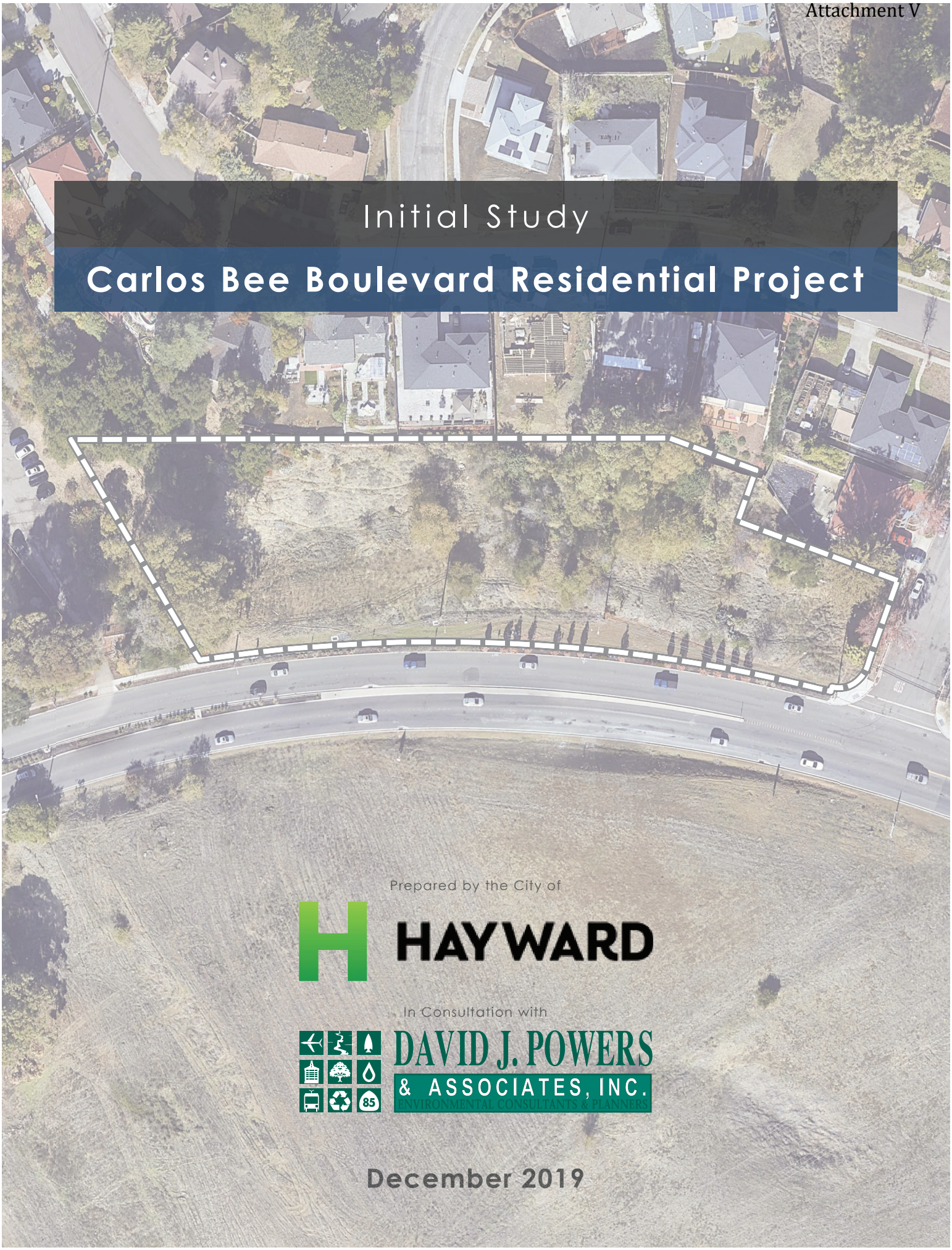


Initial Study

Carlos Bee Boulevard Residential Project

Prepared by the City of

HAYWARD

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

December 2019

TABLE OF CONTENTS

TABLE OF CONTENTS

Figures

Photos

Tables

Appendices

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 proposed residential development 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 develop a vacant, approximately 1.63-acre lot with nine single-family dwelling units and six accessory dwelling units. 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:

Leigha Schmidt, Senior Planner, AICP
Leigha.Schmidt@hayward-ca.gov
Development Services Department
Planning Division
City of Hayward
777 B Street,
Hayward, CA 94541

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 regularly scheduled Planning Commission and City Council meetings. 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

Carlos Bee Boulevard Residential Project

2.2 LEAD AGENCY CONTACT

Leigha Schmidt, AICP, Senior Planner
Development Services Department
Planning Division
City of Hayward
777 B Street,
Hayward, CA 94541

2.3 PROJECT APPLICANT

Ben Halali
Zalman Investments, LLC
4901 Rue Calais
San José, CA 95136

2.4 PROJECT LOCATION

The project is located at 25036-25096 Carlos Bee Boulevard, Hayward, CA 94542.

The project site is shown on the following figures:

Figure 2.4-1 Regional Map
Figure 2.4-2 Vicinity Map
Figure 2.4-3 Aerial Photograph and Surrounding Land Uses

2.5 ASSESSOR'S PARCEL NUMBER

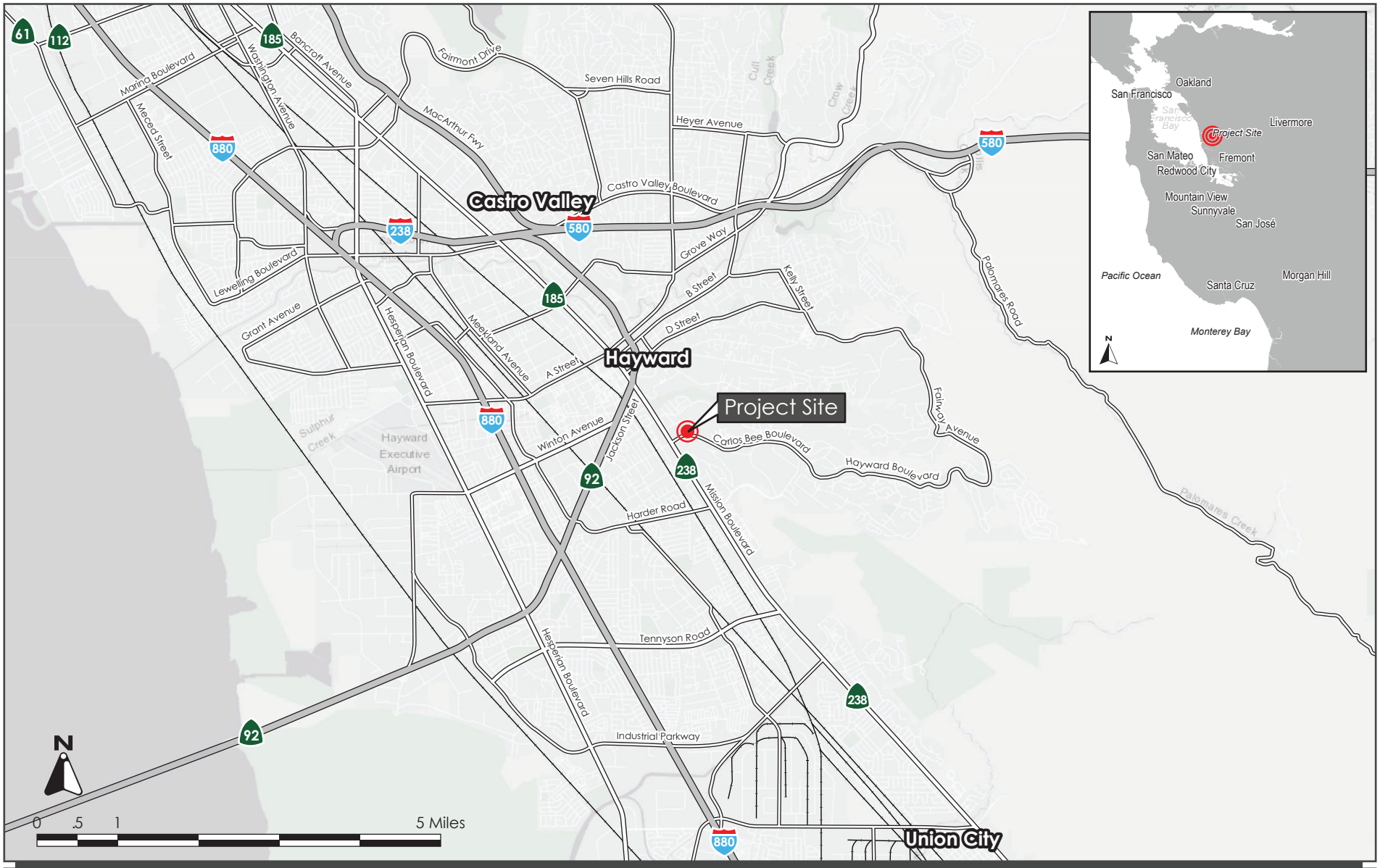
445-0170-039-13

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

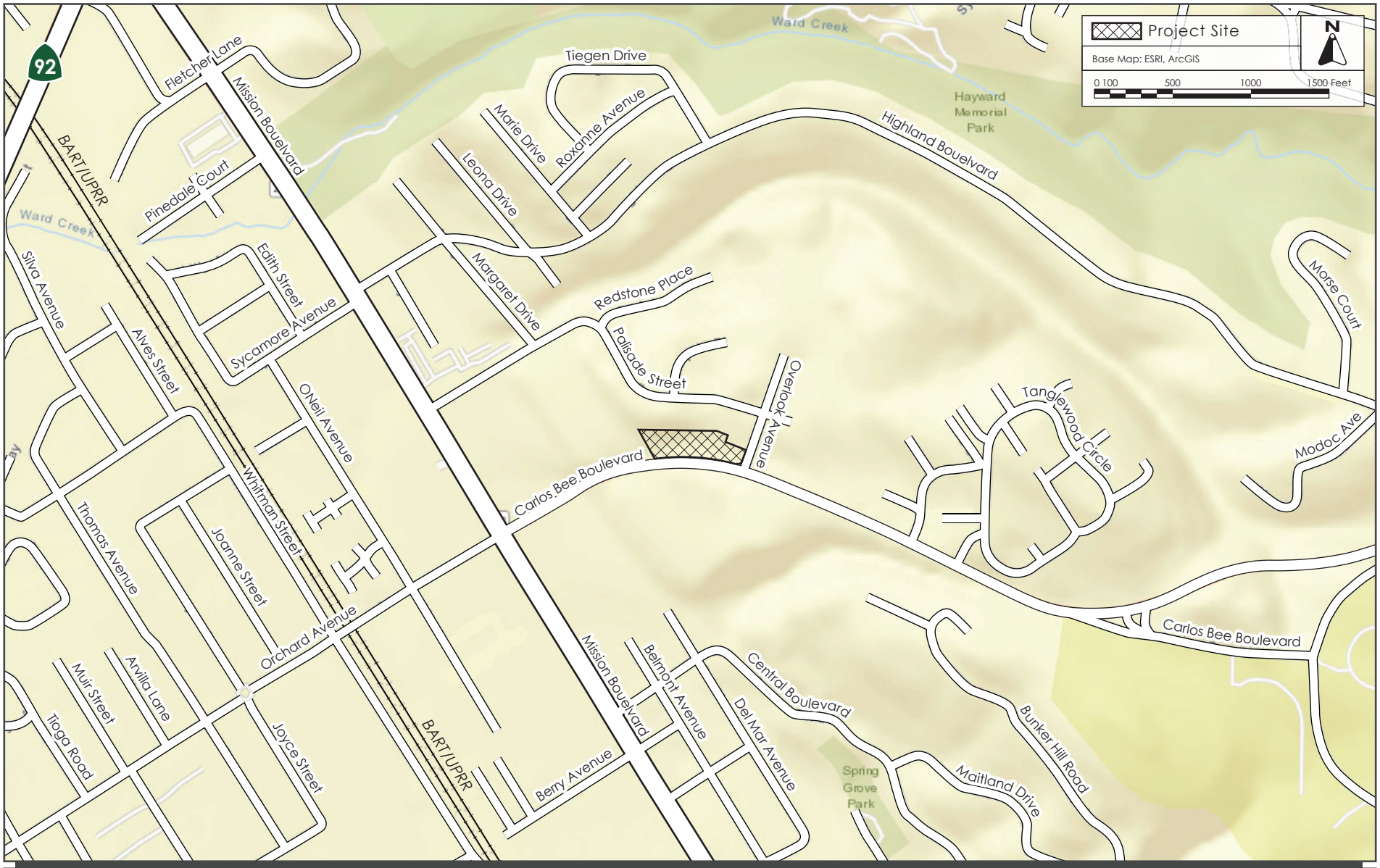
General Plan: Low Density Residential (LDR)
Zoning: Single-Family Residential (RSB6) with minimum 6,000 square foot lot District

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- Planned Development Rezoning
- Vesting Tentative Map for Condominium Purposes
- Site Plan Review
- Grading Permit
- Building Permit



REGIONAL MAP | FIGURE 2.4-1



VICINITY MAP | FIGURE 2.4-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.4-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING SITE

The approximately 1.63-acre project site consists of one parcel (APN 445-0170-039-13) that is located north of Carlos Bee Boulevard, east of Mission Boulevard, south of Palisade Street, and west of Overlook Avenue in the Hayward Hills. The site is currently undeveloped and consists of ruderal vegetation, open soil surfaces, mature shrubs and trees, and remnant building foundations. The site was previously developed with single-family residences, which were removed to accommodate the previously planned State Route 238 Corridor Bypass Freeway. The site slopes down at approximately 15 percent to the southwest. The Hayward Fault runs through the western portion of the site.

3.2 SURROUNDING USES

The project site is located in an urban area of Hayward surrounded by single-family residential uses to the north, east, and northwest, and Carlos Bee Boulevard and a vacant undeveloped lot to the south which is the site of a current application for an auto dealership. Silver Oak High School and the Eden Area YMCA are located approximately 250 feet west of the site. The properties bordering the site are designated *Low Density Residential* to the north and *Sustainable Mixed Use* to the east, west, and south in the City of Hayward 2040 General Plan.

3.3 PROPOSED DEVELOPMENT

The project proposes to construct a residential subdivision of nine single-family dwelling units. The development would be a mix of two- and three-story units with individual at-grade garages. Three of the units would be three-stories tall (Unit Type A), while six of the units would be two-stories tall (Unit Type B and C) and would include accessory dwelling units (ADUs).[1] The three-story units would have three bedrooms and four bathrooms and provide approximately 2,200 square feet of floor space. The two-story units would provide three bedrooms and two bathrooms in the main residence, and either one bedroom and bathroom (Unit Type B) or two bedrooms and one bathroom (Unit Type C) in the accessory dwelling units, for approximately 2,700 square feet of floor space. The accessory dwelling units would be located on the ground floor of Type B and C units and have separate entries from the main residences. The maximum height of the proposed homes would be 30 feet to the top of the roofline.

