City's General Plan. Based on water usage rates of approximately 89 gallons per capita per day (GPCD) for 50 new residents, which does not account for the existing single-family residence on-site since it is currently served by an on-site well, the project would utilize approximately an additional 4,450 GPD which can be conveyed in existing water lines available to the site and by existing supplies.¹⁸ **(Less Than Significant Impact)**

- f, g) *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Would the project comply with federal, state and local statues and regulations related to solid waste?*

Waste generation and disposal data for Hayward is maintained by CalRecycle. According to the CalRecycle, the total amount of solid waste landfilled in 2015 was 115,709 tons, which equals a solid waste generation rate of approximately 3.98 pounds per resident per day. Assuming this rate remains stable, the additional 47 residents projected under the proposed project would generate approximately 187 pounds (0.09 tons) of landfilled solid waste per day.¹⁹

The project would increase solid waste generation in the City by well less than one percent and therefore would not significantly impact landfill capacity. **(Less Than Significant Impact)**

¹⁸ Residential water demand: (89 gallons per capita per day) x (50 new residents) = 4,450 gallons per day.

¹⁹ CalRecycle Disposal Reporting System, available at www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx. Accessed April 27, 2017.

4.17.3.1 *Conclusion*

The proposed project would have a less than significant impact on utilities and service systems.
(Less Than Significant Impact)

4.18

MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a) Does the project have the potential to 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, 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"/>	Pgs. 16-109
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"/>	Pgs. 16-109
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"/>	Pgs. 16-109

4.18.1 Project Impacts

As discussed in the individual sections, the proposed project would not degrade the quality of the environment with the implementation of identified standard permit conditions and mitigation measures. The project includes mitigation measures to avoid or reduce biological resources, cultural resources, and noise impacts to a less than significant level.

As discussed in *Section 4.4 Biological Resources*, the project is located in an urban environment and would not impact sensitive habitat or species; however, nesting birds and retained trees may be affected during project construction if not adequately protected, and trees in new homes’ backyards will require maintenance to survive long-term.

There are no historic buildings on-site or in the immediate project vicinity as discussed in *Section 4.5 Cultural Resources*. However, the project requires implementation of appropriate standard measures if project construction encounters unknown buried archaeological resources. Therefore, the implementation of identified standard measures would ensure biological and cultural impacts related to the proposed residential development would be less than significant. **(Less Than Significant Impact with Mitigation)**

4.18.2 Cumulative Impacts

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects “that are individually limited, but cumulatively considerable.” As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

Because criteria air pollutant and GHG emissions would contribute to regional and global emissions of such pollutants, the identified thresholds developed by BAAQMD and used by the City of Hayward were developed such that a project-level impact would also be a cumulatively considerable impact. The project would not result in a significant emissions of criteria air pollutants or GHG emissions and, therefore, would not make a substantial contribution to cumulative air quality or GHG emissions impacts.

With the implementation of mitigation measures and standard permit conditions, residential development on the site would not result in significant geology and soils or hydrology and water quality impacts and would not contribute to cumulative impacts to these resources as they are specific to the site and immediate surroundings. Also, the project would not impact agricultural and forest resources or mineral resources and, therefore, the project would not contribute to a significant cumulative impact on these resources.

The project is located on an infill site in an urban area and therefore would not contribute to a cumulative impact on aesthetics, population and housing, public services, recreation, and transportation with the implementation of Municipal Code requirements. Therefore, the impact from the project would be a less than significant cumulative impact. **(Less Than Significant Cumulative Impact)**

4.18.3 Direct or Indirect Adverse Effects on Human Beings

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include Construction TACs, hazardous materials, and noise. However, implementation of mitigation measures, standard measures, and General Plan policies would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Cumulative Impact)**

Checklist Sources

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7. Hortscience. *Arborist Report*. January 26, 2018.
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9. Garavaglia Architecture. *Cultural Resources Assessment*. August 16, 2016.
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11. ENGEO, Inc. *Phase II Environmental Site Assessment and Visual Lead-Asbestos Survey*. February 3, 2016.
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15. County of Alameda. *FEMA Flood Zones*. Available at <http://msc.fema.gov/portal>. Accessed February 8, 2017.
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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Hayward

Leigha Schmidt, Senior Planner, AICP

6.2 CONSULTANTS

David J. Powers & Associates, Inc.

Environmental Consultants and Planners

Akoni Danielsen, Project Principal

Will Burns, Senior Project Manager

Tali Ashurov, Assistant Project Manager

Zach Dill, Graphic Artist

Illingworth & Rodkin, Inc.

Air Quality Consultants

Michael Thill, Principal