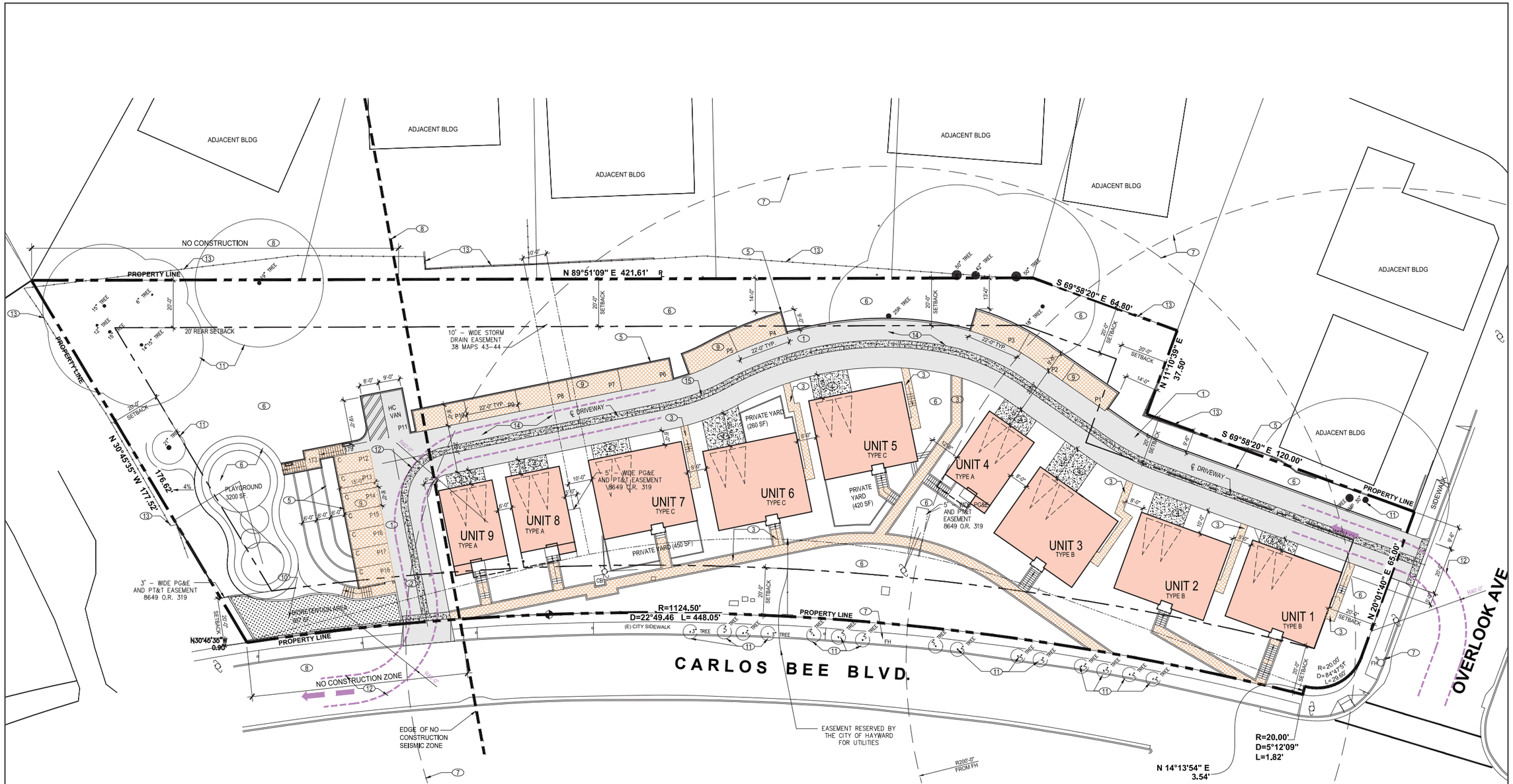
In total, the subdivision would provide 22,700 square feet of gross floor area and building footprints would occupy approximately 15 percent of the site. The proposed buildings would generally be setback 20 feet from the property lines. Approximately one-fourth of the western part of the site would be retained as open space due to its location within an earthquake fault zone.

The buildings would be designed in a contemporary style with pitched roofs and building pop-outs to break up the building form, particularly on the front and rear of the homes. The exterior building materials would include a mix of stucco siding and horizontal fiber cement siding, balconies with metal railings, vinyl windows, and doors with wood trim. Amenity space would be provided in the

[1] Accessory dwelling units are smaller, independent residential dwelling units located on the same lot as a stand-alone (i.e. detached) single-family home.

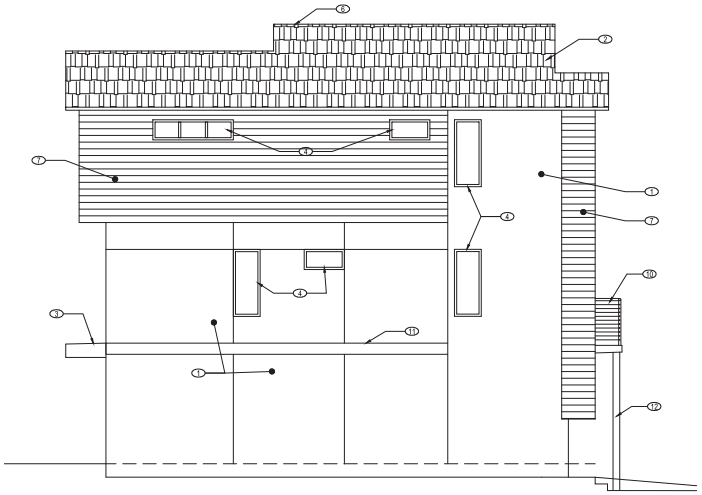
form of an approximately 3,200 square foot playground on the western portion of the site, and the yards fronting Carlos Bee Boulevard would have a decorative meandering pathway that would parallel the existing sidewalk. The proposed project's site plan is shown on the following page on Figures 3.2-1. Building elevations are shown on Figures 3.2-2 and 3.2-3.[2]

[2] It should be noted that Unit Types B and C have the same exterior elevations and are differentiated only by the number of bedrooms in the ADUs.

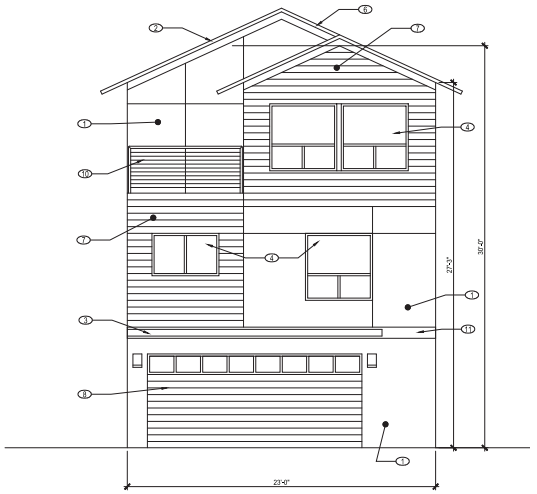


Source: Kodama Diseno Architects & Planners, 10/3/2019.

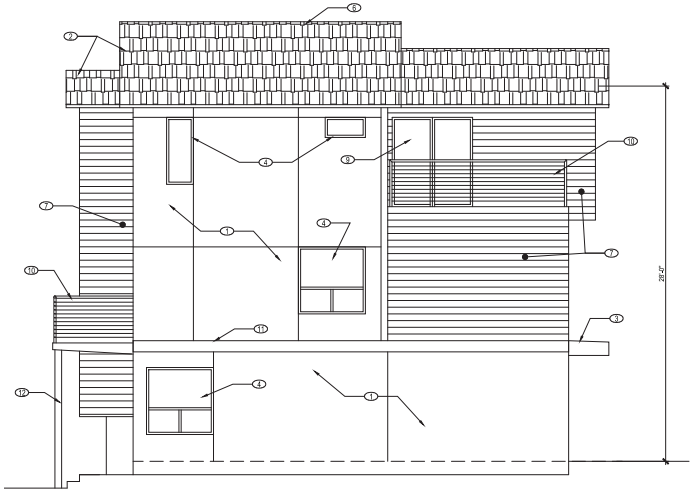
PROPOSED SITE PLAN | FIGURE 3.2-1



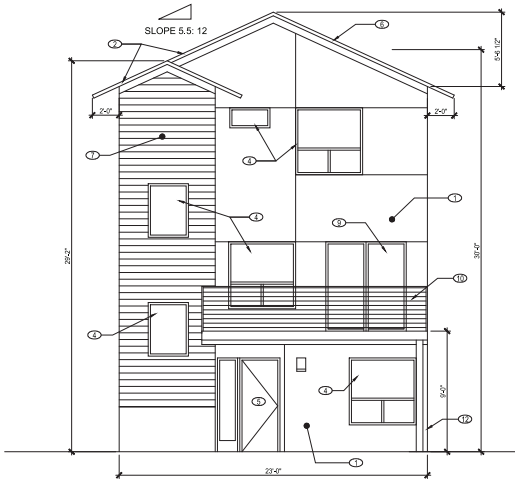
WEST ELEVATION (SIDE) - UNIT TYPE A



NORTH ELEVATION (REAR) - UNIT TYPE A



EAST ELEVATION (SIDE) - UNIT TYPE A

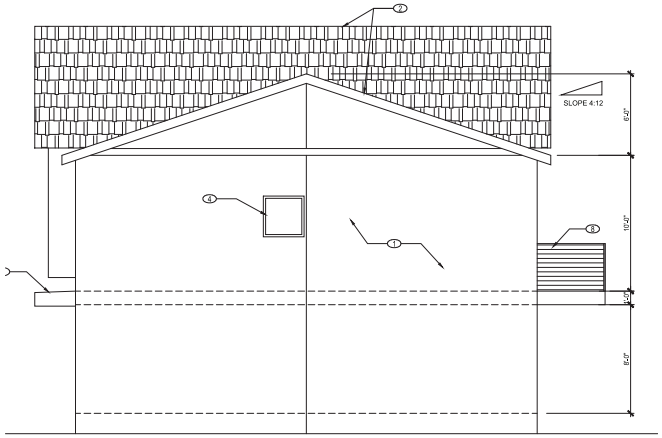


SOUTH ELEVATION (FRONT) - UNIT TYPE A

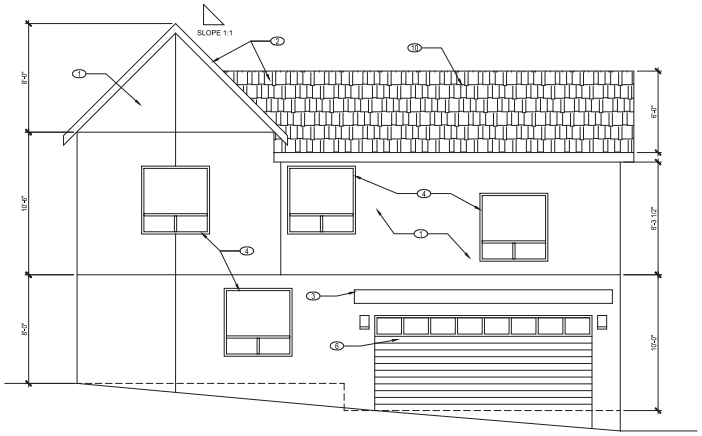
Source: Kodama Diseno Architects & Planners, 7/22/2019.

UNIT TYPE A BUILDING ELEVATIONS

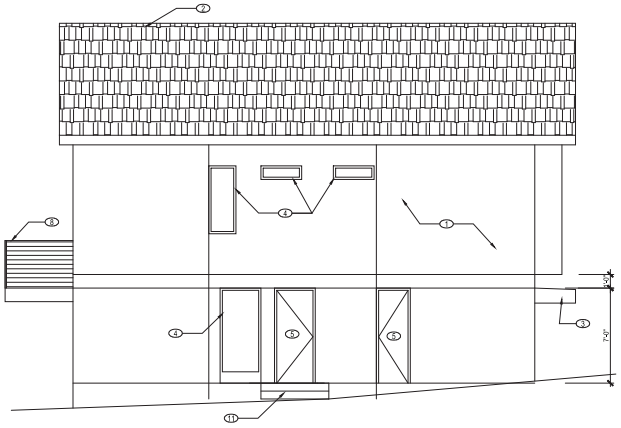
FIGURE 3.2-2



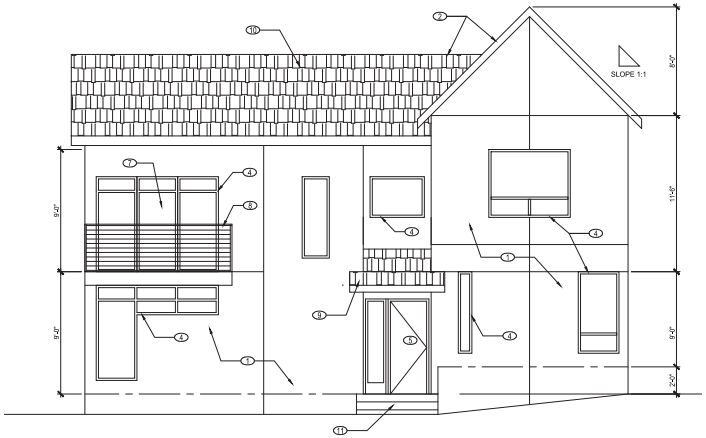
(N) WEST ELEVATION (SIDE) - UNIT TYPE B



(N) NORTH ELEVATION (REAR) - UNIT TYPE B



(N) EAST ELEVATION (SIDE) - UNIT TYPE B



(N) SOUTH ELEVATION (FRONT) - UNIT TYPE B

Source: Kodama Diseno Architects & Planners, 7/22/2019.

UNIT TYPE B & C BUILDING ELEVATIONS

FIGURE 3.2-3

3.3.1 Site Access and Parking

Vehicular access to the project site would be provided via a two-way driveway on Overlook Avenue and an emergency vehicle access on Carlos Bee Boulevard. The roadway would run along the rear of the site and would provide access to alley-loaded individual garages. The project would provide 18 garage parking spaces (two car garages for each single-family unit) plus 18 guest surface parking spaces on the western portion of the site and along the northern side of the roadway. Pedestrian access would be provided via paved pathways connecting the existing sidewalks on Carlos Bee Boulevard and Overlook Avenue to the interior of the site.

3.3.2 Landscaping

The project proposes new landscaping that would consist of primarily low to moderate water use trees, shrubs, and groundcover. A total of 84 trees on and adjacent to the site were surveyed as part of the project according to the Arborist Report prepared for the project (see Appendix B). Between 52 and 54 trees would be removed by the project (with 30-32 preserved depending on suitability and adjacency to construction), and 87 new trees would be planted on the site. Landscaped areas would be located along the site perimeter and intermittently throughout the site. Trees would be planted along the sidewalk on Carlos Bee Boulevard to provide visual screening of the residences.

3.3.3 Utilities

The proposed residences would be required to connect to the City's water, sewer, and storm systems and other public utilities fronting the property. The project proposes an on-site water main with connections to existing six-inch water mains along Overlook Avenue and Carlos Bee Boulevard and on-site sanitary sewer main with connection to existing eight-inch sanitary sewer main along Carlos Bee Boulevard. Stormwater runoff would be directed downslope to the proposed biotreatment area at the southwest corner of the site where it would be treated in compliance with Alameda County Cleanwater Program requirements prior to entering the City's 15-inch storm drain line in Carlos Bee Boulevard.

There are two utility poles on-site. These poles are within an existing PG&E utility easement which passes through the site from east to west. A natural gas main runs through the site adjacent to Carlos Bee Boulevard. No trees would be planted within 10 feet of the gas main. Additionally, a storm drain line in a 10-foot wide storm drain easement runs through the site from north to south and conveys runoff from the properties just north of the site on Palisade Street to the City's storm drain Carlos Bee Boulevard. All utility services to the proposed residences will be underground as a standard condition of approval of the development.

3.3.4 Construction

Construction of the project would last approximately eight months, beginning in 2020. The project would require grading, minor excavation, trenching, building construction, and paving. The project would disturb approximately 1.3 acres of land during construction. Soil would not be removed and/or added. Rather, the existing soil on-site would be distributed within the parcel.

The project would include a three-foot high retaining wall along the northern edge of the proposed internal roadway for slope stabilization. The existing fence and concrete wall at the northern property line would remain.

3.3.5 Green Building Measures

The project would be built in accordance with the most recent California Green Building Standards (CALGreen) Code, as adopted by the City. The project would include photovoltaic panels on the rooftops of select residential units as a Planned Development District amenity and condition of approval.

3.3.6 General Plan and Zoning Designation

The project site has a 2040 General Plan land use designation of *Low Density Residential*. This designation generally applies to suburban areas located throughout the Hayward Planning Area. Typical building types include detached single-family homes, second units, and ancillary structures. This designation allows residential densities between 4.3 and 8.7 dwelling units per net acre. The project proposes a residential density of 5.5 dwelling units per acre. No General Plan amendment is proposed.

The project site is zoned RSB6 (Single-Family Residential with minimum 6,000 square foot lot) District. This zoning designation supports the development of single-family homes on minimum 6,000 square foot lots and accompanying community services. The project proposes a Zone Change to Planned Development (PD) District to allow for detached single-family homes to be developed as condominiums on a common lot, thus eliminating the minimum lot and minimum setback requirements from property lines due to the steep slopes at the rear of the site and the difficulty in placing driveways along Carlos Bee Boulevard which is a high intensity vehicular roadway. The proposed PD District would not exceed the permitted density under the *Low Density Residential* General Plan designation.

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	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

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.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related 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 to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in Hayward. I-580, located just north of Hayward, is included in the California Scenic Highway Program as an eligible but not official designated State Scenic Highway. [3]

Local

City of Hayward General Plan

The Land Use and Community Character Element contains policies to reduce aesthetic impacts of new development in the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy LU-1.2	The City shall maintain and implement commercial, residential, industrial, and hillside design guidelines to ensure that future development complies with General Plan goals and policies.
Policy LU-3.7	The City shall protect the pattern and character of the existing neighborhoods by requiring new infill developments to have complementary building forms and site features.
Policy LU-7.2	The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside.
Policy LU-7.3	The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.
Policy LU-7.4	The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curbs and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.
Policy LU-7.5	The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.

[3] California Department of Transportation. California Scenic Highway Mapping System. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html. Accessed August 16, 2019

Policy NR-8.1	The City shall regulate the design of streets, sidewalks, cluster home development, architecture, site design, grading, landscaping, utilities, and signage in hillside areas to protect aesthetics, natural topography, and views of surrounding open space through the continued Hillside Design and Urban/Wildland Interface Guidelines.
Policy NR-8.2	The City shall require low-impact site grading, soils repair, foundation design, and other construction methods to be used on new residential structures and roadways above 250 feet in elevation to protect aesthetics, natural topography, and views of hillsides and surrounding open space.
Policy NR-8.4	The City shall maintain and implement residential and non-residential design guidelines in order to protect existing views of the Bay shoreline.

City of Hayward Design Guidelines

The City of Hayward adopted Design Guidelines in 1993 to establish guidelines for site planning, circulation, architectural design, and landscape design for all development in the City; guidelines for specific land uses; and guidelines specifically for the Downtown area and hillside areas. The Hillside Design/Urban Wildland Fire Interface Guidelines promote quality design that enhances the aesthetic character of the hillside setting and preserve important environmental resources. The guidelines include recommended design standards for streets, sidewalks, cluster home development, architecture, site design, grading, landscaping, utilities, signage, and building construction strategies for fire construction.

4.1.1.2 *Existing Conditions*

The project site is located on an undeveloped hillside covered by ruderal vegetation, open soil surfaces, and numerous mature trees and shrubs. Telephone poles and lines run east-west through the site. Views of the site are limited to the surrounding parcels and roadways.

Surrounding uses include single-family residences to the north and east, Silver Oak High School and residences to the west, and a vacant lot to the south. The surrounding neighborhoods consist of older one- and two-story homes with detached garages. Silver Oak High School is located approximately 250 feet west of the site. The high school consists of long, narrow, one- and two-story structures and is screened from the site by dense vegetation. The existing site and surrounding uses are shown in Photos 1 through 6 on the following pages.

The San Francisco Bay and the City of Hayward are visible from the project site. The project site is located approximately 2.4 miles south of I-580, the nearest eligible State Scenic Highway. County-designated scenic routes in Hayward include I-880 and SR 92[4]; the project site is located approximately 1.7 miles northeast and 0.6-mile east, respectively, of the nearest segments along these routes.

[4] Alameda County. *Scenic Route Element of the General Plan.* Adopted May 1966, Amended May 1994.

Photo 1: View of the project site from the east along Carlos Bee Boulevard.

Photo 2: View of the project site from the west along Carlos Bee Boulevard.

PHOTOS 1 & 2

Photo 3: View of the western portion of the project site and property lines of adjacent residences from the south.

Photo 4: View of the eastern portion of the project site and adjacent residences from the south.

PHOTOS 3 & 4

Photo 5: View of Carlos Bee Boulevard and adjacent properties to the south of the project site.

Photo 6: View of the Carlos Bee Boulevard and Overlook Avenue intersection from the east of the project site.

PHOTOS 5 & 6

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

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. The site is not prominently visible from the flatlands at the intersection of Carlos Bee Boulevard and Mission Boulevard and would not impact a view of the hillside. Intervening structures and trees would provide some visual screening from roadways at the base of the hillside. Therefore, the project would have a less than significant impact on scenic vistas. **(Less than Significant Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(Less than Significant Impact)**

The project site is not located within a state scenic highway, nor are there views of a scenic highway in the area which would be obstructed by the project. There are no rock outcroppings within, or adjacent to, the project site that qualify as scenic resources. Of the 86 trees surveyed on and around the site, 52-54 would be removed and 32-34 would be retained. Tree removal is subject to Tree Removal Permits and mitigation of the loss of trees in accordance with the Hayward Municipal Code Chapter 10, Article 15, Tree Preservation Ordinance. For these reasons, the proposed project would not damage scenic resources. **(Less than Significant Impact)**

Impact AES-3:	The project, which is in an urbanized area, would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The proposed project would be subject to the Zone Change and Tentative Map approval process which evaluates architectural and site design and consistency with the City's General Plan and Hillside Design Guidelines among other City regulations and policies. During this process, modifications to the project's design can be made, as necessary, to reduce visual impacts, ensure compatibility with the surrounding neighborhood and hillside character, and ensure consistency with General Plan and Zoning Ordinance standards. Overall, the proposed site is an infill site and the proposed development is in line with the surrounding residential development. Based on the entitlement process and the proposed development type, the project would not conflict with applicable zoning and/or other regulations governing scenic quality. **(Less than Significant Impact)**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The project would result in a negligible increase in daytime glare from building windows. As the site is currently undeveloped, new nighttime lighting would be created from the illuminated building interiors; however, this increase in lighting would be minor. The nighttime light created by the project would be comparable in brightness to the ambient residential and street lighting in the surrounding area. For these reasons, the project would not adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Resources Agency's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[5]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[6]

Forest Land, Timberland, and Timberland Production

The California Department of Forestry and Fire Protection (Cal Fire) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[7] Programs such as Cal Fire's Fire and Resource Assessment Program (FRAP) and are used to identify whether forest land, timberland, or timberland production areas that could be effected are located on or adjacent to a project site.[8]

4.2.1.2 *Existing Conditions*

The project site is located in a suburban area of the City of Hayward. The site itself is undeveloped. According to the Alameda County Important Farmlands 2016 Map, the project site is designated as Urban and Built-up Land.[9]

---

[5] California Department of Conservation. "Farmland Mapping and Monitoring Program". http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[6] California Department of Conservation. "Williamson Act". http://www.conservation.ca.gov/dlrp/lca.
[7] *Forest land* is land that can support 10 percent native tree cover and allows for management of one or more forest resources, including timber, fish, wildlife, and biodiversity (California Public Resources Code Section 12220(g)); *Timberland* is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing a crop of trees used to produce lumber and other forest products, including Christmas trees (California Public Resources Code Section 4526); and *Timberland Production* is land devoted to and used for growing and harvesting timber and other compatible uses (Government Code Section 51104(g)).
[8] Cal Fire. "FRAP". http://frap.fire.ca.gov/
[9] California Department of Conservation, Farmland Mapping and Monitoring Program. *Alameda County Important Farmland 2016.* August 2018.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) 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))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) 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?	☐	☐	☐	☒

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

The proposed project would develop a vacant site in an urban area of Hayward. There are no farmlands on or in the vicinity of the site. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. **(No Impact)**

Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is not under Williamson Act contract and is zoned for residential use. Therefore, developing the site with nine residential units would not conflict with existing zoning for agricultural use, nor would it conflict with a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

As mentioned previously, the site is located in an urban area that is zoned for residential uses. Developing the site for residential use is consistent with the intent of the current zoning and General Plan designation; no zoning conflicts or rezoning of forest land or timberland would result from implementation of the project. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project would remove trees from the site as detailed in Section 3.0 Project Description and under Impact AES-2 above, but the existing trees do not constitute forest land. No forest land or timberland would be impacted by the proposed development of the site. **(No Impact)**

Impact AG-5:	The project would not 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. **(No Impact)**

The project would alter the existing environment to accommodate the development of the nine dwelling units; however, the changes would be localized at the project site and would not affect any farmland or forest land off-site, as none are present in the area. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based, in part, on a construction air quality assessment prepared for the project by *Illingworth & Rodkin, Inc.* The report, dated September 11, 2019, is included in Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[10] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

[10] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[11] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are 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 16, 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, and elementary schools.

The nearest sensitive receptors to the project site are the adjacent single-family residences to the north of the project site. In addition, there is an adjacent daycare (Eden Area YMCA) with children ages 0-5 and the Silver Oak High School to the northwest of the project site.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

[11] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed October 17, 2019. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[12]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area.

[12] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

City of Hayward General Plan

The Natural Resources Element contains policies related to protecting air quality within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

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 (PM2.5) 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 (PM2.5), and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and PM2.5-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 (PM2.5), and odors.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

4.3.2.1 *Thresholds of Significance*

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Hayward has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2.

Table 4.3-2: 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, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust-Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 µg/m^3	0.8 µg/m^3 (average)	
Notes: ROG = reactive organic gases, NO_x = nitrogen oxides, PM_{10} = course particulate matter with a diameter of 10 micrometers (µm) or less, and $PM_{2.5}$ = fine particulate matter with a diameter of 2.5 µm or less.			

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

The proposed project would not conflict with the implementation of the 2017 Clean Air Plan because the proposed nine unit development would be smaller than the BAAQMD CEQA Air Quality Guidelines Operational and Construction Criteria Pollutant Screening Size for the proposed land use (refer to discussion under Impact AIR-2). Because the project would not exceed the BAAQMD screening criteria, it would not result in the generation of operational or construction criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2. Implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. Therefore, the project would not conflict with or obstruct implementation of the 2017 CAP. **(Less than Significant Impact)**

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

Operational Emissions

According to the BAAQMD thresholds, a project that generates more than 54 pounds per day of ROG (reactive organic gases), NO_x, or $PM_{2.5}$; or 82 pounds per day of PM_{10} would be considered to have a significant impact on regional air quality. The BAAQMD developed screening criteria to provide lead agencies with an indication of whether a project could result in significant operational air quality impacts (e.g., daily or annual emissions above stated thresholds). Screening criteria are used to determine the extent of additional analysis required for a specific project. If a project is determined to be below the BAAQMD's screening criteria for a specific pollutant, then the project is said to have less than significant operational air quality impacts and no further analysis is required under CEQA

The proposed project would result in the development of nine single-family dwelling units and six accessory dwelling units on an undeveloped site. Operational emissions of the project would be generated by energy and water use on-site, solid waste disposal, and vehicular trips to and from the site. While emissions at the project site would be increased relative to its current undeveloped state, this increase would be considered less than significant because the size of the project is below BAAQMD screening levels for operational emissions for single-family residential land uses (325 dwelling units).[13] Projects that are smaller than the relevant screening level are considered to have a less than significant operational air quality impact due to criteria pollutant emissions. **(Less than Significant Impact)**

Construction Emissions

The BAAQMD Guidelines also include screening criteria that provides a conservative indication of whether construction activities associated with a project could result in a potentially significant air quality impact from emissions of criteria air pollutants and their precursors. For construction impacts from criteria pollutants at single-family land uses, the screening size is 114 dwelling units. The project proposes a total of nine single-family units and six accessory dwelling units, which is below the screening criteria for the proposed land use. Therefore, the project would have a less than significant air quality impact due to criteria air pollutants and precursors released during on-site construction activities. **(Less than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact)**

[13] Bay Area Air Quality Management District. *CEQA Air Quality Guidelines*. Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes. Updated May 2011.

Construction Dust Emissions

The project would construct nine single-family dwelling units and six accessory dwelling units over a period of eight months. Construction would also include a private interior roadway, walkways, surface parking spaces, and a 3,200-square foot playground in addition to site work. Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. 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 impacts to be less than significant if best management practices are implemented to reduce these emissions.

Standard Measures: The following standard measures reflect BAAQMD best management practices and would be implemented by the project to reduce potential impacts from fugitive dust.

- 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 implementation of the BAAQMD-recommended standard measures as conditions of approval for the proposed project, it would not result in a significant air quality impact due to construction dust emissions. **(Less than Significant Impact)**

Construction TAC and $PM_{2.5}$ Health Risks

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Construction exhaust emissions can pose health risks for sensitive receptors in the project area, such as the adjacent residents. The primary community risk impact issue associated with

construction emissions are cancer risk and exposure to $PM_{2.5}$. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$. This assessment included dispersion modeling to predict the offsite and onsite concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Construction period emissions were computed using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. CalEEMod provided annual emissions for construction of the project and emission estimates for both on-site and off-site construction activities. On-site activities primarily consisted of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The land uses input into CalEEMod to represent the construction build-out scenario included: nine dwelling units and 23,139 square feet entered as "Single Family Housing" and 18 spaces and 3,143-square feet entered as "Parking Lot" on a 0.6-acre construction site. In addition, six one-way cement truck trips during construction and 12 one-way cement truck trips during paving were entered into the model. A trip length of one mile was used to represent vehicle travel (haul trips, vendor trucks, and worker trips) while at or near the construction site. For modeling purposes, it was assumed that these emissions from on-road vehicles would occur at the construction site.

Construction TAC emissions were computed as 0.0136 tons (27 pounds) of annual PM_{10} emissions (assumed to be DPM) and 0.001 tons of fugitive $PM_{2.5}$ emissions. After total emissions were computed, the U.S. EPA AERMOD dispersion model was used to predict concentrations of DPM and $PM_{2.5}$ at existing sensitive receptors (residences) in the vicinity of the project construction area. The maximum-modeled DPM and $PM_{2.5}$ concentrations were found to occur on the first floor of the adjacent residence to the northeast of the project site. Using the maximum annual modeled DPM concentrations, the maximum increased cancer risk at the location of the maximally exposed individual (MEI) was calculated; residential receptors were conservatively assumed to be infants.

The results of the assessment indicate that the maximum increased residential cancer risks would be 3.9 in one million for an infant exposure and 0.1 in one million for an adult exposure. The maximum residential cancer risk would not exceed the BAAQMD significance threshold of 10 in one million. The maximum modeled annual $PM_{2.5}$ concentration was 0.03 $\mu g/m^3$; this would not exceed the BAAQMD significance threshold of 0.3 $\mu g/m^3$. The maximum modeled annual residential DPM concentration (i.e. from construction exhaust) was 0.0221 $\mu g/m^3$; the maximum Hazard Index (HI)[14] based on this DPM concentration is 0.004, which falls below the BAAQMD significance criterion of a HI greater than 1.0. Therefore, construction of the project would not result in significant health risk impacts to sensitive receptors in the area. **(Less than Significant Impact)**

Cumulative Community Health Risks

Community health risk assessments typically look at all substantial sources of TACs located within 1,000 feet of the project site and at new TAC sources that would be introduced by the project. These sources included highways, busy surface streets, and stationary sources identified by BAAQMD. Existing substantial mobile sources of TACs in the area (roadways with average daily traffic of over

[14] Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to an acceptable reference exposure level. Source: BAAQMD. *CEQA Air Quality Guidelines*. May 2017.

10,000 trips) include State Route 238 (Mission Boulevard) and Carlos Bee Boulevard. One stationary source of TACs was identified within the 1,000-foot influence area using the BAAQMD's stationary source map. The project would not introduce any new TAC sources, such as substantial truck traffic or generators powered by diesel engines.

The combined emissions from existing mobile and stationary sources of TACs and construction exhaust emissions at the MEI were calculated and compared to BAAQMD cumulative source thresholds. The results of the analysis are shown in Table 4.3-3, below.

Table 4.3-3: Cumulative Construction Risk Assessment

Source	Maximum Cancer Risk (per million)	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Maximum Hazard Index
Unmitigated Project Construction	3.9 (infant)	0.03	<0.01
S.R. 238 (Mission Boulevard) – Link 447 (20ft elevation) at 1,000 feet east	3.8	0.03	<0.01
Carlos Bee Boulevard (east-west) at 125 feet south ADT - 20,000	5.8	0.16	<0.03
Plant #16449 (Generator) at 1,000 feet	0.1	<0.01	<0.01
Cumulative Total	13.6	<0.23	<0.06
BAAQMD Threshold – Cumulative Sources	***>100***	***>0.8***	***>10.0***
Significant?	***No***	***No***	***No***

As shown in the table, the emissions from construction of the project and emissions from nearby stationary or mobile sources of TACs would not exceed BAAQMD cumulative source health risk thresholds. Therefore, construction of the proposed project, when considered in combination with nearby emission sources, would not create a substantial health risk at the maximally exposed individual. **(Less than Significant Impact)**

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(No Impact)**

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable by adjacent residences; however, the odors would be localized and temporary and are not likely to affect a substantial number of people. The proposed residences would not be a source of odor emissions during operation. Therefore, the proposed project would result in a less than significant odor impact. **(No Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an arborist report prepared for the project by *HortScience*. The report, dated July 2019, is included in Appendix B of this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds (i.e. incidental take).[15] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control

[15] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed August 22, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Local

City of Hayward General Plan

The City of Hayward General Plan contains policies related to protecting biological resources within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy LU-7.5	The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.
Policy NR-1.1	The City shall limit or avoid new development that encroaches into important native wildlife habitats; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.
Policy NR-1.2	The City shall protect sensitive biological resources, including State and Federally designated sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats from urban development and incompatible land uses.
Policy NR-1.7	The City shall encourage protection of mature, native tree species to the maximum extent practicable, to support the local ecosystem, provide shade, create windbreaks, and enhance the aesthetics of new and existing development.
Policy NR-4.12	The City shall encourage the planting of native and diverse tree species to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation.
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.

City of Hayward Tree Preservation Ordinance

The City of Hayward Tree Preservation Ordinance provides for the protection and preservation of significant trees by designating what types of trees located on what types of development or properties are "protected" and would require a permit before removal or pruning. Protected trees include: (1) all required trees on any developed property; (2) memorial trees; (3) trees planted as "replacement trees" as part of a development or tree removal project; (4) trees eight inches in diameter or greater than 54 inches above the ground; or (5) certain native species that are four inches in diameter or greater. Per HMC 10-15.20, all removed or disfigured trees shall also require replacement with like-size, like-kind trees or an equal value tree or trees. The value of the trees is

determined using the latest edition of the "Guide for Plant Appraisal" by the International Society of Arboriculture, and valuation shall be used to determine the number and size of replacement trees required.

4.4.1.2 *Existing Conditions*

The project site is located in a developed urban area of the City of Hayward. The site itself is undeveloped but was previously developed for residential use in the past. Land cover on the site consists of ruderal vegetation, mature shrubs and trees, and open soil surfaces. Telecommunications utility lines traverse the site from east to west across its southern portion.

Special Status Species

The majority of special status animal species occurring in the Bay Area use habitats that are not present on the project site, such as salt marsh, freshwater marsh, serpentine grassland habitats, and riparian corridors. The project site is located approximately 0.2-mile south of the nearest waterway, a tributary of Ward Creek. Since the project site is located in an urbanized area and the land cover consists primarily of ruderal vegetation, special status plant and animal species are unlikely to occur. There is potential for nesting birds to be located in trees on or in the vicinity of the project site.

Trees

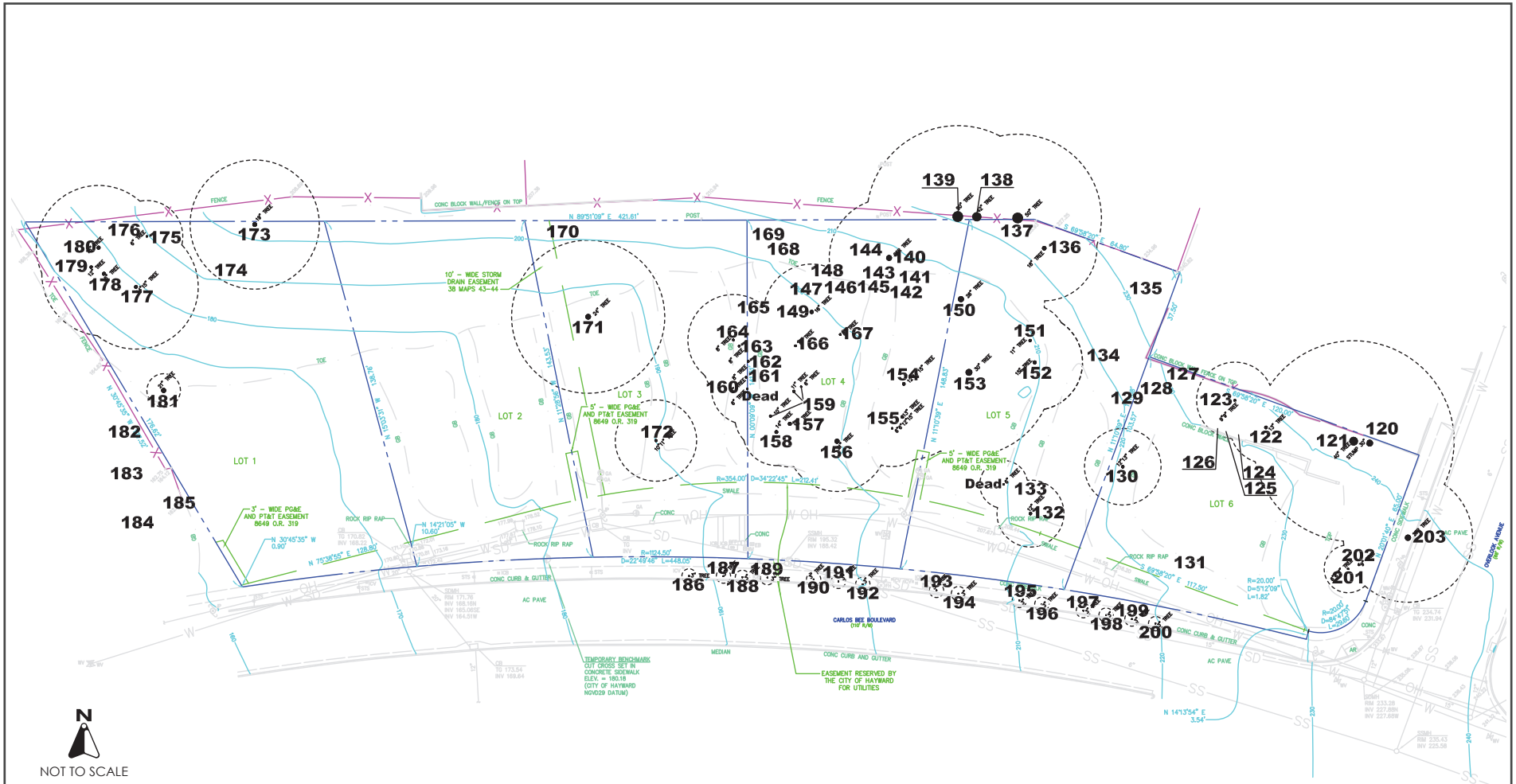
The project site contains a total of 84 trees. Table 4.4-1 below describes the trees on the project site.

Table 4.4-1: Existing Trees On-Site

Tree Species		Total	Condition		
Common Name	Scientific Name		Poor	Fair	Good
Italian cypress	*Cupressus sempervirens*	3	-	3	-
Loquat	*Eriobotrya japonica*	4	1	3	-
Blue gum	*Eucalyptus globulus*	9	4	5	-
Monterey cypress	*Hesperocyparis macrocarpa*	1	-	-	1
Toyon	*Heteromeles arbutifolia*	1	1	-	-
Hollywood juniper	*Juniperus chinensis* 'Kaizuka'	1	-	1	-
Sweetgum	*Liquidambar styraciflua*	1	-	1	-
Italian stone pine	*Pinus pinea*	1	-	1	-
Monterey pine	*Pinus radiate*	1	-	1	-
Apricot	*Prunus armeniaca*	1	1	-	-
Plum	*Prunus domestica*	3	3	-	-
Almond	*Prunus dulcis*	8	8	-	-
Coast live oak	*Quercus agrifolia*	10	-	4	6
English oak	*Quercus rubra*	15	1	1	13
Yellow willow	*Salix lasiandra*	1	-	1	-
Arroyo willow	*Salix lasiolepis*	22	22	-	-
Australian bush cherry	*Syzgium paniculatum*	1	-	1	-
Mexican fan palm	*Washingtonia robusta*	1	-	-	1
Total		**84**	**41**	**22**	**21**

The City of Hayward protects trees that have 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.[16] Based on this definition, 56 trees are protected, four of which are off-site and 16 of which are street trees. The location of trees at the project site is shown on Figure 4.4-1 on the following page.

[16] The following tree species with a trunk diameter of four inches or more are protected under the City of Hayward Tree Preservation Ordinance: Big Leaf Maple, California Buckeye, Madrone, Western Dogwood, California Sycamore, Coast Live Oak, Canyon Live Oak, Blue Oak, Oregon White Oak, California Black Oak, Valley Oak, Interior Live Oak, and California Bay.



Source: Hort Science, Dec. 2017

TREE INVENTORY MAP

FIGURE 4.4-1

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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)?	☐	☒	☐	☐
2) 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?	☐	☐	☐	☒
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
4) 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?	☐	☐	☒	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1: The project would not 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. **(Less than Significant Impact with Mitigation Incorporated)**

Special Status Species and Sensitive Habitats

The project site is located in an urban area and is surrounded by development on the north, east, and west sides. Carlos Bee Boulevard and a vacant lot are located south of the site. The project site lacks

suitable habitat for designated special status species, as the land cover is predominantly ruderal vegetation and trees that commonly occur in urban environments. Development of the project site would not result in impacts to special status species or sensitive habitats. **(No Impact)**

Nesting Birds

The proposed project would remove up to 52 trees from the site and make improvements in the vicinity of numerous mature trees. If tree-nesting raptors or migratory birds were to nest on or adjacent to the site, construction activities could result in the abandonment of active nests or direct mortality to these birds. Nesting birds, including raptors, are protected by the California Fish and Game Code 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or could otherwise lead to nest abandonment. Nest abandonment and/or loss of reproductive effort caused by disturbance are considered "take" by the CDFW and, therefore, would constitute a significant impact.

Mitigation Measure

The following mitigation measure would avoid possible impacts to nesting birds during construction:

MM BIO-1: If removal of the trees would take place between January and September, a pre-construction survey for nesting raptors or other migratory birds will be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys will be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys will be conducted no more than thirty days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area to be disturbed by these activities, and the ornithologist shall, in consultation with the CDFW, designate a construction-free buffer zone (typically 250 feet) around any occupied nests until the end of the nesting activity.

Implementation of MM BIO-1 would reduce potential impacts to migratory nesting birds to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-2: The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(No Impact)**

As mentioned, the project site is located approximately 0.2-mile south of the nearest riparian habitat. Existing housing developments separate the site from nearby habitat. The riparian habitat would be unaffected by development proposed by the project. Therefore, the project would not adversely affect riparian habitat or sensitive natural communities. **(No Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

The proposed project is not located in the vicinity of any federally protected wetlands. Therefore, implementation of the project would not result in an impact to wetlands. **(No Impact)**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

The project site is located in an urban environment and is removed from any riparian corridors or other wildlife corridors that allow fish or other wildlife to carry out natural migratory patterns. The project would not impede the use of native wildlife nursery sites because there are none on or in the vicinity of the site. Therefore, native resident or migratory fish or wildlife species would not be impacted by the project, either directly or indirectly through removal of land used for migratory purposes. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

The arborist report, dated July 2019, recommends trees for removal if they are located within the construction zone of the project or if they are unsuitable for preservation due to their condition. The proposed project would remove a total of 52 trees from the site, including 29 protected trees. It should be noted that the four protected off-site trees (#182 through #185 on Figure 4.4-1) are recommended for preservation but are located within zero to 15 feet of excavation required for the proposed bioswale. If the bioswale remains in its proposed location, impacts would likely be beyond the tolerance of Trees #182 and #185 and they would also require removal.

Removal of protected trees from the site would constitute a significant impact. Additionally, the project would retain numerous trees on-site; construction activities could damage the roots of these trees or otherwise inhibit natural growth patterns.

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

MM BIO-5.1: All protected trees removed from the site shall obtain a Tree Removal Permit per the City of Hayward Tree Preservation Ordinance (Municipal Code Chapter 10, Article 15). The removed trees would be required to be replaced at the quantities and species set forth in the Tree Preservation Ordinance. All removed trees would require replacement with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape Architect.

The project shall adhere to the conditions of approval described in the City's Tree Preservation Ordinance for the removal, replacement or maintenance of protected trees. Final landscape plans shall be reviewed and approved by the City's Landscape Architect prior to issuance of any grading, trenching, or building permits. 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 specific the species of all replacement trees.

MM BIO-5.2: The project applicant shall implement all tree protection measures as described below:

Design Recommendations

1. Any changes to the plans affecting the trees shall be reviewed by the Project Arborist with regard to tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.
2. A Tree Protection Zone (TPZ) shall be established around each tree to be preserved. No grading, excavation, construction or storage of materials shall occur within this zone. Underground services, including utilities, sub-drains, water or sewer shall be routed around the TPZ.
    a. A fence shall be placed to encircle the group of Italian stone pine and blue gums #136-140 (refer to Figure 4.4-1);
    b. No fencing is required for trees #173-180;
    c. Off-site oak #185 will require additional fencing at the line of grading. Additionally, within the dripline no self-propelled equipment shall be used.
    d. Any other measures as required by the Landscape Architect.
3. Irrigation systems must be designed so that no trenching severs roots larger than one inch in diameter will occur within the TPZ.
4. Tree Preservation Guidelines prepared by the Project Arborist, which include specifications for tree protection during demolition and construction, shall be included on all plans.
5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
6. The soil shall be not be limed within 50 feet of any tree. Lime is toxic to tree roots.
7. Ensure adequate but not excessive water is supplied to trees; in most cases, occasional irrigation will be required. Avoid directing runoff towards trees.

Pre-Construction Treatments and Recommendations

1. The demolition and construction superintendents shall meet with the Project Arborist before beginning work to review all work procedures, access routes, storage areas, and tree protection measures.
2. 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 (C/61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300). The Project Arborist will provide pruning specifications prior to site demolition.

3. Structures and underground features to be removed within the TPZ shall use equipment that will minimize damage to trees above and below ground, and operate from outside the TPZ. The Project Arborist shall be on-site during all operations within the TPZ to monitor demolition activity.
4. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife Code 3503-3513 to not disturb nesting birds, consistent with MM BIO-1. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys shall be conducted prior to tree work. Qualified biologists shall be involved in establishing work buffers for active nests.

Recommendations for Tree Protection during Construction

1. Any approved grading, construction, demolition or other work within the TPZ shall be monitored by the Project Arborist.
2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
3. Tree protection devices are to remain until all site work has been completed within the work area. Fences or other protection devices may not be relocated or removed without permission of the Project Arborist.
4. Construction trailers, traffic, and storage areas shall remain outside the TPZ at all times.
5. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Project Arborist.
6. If roots two inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Project Arborist shall be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
7. Spoils from trenching, footing, utility or other excavation shall not be placed within the TPZ, neither temporarily nor permanently.
8. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the TPZ. Any modifications shall be approved and monitored by the Project Arborist.
9. All trees shall be irrigated on a schedule to be determined by the Project Arborist (every three to six weeks is typical). Each irrigation shall wet the soil within the TPZ to a depth of 30 inches.

10. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.
11. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the TPZ.
12. Any additional tree pruning needed for clearance during construction shall be performed by a Certified Arborist and not by construction personnel.
13. Trees that accumulate a sufficient quantity of dust on their leaves, limbs and trunk as judged by the Project Arborist shall be spray-washed at the direction of the Project Arborist.

Maintenance of Relocated Trees

1. Irrigate. Until roots develop into the surrounding soil, the tree is dependent on water contained in the root ball itself. Plants should be irrigated before the root ball becomes dry, but not so frequently that it remains wet. Irrigation frequencies may range from every few days in hot, dry weather to every few weeks in cool weather. A soil probe should be used to check soil moisture and water applied as needed.
2. Prune. Trees should be pruned following transplanting to remove broken or damaged branches. If bark has been damaged, cut off any torn bark or wood with a knife. Do not shape the wound or apply wound paint.
3. Fertilize. Fertilizer should be applied if soil tests reveal deficiencies. Fall or late winter are the best times to apply fertilizer.
4. Monitor for pests and diseases. Transplanted trees are under stress until new roots are established in the landscape, and they are more susceptible to attack by parasites. Borers and canker disease are the most common problems. Inspect transplants monthly to assess any developing problems and determine appropriate treatments.
5. Inspect anchor stakes or guys. Every three months check that the plant is not being damaged by hardware.
6. Enlarge basin, replenish mulch. At the beginning of the second year, enlarge the watering basin by 50 percent and replenish wood chip mulch in basin.

Maintenance of Impacted Trees

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability shall be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases; therefore, annual inspection for hazard potential is recommended.

With implementation of the mitigation measures described above, the project would not conflict with any local polices or ordinances protecting biological resources. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

The project site is not subject to a Habitat Conservation Plan or Natural Community Conservation Plan. **(No Impact)**

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[17]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

[17] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

City of Hayward General Plan

The City of Hayward General Plan contains policies related to cultural resources. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
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 LU-8.3	The City shall maintain and implement its Historic Preservation Ordinance to safeguard the heritage of the City and to preserve historic resources.

City of Hayward Historic Preservation Ordinance

The Historic Preservation Ordinance provides for the identification, protection, enhancement, perpetuation and use of historical resources, including buildings, structures, signs, objects, features, sites, historic and prehistoric archaeological sites, places, districts, designed landscapes, cultural landscapes and areas within the City that reflect special elements of the City's architectural, artistic cultural, engineering, aesthetic, historical, political, social and other heritage. The Historic Preservation Ordinance sets forth requirements for designation and protection of historic resources. The Ordinance also sets forth conditions of approval for development projects located within archaeologically sensitive areas and/or within or adjacent to known archaeological sites.

4.5.1.2 *Existing Conditions*

Prehistoric Resources

The aboriginal inhabitants of southern Alameda County belonged to a Native American group known as the "Costanoan," derived from the Spanish word *Costanos* ("coast people" or "coastal

dwellers") who occupied the central California coast as far east as the Diablo Range. The descendants of these Native Americans now prefer to be called Ohlone. The City of Hayward is situated within the territory of the Chochenyo tribelet of the Ohlone. Historic accounts of the distribution of the tribelets and villages in the 1770s-1790s suggest that the Native Americans may have had a major village site along San Lorenzo Creek, approximately 1.2 miles north of the project site. The City of Hayward does not identify archaeologically sensitive areas in its General Plan EIR; however, the project site itself is not considered to have high archaeological sensitivity due to (1) the site's distance from San Lorenzo Creek and other waterways in the City; (2) the site's prior disturbance and; (3) the site's location in a hillside area where archaeological resources are unlikely to be deposited.

Historic Resources

The City of Hayward had its origins in the 1850s, during the Gold Rush, and was incorporated in 1876. The City's historic retail core remains evident through historic commercial and mixed-use buildings along B Street between Mission and Foothill Boulevards. The City's official list of Historically or Architecturally Significant Buildings contains 20 structures that have been officially designated by the City. Mark's Historic Rehabilitation District is the only historic district officially designated by the City. The project site is not located within this district. There are no structures on the project site that could be considered historic, nor are there recognized historic structures in the immediate vicinity of the site.[18]

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

The project site is an undeveloped hillside surrounded by development to the north, east, and west, and Carlos Bee Boulevard to the south. The site was previously developed with homes but there are

[18] City of Hayward. *Public Review Draft Background Report.* Table 1-2: Officially Designated Architecturally and Historically Significant Buildings. November 2013.

no structures left on site, aside from remnant building foundations. There are no historic structures or resources located in the site vicinity. Therefore, implementation of the project would not result in an impact to historic resources on or off the site. **(No Impact)**

Impact CUL-2:	The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

As mentioned, the project site is not located in an archaeologically sensitive area or adjacent to any recognized archaeological sites. While the project site is not known to contain an archaeological site or buried deposits, construction operations could result in the inadvertent exposure of buried prehistoric or historic archaeological materials, as well as yet unknown tribal cultural resources that could be eligible for inclusion on the California Register and/or meet the definition of a unique archaeological resource as defined in Section 21083.2 of the Public Resources Code. The project would include the following mitigation measures to reduce potential impacts to archaeological resources on-site.

Mitigation Measures: Implementation of the following mitigation measures would ensure that potential impacts to archaeological resources remain at a less than significant level.

MM CUL–1.1: *Undiscovered Archaeological Resources.* If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guidelines 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's 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.

MM CUL–1.2: *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's 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 the above Mitigation Measures CUL-1.1 and -1.2, impacts to buried cultural resources would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3:	The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

The proposed project would address the potential disturbance of human remains by implementing Mitigation Measure CUL-1.2, as described above. Therefore, human remains would not be significantly impacted by the project. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.[19] The 2019 Title 24 updates will go into effect on January 1, 2020. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[20]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. The most recent update to CALGreen went in to effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality. The 2019 update to CALGreen goes into effect on January 1, 2020, and covers the same topics.

[19] California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed October 17, 2019. http://www.bsc.ca.gov/.
[20] California Energy Commission (CEC). "2016 Building Energy Efficiency Standards." Accessed October 17, 2019. http://www.energy.ca.gov/title24/2016standards/index.html.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[21]

Local

City of Hayward General Plan

The General Plan contains policies related to energy resources. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy NR-4.1	The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.
Policy NR-4.3	The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the life-cycle of a structure.
Policy NR-4.11	The City shall require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020.
Policy NR-4.12	The City shall encourage the planting of native and diverse tree species to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation.
Policy LU-1.8	The City shall maintain and implement green building and landscaping requirements for private- and public-sector development to: • Reduce the use of energy, water, and natural resources. • Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties. • Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors. • Encourage the use of durable, sustainably sourced, and/or recycled building materials. • Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste.
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.

City of Hayward Climate Action Plan

Hayward's Climate Action Plan (CAP) was adopted by the City Council on July 2014 as part of the 2040 General Plan. The 2014 CAP was designed to reduce communitywide emissions 20 percent

[21] California Air Resources Board. "The Advanced Clean Cars Program." Accessed October 17, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

below 2005 levels by the year 2020, 62.7 percent below 2005 levels by the year 2040, and 82.5 percent below 2005 levels by 2050. The CAP includes an implementation program with several energy-related policies that parallel General Plan policies.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[22] Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[23] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Alameda County in 2018 was consumed primarily by the commercial sector (71 percent) followed by the residential sector consuming 29 percent. In 2018, a total of approximately 10,344 GWh of electricity was consumed in Alameda County. [24]

East Bay Community Energy (EBCE) is the electricity provider for the City of Hayward. EBCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. EBCE customers are automatically enrolled in Brilliant 100, which provides electricity from 100 percent carbon-free sources (hydropower).[25] Customers also have the option to enroll in Renewable 100, which sources energy from 100 percent renewable sources (small hydroelectric, solar, and wind), and Bright Choice, which is at least 38 percent renewable and an additional 47 percent carbon-free.

Natural Gas

PG&E provides natural gas services within Hayward. In 2017, approximately 1.4 percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[26] In 2016, residential and commercial customers in California used 29 percent of the state's natural gas, power plants used 32 percent, and the industrial sector used 37 percent. Transportation accounted for one percent of natural gas use in California.

[22] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 1, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.
[23] United States Energy Information Administration. *State Profile and Energy Estimates, 2017.* Accessed August 1, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.
[24] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 22, 2019. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[25] East Bay Community Energy. "Power Mix". https://ebce.org/power-mix/ Accessed August 22, 2019.
[26] California Gas and Electric Utilities. 2018 *California Gas Report.* Accessed August 22, 2019. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. **(Less than Significant Impact)**

The proposed project would be constructed in accordance with the latest California Green Building Standards Code (CALGreen) and the 2019 Title 24 Building Energy Efficiency Standards. CALGreen establishes voluntary and mandatory measures for residential developments which reduce water use and waste generation, and conserve energy through building design and site planning. Further, the project would include solar panels on all structures as a Planned Development amenity. Adherence to CALGreen and the installation of solar photovoltaic panels on all structures would ensure that the project includes measures to reduce energy use and increase the operational efficiency of the proposed single-family homes. The 2019 Title 24 Building Energy Efficiency Standards sets forth the latest energy and water efficiency requirements for new residential developments. The proposed project would incorporate measures into its final design that would meet the requirements of Title 24, subject to verification by the City at the time of permit issuance, thereby ensuring the proposed buildings are energy efficient.

Construction of the proposed project is estimated to take eight months. Energy would be required during the construction period related to the transportation of building materials, preparation of the project site (i.e., grading), fuel use for worker travel and construction equipment, and actual construction of the proposed buildings. Construction processes are already designed to be efficient to reduce excess monetary costs and opportunities for increased energy conservation during construction are limited. Construction would be limited to the hours allowed by the Municipal Code for construction activities. The project does not require demolition nor major excavation, activities which would substantially increase the energy expended to construct the project. In addition, the project is an infill development and would make use of underutilized land in an already developed area of the City. Existing utilities are available to serve the project and excessive energy would not be spent establishing new connections or extending existing lines. Therefore, the proposed project would not result in wasteful or inefficient energy use, either during construction or operation. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

As discussed in *Section 4.3, Air Quality*, the proposed project is below the screening size for operational pollutants according to BAAQMD Guidelines and would not be required to adhere to the 2017 Clean Air Plan project-specific control measures related to energy efficiency. However, the City of Hayward General Plan and Climate Action Plan are applicable to the proposed development, as both documents contain numerous goals, policies, and actions related to increasing energy efficiency and renewable energy production in the City.

The project would meet the latest building energy efficiency standards, increase the number of trees on-site, include solar panels on building rooftops, and result in land use densification on an infill site within the City. These facets of the project would result in reduced energy demand and increased renewable energy generation, in alignment with General Plan and Climate Action Plan energy policies. Overall, the project would not conflict with or obstruct the implementation of General Plan and Climate Action Plan policies related to renewable energy and/or energy efficiency. Therefore, the impact would be less than significant. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following discussion is based, in part, on a Fault Rupture Hazard Evaluation prepared by *Earth Focus Geological Services, Inc.*, a geologic peer review prepared by Louis A. Richardson, P.G., C.E.G., and a geotechnical investigation prepared by *Alan Kropp & Associates, Inc.* The reports are included in Appendix C1, C2, and C3, respectively, of this Initial Study.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Standards Code (CBC) contains the regulations that govern the construction of buildings in California and prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC. The CBC is in the process of being updated and the 2019 CBC will take effect on January 1, 2020.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

City of Hayward General Plan

The City of Hayward General Plan contains policies related to geology and soils. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy HAZ-2.1	The City shall enforce the seismic safety provisions of the Building Code and Alquist-Priolo Special Studies Zone Act to minimize earthquake-related hazards in new construction, particularly as they relate to high occupancy structures or buildings taller than 50 feet in height.
Policy LU-7.1	The City shall prohibit the construction of buildings on unstable and steep slopes (slopes greater than 25 percent).
Policy LU-7.2	The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside.
Policy LU-7.3	The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.
Policy LU-7.4	The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curbs and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.
Policy LU-7.5	The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.

Policy LU-7.6	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.
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.

4.7.1.2 *Existing Conditions*

Regional Geology

The City of Hayward is located within the San Francisco Bay portion of the Coast Ranges geomorphic province of California, a region characterized by northwest-trending ridges and intervening valleys influenced by the strike of the San Andreas and related faults. The project site is located on the west flank of the East Bay Hills which are underlain by a variety of sedimentary, igneous, and metamorphic bedrock types that range from Jurassic to Miocene in age. The geologic structure of the area has been severely complicated by faulting related to the active Hayward fault zone.

Seismicity and Seismic Hazards

Seismicity

The San Francisco Bay Area is one of the most seismically active areas in the United States. While seismologists cannot predict earthquake events, the United States Geological Survey's Working Group on California Earthquake Probabilities estimates there is a 62 percent chance of at least one magnitude 6.7 earthquake occurring in the Bay Area region between 2002 and 2032. There is a 27 percent chance that this predicted earthquake will occur on the Hayward-Rodgers Creek fault zone.

The western portion of the project site is within the Earthquake Fault Zone for the Hayward Fault. The Hayward Fault is divided into two segments based on seismicity. The southern Hayward fault, which is identified as the segment extending from near Warm Springs to near Montclair, has a fault length of approximately 33 miles, and is capable of producing a magnitude 6.9 earthquake. The northern Hayward fault, which is identified as the segment from near Montclair to San Pablo Bay, has a fault length of approximately 22 miles, and is capable of producing a magnitude 6.7 earthquake. The project site is closest to the southern Hayward fault segment. The nearest trace of the Hayward fault zone as shown on the latest official map by the State of California is approximately 300 feet to the west of the west property boundary. There are other prominent faults mapped in the vicinity of the site, such as the northwest-trending East and West Chabot faults located more than 2,000 feet to the east, although these faults are not seismically active.

A review of historical aerial photographs indicates the presence of a prominent linear scarp[27] that forms a well-defined break in the topography separating the valley plain from the hills within the site vicinity. This scarp has been mapped as the main trace of the Hayward fault zone located approximately 300 feet west of the west property boundary. A secondary trace of the Hayward fault

[27] A scarp is a topographic expression of faulting attributed to the displacement of land surface by movement along faults.

zone is visible in aerial photographs as a less prominent, linear scarp near the west property boundary. These two subparallel faults defined an elongated terrace along the otherwise steep hillsides in the area. The project site is located along the upslope side of this terrace. With the exception of the linear scarp near the west property boundary, no obvious lineaments, springs, abrupt vegetation changes, or any other geomorphic anomalies were observed that could be attributed to active faulting from the Hayward fault zone.

Liquefaction

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations and ground rupture or sand boils. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

The project site is not located within an Earthquake Zone of Required Investigation for liquefaction hazards and would not be subject to liquefaction.[28]

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open face, such as the steep bank of a stream channel.

There are no stream channels on or adjacent to the site and the project site is not subject to liquefaction; therefore, the project site would not be subject to lateral spreading.

Landslides

The project site is not located within an Earthquake Zone of Required Investigation for landslide hazards and would not be subject to landslides.[29]

Site Conditions

The project site is located on gentle to moderate slopes in the East Bay Hills of Hayward. The site has an elevation of approximately 170 feet to 240 feet above mean sea level.[30] The ground surface slopes downward to the southwest. The site also contains a continuous slope to the north which leads up to the neighboring residential lots above. The site is occupied by ruderal vegetation, shrubs and mature trees. There are terraced building pads on-site from the homes which formerly occupied the site. Remnant building foundations and retaining walls also remain at the intersection of Carlos Bee Boulevard and Overlook Avenue.

[28] California Geological Survey. "Earthquake Zones of Required Investigation". https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed August 23, 2019.
[29] Ibid.
[30] Alan Kropp & Associates, Inc. *Geotechnical Investigation – Carlos Bee Condominiums – Hayward, California.* March 15, 2019.

Soil

A total of four borings were drilled during the geotechnical investigation of the site. The borings were drilled to depths ranging from approximately 16.5 feet to approximately 26.5 feet below existing grade. Soil samples were taken from the site and subjected to laboratory testing and soil engineering analyses to characterize the on-site soil conditions.

The subsurface soil conditions generally consist of stiff to very stiff, fat clay (with various amounts of sand and gravel) with high to critical plasticity to depths of about 19 feet. Below the clay and gravel soils, sandstone and claystone bedrock were encountered to the maximum depths explored. The soils on-site are considered to have moderate to high expansion potential.

Groundwater

Free groundwater was encountered at a depth of approximately 11.5 feet below grade.[31] According to the Phase I Environmental Site Assessment prepared for the site, groundwater under the site flows in a southwest to northwest direction.[32] Groundwater levels will likely fluctuate due to variations in rainfall, temperature, and irrigation practices.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

[31] Allan Kropp & Associates, Inc. *Geotechnical Investigation – Carlos Bee Condominiums – Hayward, California.* March 15, 2019.
[32] Harris and Lee Environmental Sciences, LLC. *Phase I Environmental Site Assessment*. November 4, 2017.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) 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?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) 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?	☐	☐	☒	☐
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

Fault Rupture

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Hayward has policies that address existing geology and soils conditions affecting a proposed project. General Plan Policy HAZ-2.1 requires the City to minimize earthquake-related hazards in new development in accordance with the Building Code and the Alquist-Priolo Special Studies Zone Act.

As described above, the western portion of the project site is located within the Earthquake Fault Zone for the Hayward Fault. The Fault Rupture Hazard Evaluation completed a 175-foot long, 16.5-foot deep exploratory trench excavation on the project site within the fault zone to examine the site for evidence of active faulting. No signs of active faulting of the Hayward fault were identified within the exploration limits of the trench; however, the depth of the bedrock below the ground surface, the thickness of overlying materials, and the rising groundwater condition in the west portion of the exploratory trench made it unsafe to explore the underlying bedrock in this area of the site. The potential for active faulting to affect this area of the site was, therefore, unable to be determined. Using data gathered from prior geotechnical studies of the area, existing knowledge of the Hayward

Fault, and data from the exploratory excavation, it was determined that a No Residential Construction Zone shall be established within the west portion of the site under the Alquist-Priolo Earthquake Fault Zone Act of 1972. Figure 4.7-1 illustrates the location of the exploratory trench and the No Residential Construction Zone.[33] The most recent plans for the project, dated October 3, 2019, reflect the No Residential Construction Zone and show no homes are planned within this zone. Nonetheless, significant seismic shaking would occur, including potential loss, injury, or death, if any of the proposed dwelling units (or portions thereof) were placed in an area of the project site which is exposed to active fault movements of the Hayward Fault.

Project Condition of Approval:

The proposed project shall implement the following condition of approval to ensure no adverse effects result from locating the project in the vicinity of the Fault Zone of the Hayward Fault:

- During construction, the project geologic team shall observe excavations and exposures for the existence or nonexistence of active faulting and verify that the locations of specific building sites are in conformance with their recommendations. A confirming letter shall be submitted to the Public Works Department prior to the issuance of any certificates of occupancy.

By adhering to the condition of approval described above and constructing the project in accordance with the California Building Code, the proposed project would not expose future residents to adverse effects related to rupture of the Hayward Fault. The proposed project would not increase the risk of fault rupture or otherwise cause direct or indirect adverse effects related to fault rupture. **(Less than Significant Impact)**

Seismic Shaking, Liquefaction, and Landslides

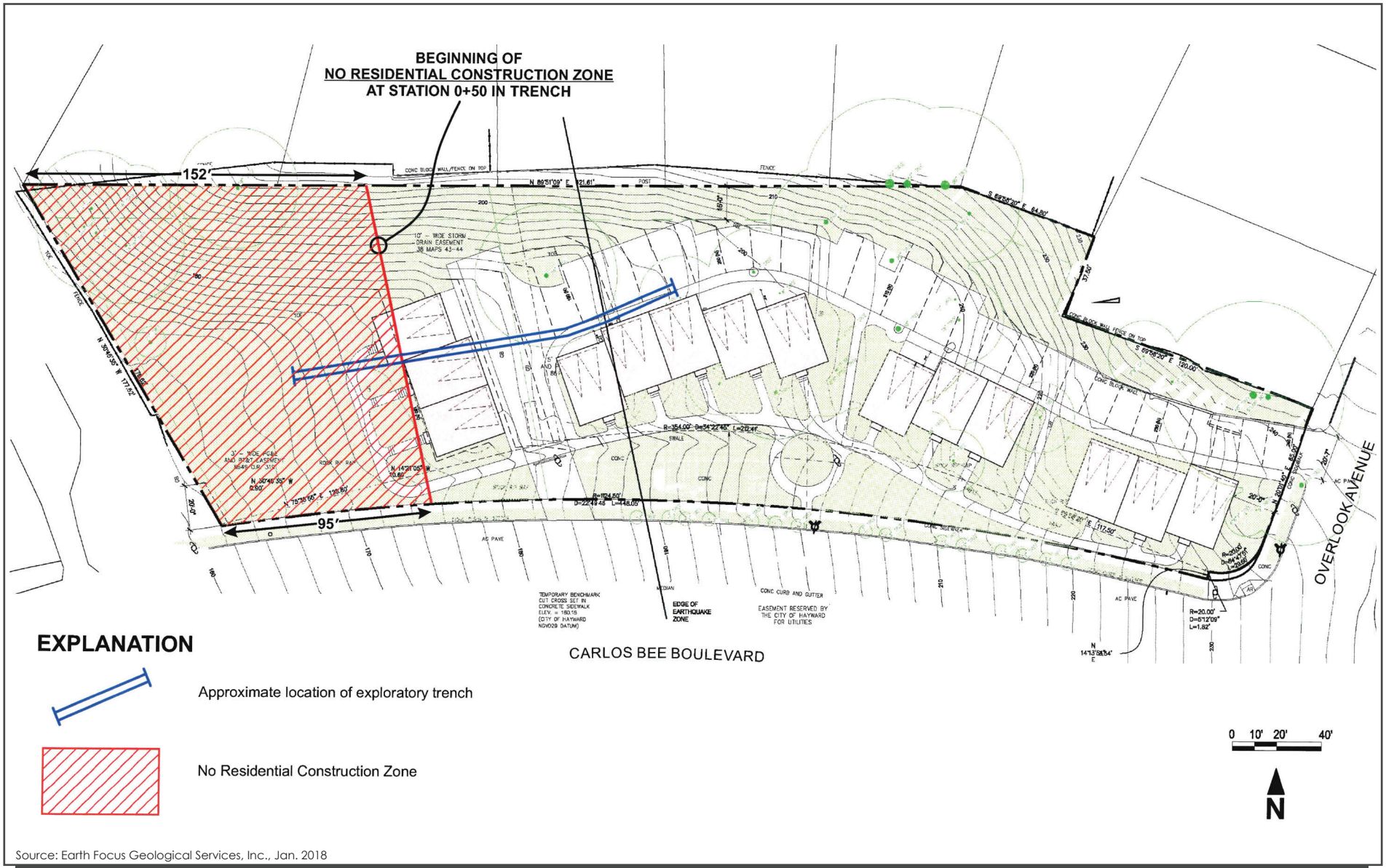
Seismic Shaking

The project would conform to the standard engineering and building practices and techniques specified in the California Building Code (CBC). The CBC has adopted provisions for incorporation of strong ground shaking into the design of all structures. The buildings would meet the requirements of appropriate Building and Fire Codes, as adopted by the City of Hayward. The proposed residences would also be designed and constructed in accordance with the recommendations of a geotechnical report prepared for the site (refer to Appendix C3), which identifies specific design features related to geologic and seismic conditions.. Therefore, the project would not cause substantial adverse effects related to seismic ground shaking. **(Less than Significant Impact)**

Liquefaction

The project site is not located in a liquefaction hazard zone. Thus, there would be no impact due to liquefaction. **(No Impact)**

[33] It should be noted that Figure 4.7-1 references a site plan which is no longer current. The current site plan has been adjusted to account for the results of the Fault Rupture Hazard Evaluation and the established No Residential Construction Zone.



Source: Earth Focus Geological Services, Inc., Jan. 2018

EXPLORATORY TRENCH LOCATION AND NO RESIDENTIAL CONSTRUCTION ZONE | FIGURE 4.7-1

Landslides

As described, the project site is not located in an identified landslide hazard zone. The probability that landslides will occur is low, and proper maintenance of drainage measures at the site would further reduce any risk. The project would not create or exacerbate landslide hazards. Thus, no substantial adverse effects would occur due to landslides. **(Less than Significant Impact)**

Impact GEO-2:	The project would not result in substantial erosion or the loss of topsoil. **(Less than Significant Impact)**

The proposed project is located on approximately 15 percent slopes and would involve minor grading and excavation. During construction, open soil surfaces would be exposed to wind and water erosion. Soil loss from the site could lead to building instability and potential impacts on the City's stormdrain system. However, as discussed in Section 4.10, Hydrology and Water Quality, the project would be required to control erosion and sedimentation using Best Management Practices (BMPs) as required under the City's Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) permit. Stormwater runoff during construction would be minimized and managed as required by the Construction General Permit. The project would be required to provide an erosion or sediment plan as part of the process to obtain grading permits, as stipulated by in Chapter 10, Article 8 of the Hayward Municipal Code. For these reasons, the project would not result in substantial erosion or the loss of topsoil during construction and post-construction periods. **(Less than Significant Impact)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. **(Less than Significant Impact)**

As mentioned, the project site is not located within liquefaction or landslide hazard zones. The geotechnical investigation of the site did not report any unusual geologic conditions that could lead to structural instability or otherwise cause substantial hazards. The project would conform to the recommendations of the geotechnical investigation pertaining to site clearing and preparation, building foundations, slope stability, excavations, fill and compaction, and surface drainage. Conformance to the recommendations in the geotechnical investigation and the California Building Code would ensure the project does not risk exacerbating any geologic or soil conditions at the site. **(Less than Significant Impact)**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

The geotechnical investigation noted that the soils underlying the site have a moderate to high expansion potential. The geotechnical investigation includes recommendations to mitigate the effects of expansive soil if encountered during construction. Additionally, it is recommended that the

proposed buildings be supported on mat slab foundations that extend at least 12 inches below the lowest adjacent grade to account for the abundant expansive soils on-site and potential soil movement during the lifetime of the project. Adherence to the recommendations of the geotechnical investigation would reduce the risks associated with expansive soils to a less than significant level. **(Less than Significant Impact)**

Impact GEO-5:	The project would not 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 waste water. **(No Impact)**

The City's sanitary sewer system is available to serve the proposed project and implementation of the project would not involve the use of alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

The proposed project would excavate to an estimated depth of four feet. Paleontological resources are typically not found within strata at this depth. However, there is still the possibility that construction activities unearth previously undiscovered paleontological resources. Disturbance of these resources during construction would constitute a significant impact.

Mitigation Measure: The project would implement the following mitigation measure to account for the accidental discovery of paleontological resources during project construction:

MM GEO–6: *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's Planning Manager notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. 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 shall also be submitted to the City.

Adherence to the mitigation measure described above would reduce potentially significant impacts to paleontological resources. **(Less than Significant with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

State

Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO2e.

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 upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions 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.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission partnered with the Association of Bay Area Governments, BAAQMD, and Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The project site is located just outside of the Mission Boulevard Corridor PDA.[34]

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for

[34] Association of Bay Area Governments. "PDA – Priority Development Areas." https://abag.ca.gov/our-work/land-use/pda-priority-development-areas. Accessed September 27, 2019.

model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[35]

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal 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 related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed 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.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Hayward and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

City of Hayward General Plan

The City of Hayward General Plan contains policies related to reducing GHG emissions. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy NR-4.3	The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the life-cycle of a structure.
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.
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.

[35] CARB. "The Advanced Clean Cars Program". Accessed January 29, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

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 2014 as part of the 2040 General Plan. The 2014 CAP was designed to reduce communitywide emissions 20 percent below 2005 levels by the year 2020, 62.7 percent below 2005 levels by the year 2040, and 82.5 percent below 2005 levels by 2050.

The CAP includes nine GHG reduction strategies that apply to all sectors. Within these strategies, there are approximately 40 specific communitywide actions and 20 specific municipal actions that implement the strategies. Full implementation of all quantitative actions according to the implementation plan in the CAP would result in meeting the City's GHG reduction targets through 2020, 2040, and 2050.

4.8.1.2 *Existing Conditions*

Total GHG emissions in Hayward were approximately 1,183,279 metric tons of CO_2 equivalent in 2005. Total GHG emissions decreased in certain sectors in Hayward by 2010; residential and commercial sectors each decreased by three percent, while transportation GHG emissions from on-road sources decreased by eight percent. Waste-related GHG emissions declined by approximately 54 percent between 2005 and 2010.[36] The primary source of GHG emissions in Hayward is the transportation sector, comprising about 62 percent of all GHG emissions in the City. Residential and commercial building energy consumption comprises nearly 34 percent of local emissions.

The project site is undeveloped and does not contribute to the City's GHG emissions portfolio.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

[36] City of Hayward. *Hayward 2040 General Plan Draft Environmental Impact Report.* January 2014.

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

GHG emissions would occur during grading of the site and construction of the project, including emissions associated with equipment, vehicles, and manufacturing materials used to construct the project. The project site is an infill site located within an urbanized area in close proximity to construction material suppliers and equipment. This infill location and proximity to supplies would help to minimize GHG emissions generated from transport of construction materials and waste associated with the project. There is no reliable method to estimate construction-related emissions associated with the manufacturing of project materials.

Neither the City of Hayward nor BAAQMD have quantified thresholds for construction-related GHG emissions. Because project construction will be a temporary condition (approximately eight months) and would not result in a permanent increase in local or regional emissions that would interfere with implementation of AB 32 or SB 32, the increase in emissions would be less than significant. **(Less than Significant Impact)**

Operational Emissions

The proposed project includes construction of nine single-family dwellings and six ADUs on a 1.6-acre site. In total, the proposed buildings would occupy approximately 10,476 square feet of the site (15 percent), with the remaining area occupied by a private roadway, guest parking area, playground, and landscaping. BAAQMD has developed screening criteria to provide a conservative indication of whether a project would result in a potentially significant operational-related GHG emissions impact. Projects that fall below the applicable screening criteria for the proposed land use would be considered to have a less than significant operational GHG impact and would not require a site-specific GHG analysis.

The screening size for the "single-family" land use type is 56 dwelling units. The screening criteria is based on GHG reduction targets through the year 2020, per AB 32. More stringent targets have since been adopted, per SB 32, which mandate a 40 percent reduction in GHG emissions from 1990 levels by the year 2030. The proposed project would not be constructed and operational prior to 2020; therefore, its GHG impacts were assessed relative to the 2030 target. To reflect this new target, the screening levels were reduced by 40 percent to be 34 dwelling units. As the project proposes a total of nine single-family units and six ADUs, it would remain below the BAAQMD screening criteria (as modified to reflect reduction targets through 2030). Therefore, the proposed project would have a less than significant operational GHG impact. **(Less than Significant Impact)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

The proposed project would not result in an operational GHG emissions impact, as discussed above. The project is consistent with the site's General Plan land use designation of *Low Density Residential.* The City of Hayward's 2040 CAP determined that consistency with the implementation program of the 2040 CAP would reduce communitywide GHG emissions to meet the City's targets through 2020, 2040, and 2050. The project would not deviate from the land use assumptions used to make this conclusion; thus, the project would not result in GHG emissions beyond what was forecasted in the most recent inventory. The nature of the project as an infill development in proximity to commercial development and transit options along Mission Boulevard and the inclusion of various amenities would reduce the project's vehicle miles traveled (VMT) and associated automobile emissions. The project would be required to incorporate energy-efficient and sustainable building features into its design, per the 2019 CALGreen Code and Title 24, and would provide solar panels on select units of the subdivision as a Planned Development amenity. Compliance with the latest energy efficiency standards would reduce energy waste and GHG emissions resulting from energy expenditures. For these reasons, the proposed project would not conflict with General Plan policies related to GHG emission reductions or with the implementation program of the 2040 CAP. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I Environmental Site Assessment prepared by *Harris and Lee Environmental Sciences, LLC* in November 2017. The Phase I ESA is included in Appendix D of this Initial Study.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Federal and State

Hazardous Materials Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Cortese List

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and 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 Alameda County. The project site is not on the Cortese List.[37]

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of property. Facilities that are required to participate in the CalARP program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if

[37] CalEPA. "Cortese List Data Resources". Accessed August 23, 2019. https://calepa.ca.gov/sitecleanup/corteselist.

accidentally released. The County of Alameda Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials and Lead-Based Paint

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

The U.S. Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Federal Aviation Regulations, Part 77

Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (FAR Part 77) sets standards and review requirements for protecting the airspace for safe aircraft operations. The FAR Part 77 restricts the height of structures, and sets standards for minimization of potential hazards like reflective surfaces, flashing lights, and electronic interference, that could potentially interfere with aircraft operations. Building height limitations are intended to keep flight paths clear of structures that could interfere with takeoff and landing movements.

Local

City of Hayward General Plan

The Safety Element, Natural Resources Element and Hazards Element of the City's General Plan contains policies, recommendations, and actions to avoid or mitigate hazards and hazardous material impacts resulting from development within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Goal HAZ-1	Promote a disaster-resilient region by reducing hazard risks through regional coordination and mitigation planning.
Goal HAZ-5	Protect life and minimize potential property damage from urban wildfire hazards in hillside areas.
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 HAZ-6.1	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: • Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans - HMBP); • California Accidental Release Prevention (CalARP) Program; • 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 HAZ-6.2	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.

Association of Bay Area Governments Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area

The City of Hayward has adopted the Association of Bay Area Governments (ABAG) Multi-Jurisdictional Local Hazard Mitigation Plan as the City's Local Hazard Mitigation Plan. The Plan identifies natural hazards facing the community and the region, assesses the community's and region's vulnerability to these hazards, and identifies specific preventative actions that can be taken to reduce the risk from the hazards.

City of Hayward Hillside Design and Urban/Wildland Interface Guidelines

The City has adopted guidelines for development proposed in hillside areas and in the Urban/Wildland Interface. The purpose of the Urban/Wildland Interface Guidelines is to mitigate through proper planning, design, and management the high fire danger associated with development located in an Urban/Wildland Interface Zone. Guidelines address building construction standards for fire protection, fuel modification and management at the urban/wildland interface, and fire-resistant landscaping.

4.9.1.2 *Existing Conditions*

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.

Historical Use of the Site

The project site was undeveloped as far back as 1939. From the 1960s until approximately 2010 there were multiple dwellings located on eastern and western sides of the project site. From 2012 to the present there have been no structures on-site and the site has been vacant land covered in native grasses and trees.

On-Site Environmental Conditions

The project site was historically used for residential purposes. An environmental records search revealed that the site is listed on the HAZNET database for the handling and disposal of 'asbestos-containing waste'. This record is most likely related to an upgrade or remodel of one of the dwellings that was formerly located on the project site and is not of adverse environmental significance to the project site. There are no recognized environmental conditions, controlled recognized environmental conditions, or vapor encroachment conditions on the project site.

Off-Site Environmental Conditions

Within the standard American Society for Testing and Materials (ASTM) search distance of one mile, there are no listed sites which present a hazardous materials concern to the project site. This is due to either the status of the listed site, the distance from the project site, and/or the location relative to site topography and groundwater flow direction.

Wildland Fire Hazards

The project site is not located within an identified Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) or a Local Responsibility (LRA).[38,39] The project site is, however, located within an identified high fire hazard area and an Urban/Wildland Interface in the City's General Plan EIR.[40]

Airport Hazards

The project site is located approximately 2.5 miles east of the nearest airport, Hayward Executive Airport. Hayward Executive Airport is a general aviation airport serving local private pilots and houses over 400 aircraft including business jets.[41] The project site is located outside of the Airport Influence Area (AIA) for Hayward Executive Airport.[42]

[38] CAL FIRE. *Alameda County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[39] CAL FIRE. *Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area.* September 2008.
[40] City of Hayward. *Hayward 2040 General Plan Background Report.* Figures 5-3 and 5-4. November 2013.
[41] City of Hayward. "Hayward Executive Airport". 2016. Accessed August 27, 2019. Available at: https://www.hayward-ca.gov/airport
[42] Alameda County Airport Land Use Commission. *Hayward Executive Airport Land Use Compatibility Plan.* August 2012.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) 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?	☐	☐	☐	☒
5) 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, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
6) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Future residential development at the project site would likely include the on-site use and storage of cleaning supplies and maintenance chemicals in small quantities. The small quantities of cleaning supplies and maintenance chemicals used on-site would not create a significant hazard to adjacent land uses. **(Less than Significant Impact)**

Impact HAZ-2:	The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

The Phase I ESA did not identify any environmental conditions at the project site that warrant additional study, remedial action, or special treatment during construction or operation of the project. The project does not involve demolition of structures which could contain asbestos or lead-based paints. The site was not formerly used for hazardous materials storage and there are no off-site releases of hazardous materials into soil or groundwater which could be exacerbated by the project. Therefore, the project would not create a significant hazard to the public or the environment through the release of hazardous materials. **(Less than Significant Impact)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

The project site is located approximately 250 feet east of Silver Oak High School. There are no other schools within ¼-mile of the project site. The proposed project is a residential development which would not emit hazardous emissions or use hazardous materials. As mentioned, operation of the project would likely involve the storage, use, and disposal of cleaning supplies and maintenance chemicals in small quantities typical in a residence. The presence and use of these chemicals on-site would not pose a hazardous materials risk to adjacent uses. Therefore, nearby schools would not be impacted by hazardous materials released during operation of the proposed project. **(Less than Significant Impact)**

Impact HAZ-4:	The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(No Impact)**

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment. **(No Impact)**

Impact HAZ-5:	The project is not located within an airport land use plan and would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

As mentioned, the project site is located outside of the AIA for Hayward Executive Airport. The proposed residential project would not result in a safety hazard or excessive noise for people residing in the project area. **(No Impact)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The proposed project would comply with the California Building Code and Fire Code. The project includes an emergency access road which would be accessible from Carlos Bee Boulevard and Overlook Avenue. The project would not prevent access to surrounding neighborhoods, either during construction or operation. Therefore, the project would not interfere with the City of Hayward Comprehensive Emergency Management Plan. **(Less than Significant Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. **(Less than Significant Impact)**

The project site is located in a high fire hazard zone and Urban/Wildland Interface as delineated by the City of Hayward in its General Plan.[43] The project would require appropriate fire safe design measures be incorporated into the project design to avoid contributing to wildland fire hazards in the surrounding neighborhoods. The project would adhere to the City's Hillside Design and Urban/Wildland Interface Guidelines, which requires structures in this area to meet or exceed the minimum California Fire Safe Guidelines and include sprinkler systems, double-paned windows, decks made from non-combustible materials, fire-resistant planting, and other fire safe design elements. The proposed project would also be required to establish a fuel management program that focuses on homeowner education, shaded fuel breaks, and fuel management zones. Adherence to the City's Hillside Design and Urban/Wildland Interface Guidelines, and continued implementation of the mitigation strategies outlined in the 2016 Local Hazard Mitigation Plan, would ensure that the proposed project does not expose people or structures to significant impacts related to wildland fires. **(Less than Significant Impact)**

[43] City of Hayward. *Hayward 2040 General Plan Background Report.* Figures 5-3 and 5-4. November 2013.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Federal

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRM) that identify Special Flood Hazard Areas (SFHA). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

State

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect

these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Stormwater NPDES Permit/Provision C.3

The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit[44] (MRP) to regulate stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

In addition to water quality controls, the MRP requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious. The project would not create or replace more than one acre of impervious surfaces; therefore, it would not meet the size threshold for hydromodification requirements.

Local

City of Hayward General Plan

The General Plan includes the following policies which pertain to hydrology and water quality and are applicable to the proposed project:

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.

[44] MRP Number CAS612008

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.

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.

City of Hayward Floodplain Management Ordinance

The City Flood Plain Management Ordinance is intended to establish regulations consistent with Federal and State requirements and set development standards and restrictions for publicly and privately-owned land within flood-prone, mudslide, or flood-related erosion areas. The Ordinance requires the City to participate in the NFIP.

The City Engineer, acting as the Flood Plain Administrator for the City of Hayward, is responsible for making determinations in accordance with the Flood Plain Management Ordinance. Responsibilities include ensuring that development applications comply with ordinance requirements, that required State and Federal permits have been obtained, that a proposed development site is reasonably safe from flooding, that the proposed development does not adversely affect area carrying capacity, and that building permits for flood control projects meet requirements.

4.10.1.2 *Existing Conditions*

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. Currently, none of the tributaries which pass through Hayward are listed as impaired on the Clean Water Act Section 303(d) list of threatened and impaired waters.

The project site is located within the Old Alameda Creek watershed.[45] The Old Alameda Creek watershed drains approximately 22 square miles and is part of the larger Alameda Creek watershed. The watershed drains a portion of the East Bay Hills in Hayward, then spreads through urban flatlands before flowing to San Francisco Bay. Ward Creek and Zeile Creek drain the hills surrounding California State University East Bay, connect to a series of engineered channels and culverts in the lower watershed, and eventually join Old Alameda Creek. Ward Creek is located approximately 0.2-mile north of the project site. Stormwater runoff from the buildings, hardscape, and local streets in the project area is collected and conveyed to Old Alameda Creek via the City's stormwater drainage system.

Groundwater

The City of Hayward is situated over portions of two medium priority groundwater basins: the East Bay Plain Subbasin and the Niles Cones Subbasin. These two subbasins are part of the larger Santa Clara Valley Groundwater Basin. The Niles Cone Subbasin 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 groundwater levels on either side. The City does not rely on groundwater for regular water supply but maintains groundwater wells that are critical to the City's ability to provide water service during an earthquake or other water supply emergency.

The City of Hayward operates as the Groundwater Sustainability Agency (GSA) under the 2014 Sustainable Groundwater Management Act (SGMA) for the portion of the East Bay Plain Basin which is within City limits. The Alameda County Water District (ACWD) operates as the GSA for the Niles Cone Subbasin. The project site is located just outside of the bounds of the East Bay Plain subbasin.[46]

Groundwater at the site was encountered at depths of 11.5 feet bgs and flows in a southwest to northwest direction. The site does not contain any recharge ponds or production wells.

Storm Drainage System

The City of Hayward owns and maintains the municipal storm drainage system serving the project area. The project site is undeveloped and consists of 100 percent pervious surfaces. There are two storm drain inlets located adjacent to the sidewalk at the southern portion of the site. The majority of stormwater naturally infiltrates into the soil or is captured by the storm drain inlets and conveyed to the City's drainage system via a 15-inch storm drain line in Carlos Bee Boulevard.

Flooding

The project site is not located within a 100-year flood hazard area. According to the FEMA FIRM, the project site is located in Zone X which is an area with 0.2 percent annual chance of flood; areas

[45] Alameda Flood Control and Water Conservation District. "Interactive Map: Alameda County Watersheds". https://acfloodcontrol.org/resources/explore-watersheds/ Accessed August 28, 2019.
[46] California Department of Water Resources. "SGMA Portal – City of Hayward GSA". https://sgma.water.ca.gov/portal/gsa/print/200#intro Accessed August 28, 2019.

with one percent chance of annual flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from one percent annual flood.[47]

Other Inundation 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 its dam facilities. The Hayward Dam Inundation Area map shows that the project site is not located within a dam failure inundation zone.[48]

Sea Level Rise

The project site is located on an elevated hillside in the northeastern part of the City. The project site is not located within a shoreline area vulnerable to projected sea level rise due to global climate change.

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.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐

[47] Federal Emergency Management Agency. *Flood Insurance Rate Map 06001C0287G*. August 3, 2009.
[48] City of Hayward. *General Plan Background Report*. Figure 9-5 Hayward Dam Inundation Areas. January 2013.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Water Quality Impacts

Construction activities, such as grading and hauling of materials, have the potential to result in temporary impacts to surface water quality in adjacent waterways. When disturbance to the soil occurs, sediments may be dislodged and discharged into the storm drainage system after surface runoff flows across the site. The proposed project would disturb approximately 1.3 acres of soil on the site, which exceeds the one-acre threshold requiring compliance with the Construction General Permit. As discussed above in Section 4.10.1.1 Regulatory Framework, the Construction General Permit requires the filing of an NOI and a SWPPP with the SWRCB. Compliance with this mandatory regulation would ensure that the discharge of pollutants to nearby receiving water bodies is minimized and construction-related water quality impacts are reduced. The SWPPP would include Best Management Practices to reduce erosions potential and sedimentation, as detailed below.

Standard Measures

The following standard measures (based on the RWQCB BMPs) will be included in the SWPPP prepared for the project and would reduce identified construction-related water quality impacts to a less than significant level.

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities shall be suspended during periods of high winds.

- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be required to cover all trucks or maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to knock mud from truck tires prior to entering City streets. A tire wash system may also be employed at the request of the City.

Implementation of the construction BMPs outlined above, along with compliance with the Construction General Permit, would ensure that the project does not result in construction-related water quality impacts. **(Less than Significant Impact)**

Operational Water Quality Impacts

The proposed project would increase impervious surfaces on-site by 23,945 square feet. The project would add more than 10,000 square feet of impervious surfaces and would be required to comply with Provision C.3 of the MRP. The project would treat stormwater runoff at the site using LID methods. Stormwater runoff from the site would be treated for pollutants in a bioretention pond located at the southwestern corner of the site. The bioretention pond would be numerically sized to treat the amount of stormwater resulting from the increased impervious surfaces on-site. This would allow for natural infiltration of stormwater and reduce the amount of surface runoff and pollutants released into the City's drainage system. Therefore, the project would not result in an operational water quality impact. **(Less than Significant Impact)**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Less than Significant Impact)**

The proposed project would connect to the City's municipal water system and would not directly extract groundwater. As mentioned, the groundwater level underlying the site is approximately 11.5 bgs. Substantial excavation is not proposed by the project and the depth of trenching required for utility connections would likely not encounter groundwater. The project would not require any dewatering of subsurface groundwater.

The proposed nine-unit development would result in a minor increase in water demand in the City; however, this increase was accounted for in the City's General Plan and related utility planning documents, could be met by existing service providers, and would not substantially decrease groundwater supplies. Overall, the project would not interfere with efforts to sustainably manage the

East Bay Plain subbasin or any other groundwater basin which the City relies upon for water supply. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

The proposed project would slightly alter the existing drainage pattern of the site by adding impervious surfaces and directing runoff towards a bioretention pond on the downslope side of the site. The project would not alter the course of a stream or river or impede or redirect flood flows. Impervious surfaces on the project site would increase from zero to 23,945 square feet and a greater volume of stormwater runoff would be generated on-site. The increased volume of runoff would be managed in accordance with the Provision C.3 of the MRP, which would reduce the amount of runoff and pollutants leaving the site and entering the City's drainage system. The storm drain system in the surrounding streets has sufficient capacity to accommodate the increase in runoff resulting from the project. Additionally, as described in Section 4.7 Geology and Soils, the project would be required to prepare an erosion or sediment control plan prior to issuance of grading permits pursuant to City of Hayward Municipal Code Chapter 10, Article 8. For the reasons described above, the proposed project would not result in a significant drainage impact. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

The project site is not located within an area exposed to flood hazards. The site is approximately 170 to 240 feet above sea level and is not at risk of inundation or subsequent pollutant release. **(No Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

The project site is located outside of the boundaries of the groundwater basin (East Bay Plain subbasin) that the local GSA (City of Hayward) is responsible for managing. The City and the East Bay Municipal Utilities District are in the process of jointly preparing a Groundwater Sustainability Plan for the ongoing management of the entire East Bay Plain subbasin. The proposed project would not conflict with future implementation of this plan, as the site does not contain any emergency wells operated by the City and is outside of the jurisdiction of the GSA. **(No Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

City of Hayward General Plan

The General Plan contains numerous policies which were intended to reduce or mitigate environmental effects associated with build-out of the General Plan. Policies which are applicable to the proposed project are discussed in their respective resource sections throughout this Initial Study.

City of Hayward Zoning Ordinance

The City's Zoning Ordinance is intended to promote the public health, safety, general welfare and preserve and enhance the aesthetic quality of the City by providing regulations to ensure an appropriate mix of land uses in an orderly manner. The City has set forth allowable land uses and development standards in the Zoning Ordinance in order to:

a. Retain and enhance established residential neighborhoods, commercial and industrial districts, regional-serving uses, and recreational amenities.
b. Allow for the infill and reuse areas at their prevailing scale and character.
c. Accommodate expansion of development into vacant and underutilized lands within environmental and infrastructure constraints.
d. Maintain and enhance significant environmental resources.
e. Provide a diversity of areas characterized by differing land use activity, scale and intensity.
f. Establish Hayward as a unique and distinctive place in the heart of the San Francisco Bay Area with a high quality of life in an attractive, secure environment for the City's residents and businesses.

Hayward Executive Airport Comprehensive Land Use Plan

The Airport Land Use Commission (ALUC) for Alameda County adopted the Comprehensive Land Use Plan (CLUP) for the Hayward Executive Airport in August 2012. The CLUP is a guiding document which promotes compatibility between Hayward Executive Airport and its environs. The CLUP establishes an Airport Influence Area (AIA) in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions within that area. Projects within the AIA would require referral to the ALUC for review prior to project approval.

4.11.1.2 *Existing Conditions*

The project site is designated in the General Plan as *Low Density Residential.* This designation generally applies to suburban areas located throughout the Hayward Planning Area. Typical building types include single-family homes, second units, and ancillary structures. This designation allow residential densities between 4.3 and 8.7 dwelling units per net acre.

The project site is zoned RS (Single-Family Residential). This zoning designation is intended to be used only for single-family homes and accompanying community services as allowed by the City's zoning code.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☐	☒
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Impact LU-1: The project would not physically divide an established community. **(No Impact)**

The project proposes to develop a vacant site with nine single-family dwelling units and six ADUs in an urban area of Hayward. There are existing single-family neighborhoods to the north and east of the site, a vacant lot to the south, and a school and commercial uses to the west. The project does not propose the construction of infrastructure such as highways, freeways, or major arterial streets which could divide the area. As proposed, development would be confined to the project site and residents of the surrounding neighborhoods would retain access to local roadways in the vicinity of the site. Therefore, the project would not result in a significant land use impact by physically dividing an established community. **(No Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

General Plan and Zoning

The project proposes a residential density of 5.5 dwelling units per acre; this is within the allowable densities under a General Plan designation of *Low Density Residential* (4.3-8.7 du/ac). The proposed nine-unit development would not require a General Plan Amendment and would be consistent with its land use designation. The project would be consistent with General Plan policies adopted to avoid or mitigate environmental effects, as is discussed in the respective resource sections throughout this Initial Study.

The project site is zoned RSB6 (Single-Family Residential). This zoning designation is intended to be used only for single-family homes and accompanying community services as allowed by the City's zoning code. The proposed project includes a Zone Change from RSB6 District to PD

(Planned Development) District to allow for a clustered, small lot residential development within the allowable density range set by the *Low Density Residential* General Plan land use designation. Pursuant to the Hayward Municipal Code Section 10-1.2505, the PD District designation is intended to facilitate development of land in an innovative fashion to allow for flexibility in site design and encourage development that is sensitive to environmental and site-specific considerations. The applicant is seeking deviations from the minimum lot size in order to cluster the development on the least sloped portion of the site that is outside of the identified "No Residential Construction Zone." The PD District would make minor modifications to development standards allowed under existing zoning but would not exceed the permitted density under the *Low Density Residential* General Plan designation. Upon approval of the proposed rezone, the project would not be in conflict with the Zoning Ordinance. **(Less than Significant Impact)**

Hayward Executive Airport Comprehensive Land Use Plan

The project site is located approximately 2.5 miles east of the Hayward Executive Airport and is outside of the AIA established in the CLUP. Therefore, the project would not conflict with any policies set forth in the CLUP to reduce or avoid environmental impacts. **(No Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board, after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

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-5.1	The City shall protect mineral resources in undeveloped areas that have been classified by the State Mining and Geology Board as having statewide or regional significance for possible future extraction by limiting new residential or urban uses that would be incompatible with mining and mineral extraction operations.

4.12.1.2 *Existing Conditions*

The U.S. Geological Survey has identified eleven past, present, or prospective mining sites within the City of Hayward. The only State-designated mineral resource of regional significance in Hayward is the La Vista Quarry. The project site is not located within the La Vista Quarry, which is approximately 600 feet southwest of the site. The vacant lot to the south of the project site is identified in the General Plan Background Report as containing a portion of a prospective stone extraction mine.[49]

[49] City of Hayward. *General Plan Background Report.* Figure 7-8. February 2013.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒

Impact MIN-1:	The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

The project site does not contain any known mineral resources of value. The development of the site with a residential subdivision would not result in any impact to mineral resources. **(No Impact)**

Impact MIN-2:	The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. **(No Impact)**

As described previously, the vacant land to the south of the site is identified in the City's General Plan as a prospective stone extraction site. The proposed project would not result in the loss of this potential mineral resource recovery site. **(No Impact)**

4.13 NOISE

4.13.1 Environmental Setting

4.13.1.1 *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.[50] 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 Noise

Construction is a temporary source of noise impacting residences and businesses located near construction sites. Construction noise can be significant for short periods of time at any particular location and generates the highest noise levels during grading and excavation, with lower noise levels occurring during building construction. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 90 to 95 dBA L_{max} at a distance of 50 feet. Typical hourly average construction-generated noise levels are approximately 81 to 88 dBA L_{eq} measured at a distance of 50 feet from the site during busy construction periods. Construction

[50] 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.

generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

4.13.1.2 *Regulatory Framework*

Local

City of Hayward General Plan

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

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-8.4	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	The City shall require the design of new residential development to comply with the following noise standards: • 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 Ldn of 45 dB with windows closed. • The maximum acceptable exterior noise level for the primary open space area of a detached single-family home, duplex or mobile home, which is typically the backyard or a fenced side yard, shall be an Ldn of 60 dB. 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-8.20	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 10:00am to 6:00 pm on Sundays and holidays).
Policy HAZ-8.22	The City shall require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g. pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.

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.

4.13.1.3 *Existing Conditions*

The project site is located in a predominantly residential area of the City. The noise environment at the project site results primarily from vehicular traffic along Mission Boulevard, approximately 730 feet west of the site. Traffic along Carlos Bee Boulevard and intermittent airplane flyovers from Hayward Executive Airport also contribute to noise levels at the site. The project site is located approximately 2,000 feet from the nearest rail line. The General Plan Draft EIR found that the 60 dBA CNEL railroad noise contour extends approximately 950 to 1,120 feet from the centerline of the rail line; therefore, the project site is not exposed to substantial noise from the rail line.

Traffic noise levels along Mission Boulevard from Harder Road to Carlos Bee Boulevard were modeled as 72 dBA CNEL at 50 feet from the roadway centerline.[51] The project site is located approximately 800 feet from the centerline of Mission Boulevard. Traffic noise modeling was based on existing average daily traffic (ADT) volumes and speeds indicated by the General Plan traffic study. Long-term measurements were also taken throughout the City as a part of the General Plan Background Report; the closest long-term measurement (LT 3) was located at Bunker Hill Boulevard, approximately 0.4-mile east of the project site. Ambient noise levels at this location were measured as approximately 62 CNEL.

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

[51] City of Hayward. *Public Review Draft Background Report.* Table 9-11: Summary of Modeled Existing Traffic Noise Levels. November 2013.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact NOI-1: The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact with Mitigation Incorporated)**

Construction Noise

Construction of the proposed project would take approximately eight months to complete. The project would increase the temporary noise levels in the area due to construction activities such as grading, paving, and trenching for utility connections. The significance of noise impacts during construction depends on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors.

Construction activities generate considerable amounts of noise when heavy equipment is used. Typical hourly average construction generated noise levels are about 75 dBA to 80 dBA measured at a distance of 100 feet from the source during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Construction generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor.

The construction of the proposed project would temporarily increase noise levels in the immediate vicinity of the project site and would be audible at the nearby residences. Construction of the project would be limited to between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays, and 7:00 a.m. and 7:00 p.m. on other days, as set forth in General Plan Policy HAZ-8.21. The City of Hayward Municipal Code (Chapter 4, Section 4-1.03.4) sets additional requirements for construction noise, which are stated below:

- No individual device or pierce of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.

- The noise level at any point outside of the property plane shall not exceed eighty-six (86) dBA.
- During all other times, the decibel levels set forth in Section 4-1.03.1 shall control.

While the construction equipment and activities anticipated for the proposed project are not expected to generate noise in exceedance of Municipal Code requirements, sensitive receptors in the vicinity could still be exposed to excessive noise levels. If project construction were to expose nearby sensitive receptors to noise levels in excess of City standards, this would constitute a significant impact. To ensure the proposed project would not result in construction noise impacts at adjacent residences the following mitigation measures shall be implemented.

Mitigation Measures:

The following measures will be implemented by the project, in addition to Municipal Code limits on hours of construction, to ensure impacts from construction noise are reduced to a less than significant level:

MM NOI-1.1: The applicant shall develop a construction noise plan, including, but not limited to the following available controls:

- In accordance with the Municipal Code, utilize the best commercially-reasonable available noise suppression devices and techniques during construction activities to reduce noise levels from individual devices or pieces of equipment to 83 dBA or less at a distance of 25 feet and 86 dBA at the property plane.

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Unnecessary idling of internal combustion engines shall be strictly prohibited.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- Locate temporary material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

- Notify in writing all adjacent business, residences, and other noise-sensitive land uses of the construction schedule.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The construction noise control plan will be implemented during all phases of construction activity to reduce the noise exposure of neighboring properties. With implementation of the above-listed noise control measures and compliance with limitations on hours and construction equipment noise level emissions set forth in the Municipal Code, the project would have a less than significant construction-noise impact. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Noise

Operational noise generated by the project would be primarily attributed to mechanical equipment in the proposed buildings (ventilation systems, air conditioning, fans, etc.) and the increase in traffic from additional vehicle trips to and from the site.

A noise increase is considered substantial if it increases the ambient noise level by three dB or more in sensitive noise areas. A three dB increase is equivalent to a doubling of traffic on local roadways. The proposed project would generate an additional 103 net new daily trips on local roadways, based on the estimated population increase created by the project and Institute of Traffic Engineers (ITE) trip generation rates (refer to Section 4.17, Transportation).[52] This increase in traffic would not result in a doubling of traffic on Carlos Bee Boulevard and other neighboring streets; existing average daily trip (ADT) volumes on Carlos Bee Boulevard at Mission Boulevard are estimated at 16,100. Traffic noise from the project would not result in a substantial increase in ambient noise levels.

The proposed project's mechanical equipment will be designed to meet the City's 60 dBA L_{eq} noise levels at adjacent residential property lines. For this reason, and those discussed above, the proposed project would not result in a significant operational noise impact. **(Less than Significant Impact)**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Construction activities of the proposed project would not involve demolition, impact pile driving, bulldozing, or other heavy-duty activities that typically generate the greatest vibrational frequency. In

[52] Institute of Transportation Engineers. *Trip Generation Manual 10th Edition – Volume 2: Data – Residential (Land Uses 200-299). Single-Family Detached Housing.* September 2017.

addition, the project would not include excavation aside from the minor trenching required to establish utility connections. Due to the scale of the construction activities proposed by the project, and their duration, the project would not result in excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Impact NOI-3:	The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

The project site is located approximately 2.5 miles east of the Hayward Executive Airport and is outside of the AIA and 55 CNEL noise contours established in the CLUP.[53] The project would not expose people residing or working in the project area to excessive noise levels due to airport activities. **(No Impact)**

4.13.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD),* effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Hayward has policies that address existing noise conditions affecting a proposed project.

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 General Plan long-term noise measurements, exterior noise levels at the project site would be approximately 62 dBA CNEL. 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 decibles lower than exterior noise levels with the windows closed. The City has established an interior noise standard of 45 dBA DNL for residential uses. Future project residences would be exposed to noise levels which would exceed the acceptable interior noise standard with windows partially open but would meet the interior noise standard with windows closed. As a condition of approval, the project would be required to include mechanical ventilation to allow windows to be kept closed to ensure interior noise levels in the proposed residences would be maintained at or below 45 dBA DNL, consistent with the City's General Plan.

[53] Alameda County. *Hayward Executive Airport - Airport Land Use Compatibility Plan.* Figure 3.3 HWD Noise Compatibility Zones. August 2012.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

Policies	Description
Policy LU-1.1	The City shall support efforts to improve the jobs-housing balance of Hayward and other communities throughout the region to reduce automobile use, regional and local traffic congestion, and pollution.

4.14.1.2 *Existing Conditions*

According to California Department of Finance data, the City of Hayward had a population of approximately 159,433 residents as of January 1, 2019.[54] ABAG projects the City's population to be 178,270 in 2040.[55]

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. With about 65,741 jobs and 61,718 employed residents in 2010, Hayward had a jobs/housing balance of 1.07.[56] This means that there were 1.07 jobs for every employed resident in the City.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

[54] State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change—January 1, 2018 and 2019. May 2019.
[55] ABAG. "Projections 2040 – Forecasts for Population, Household and Employment for the Nine County San Francisco Bay Area Region." http://projections.planbayarea.org/ Accessed September 9, 2019.
[56] City of Hayward. *Public Review Draft Background Report.* Table 3-1. November 2013.

Impact POP-1:	The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(Less than Significant Impact)**

The project proposes a development of nine single-family dwelling units on an existing vacant site. Of the nine dwelling units, six would include ADUs, as discussed in Section 3.0, Project Description. The increase in housing facilitated by the project would result in a net increase in the local population of approximately 39 residents. [57] This minor increase in population associated with the project was assumed as part of the General Plan buildout, and would not induce substantial population growth in the City of Hayward.

The proposed project would not include any infrastructure or utility systems beyond what is necessary to serve the project, nor would the project remove any existing constraints on growth. The project would, therefore, have a less than significant population impact. **(Less than Significant Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The project site is currently undeveloped. Implementation of the project, therefore, would not displace people or existing housing. **(No Impact)**

[57] Based on the latest Department of Finance data, the average number of residents per household in Hayward is 3.29 (State of California, Department of Finance. *Report E-5 Population and Housing Estimates for Cities, Counties, and the State.* Table 2: City/County Population and Housing Estimates. January 1, 2019). The average number of residents per accessory dwelling unit is 1.5. 3.29 residents per household x nine (9) net new units = 30 residents. 1.5 residents per accessory dwelling unit x six (6) accessory dwelling units = nine residents. Thirty single-family residents + nine accessory dwelling unit residents = 39 total net new residents.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

City of Hayward General Plan

The City's General Plan contain policies, recommendations, and actions to protect and enhance existing and future open space areas within the City. The proposed 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.

Policy LU-9.1	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.
Policy LU-9.2	The City shall coordinate with school districts, park districts, utility providers, and other government agencies that are exempt from local land use controls to encourage facility designs that are compatible in scale, mass, and character with the neighborhood, district, or corridor in which they are located.
Policy LU-7.6	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.
Policy HQL-10.2	The City shall seek to increase the number of parks throughout the City by working with HARD to achieve and maintain the following park standards per 1,000 Hayward residents: • Two acres of local parks, • Two acres of school parks, • Three acres of regional parks, • One mile of trails and linear parks, and • Five acres of parks district-wide.
Policy HQL-10.12	The City shall maintain park dedication requirements and in-lieu fees for new residential development at the maximum allowed under State law.

4.15.1.2 *Existing Conditions*

Fire Service

The City of Hayward Fire Department (HFD) provides fire, paramedic advanced life support (ALS)/emergency medical (EMS), and emergency services to all areas within the City limits, and to the Fairview Fire Protection District (FFPD) on a contract basis. The closest station to the project site is Station 1, located at 22700 Main Street, approximately one mile northwest of the site.

Police Protection Service

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 1.4 miles west of the site. The Hayward Police Department employs over 190 sworn officers in a staff of approximately 300.

Schools

The project site is located within the Hayward Unified School District (HUSD). HUSD operates 22 elementary, five middle, and four high schools within the Hayward Planning Area. Students in the project area would attend Stonebrae Elementary School (approximately 2.9-mile east of the site), Bret Harte Middle School (approximately 0.6-mile northwest of the site), and Hayward High School (approximately 0.6-mile north of the site).[58] Additionally, Silver Oak High School, a charter school, is located approximately 250 feet west of the site. The General Plan Background Report (City of Hayward, 2013) found that the only overcrowded schools in the HUSD were Burbank Elementary School and Cherryland Elementary School.

[58] Hayward Unified School District. "Enrollment – School Boundary Map". https://www.husd.us/enroll. Accessed November 8, 2019.

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. According to the 2019 Draft Recreation and Parks Master Plan, HARD does not meet current standards for local parks, school parks, and district parks (current standards are established by General Plan Policy HQL-10.2, as shown above); however, HARD exceeds the standard for regional parkland.

The nearest public park to the project site is Spring Grove Park, located approximately 0.3-mile south of the site. Other nearby parks include Memorial Park, approximately 0.4-mile northwest of the site, Berry Park, approximately 0.6-mile southwest of the site, and Orange Park, approximately 0.8-mile southwest of the site.

Libraries

The City of Hayward library system includes the Main Library at 835 C Street (approximately 0.9 miles northwest of the site) and Weekes Branch Library at 27300 Patrick Avenue (approximately two miles south of the site).

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

Community Centers

There are currently 11 community centers in the City of Hayward. The nearest community center to the project site is the Hayward Plunge indoor pool facility, approximately 0.4-mile northwest of the site.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project 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:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☒	☐
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☒	☐

Impact PS-1: The project would not 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 fire protection services. **(Less than Significant Impact)**

The proposed project would be located in an urban area that is already served by the HFD. The project would incrementally increase the demand for fire protection services within the HFD's jurisdiction; however, this increase in demand would not require the construction of new facilities or expansion of existing facilities. The proposed project is estimated to increase the local population by 39 residents, which is not a sufficient increase in population to justify new fire stations, personnel, or equipment. The proposed development would be built to applicable Fire Code standards when construction permits are issued and would include features that would reduce potential fire hazards, including smoke detectors and sprinklers. Further, the development will be consistent with the Hillside Design/Urban Wildland Fire Interface Guidelines as outlined in Section 4.9.2 Hazards and Hazardous Materials, above. Emergency vehicles would be able to access the project site from driveways on Carlos Bee Boulevard and Overlook Avenue. Therefore, the proposed project would result in a less than significant impact on fire protection services. **(Less than Significant Impact)**

Impact PS-2: The project would not 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 police protection services. **(Less than Significant Impact)**

The proposed residential development would increase the population of Hayward by approximately 39 residents, thus incrementally increasing the demand for police services. The project site is, however, located within an urban area that is already served by the HPD. The project would be constructed in conformance with current codes and would not require new or physically altered police facilities. Therefore, the proposed project would result in a less than significant impact on police protection services. **(Less than Significant Impact)**

Impact PS-3:	The project would not 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 schools. **(Less than Significant Impact)**

The proposed project would add nine single-family dwelling units and six ADUs and consequently increase the potential number of school-aged children in the area. 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 homes yield approximately 0.143 elementary school students, 0.033 middle school students, and 0.050 high school students.[59] Using the student yield rates mentioned, the proposed nine single-family homes and six ADUs would yield approximately three elementary school students, one middle school student, and one high school student.

The new students generated by the proposed project would not place a significant burden on existing school facilities or require the construction of new facilities. The project would contribute minimally to the demand placed on the schools' infrastructure, staffing and resources. 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 would be 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)**

Impact PS-4:	The project would not 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 parks. **(Less than Significant Impact)**

The City of Hayward provides and maintains parkland and open space within the City for residents and visitors to enjoy. The project is estimated to increase the local population by 39 residents. The

[59] Davis Demographics. *Newark Unified School District – Student Population Projections by Residence - School Year 2016/2017 Report.* August 2017.

project residents would be served by existing parks in the project area and other open space and recreational facilities in the region, including Memorial Park and Berry Park.

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; these fees would be used by the City to acquire and/or develop new parkland and/or amenities, thereby mitigating the impacts from the proposed residential development. **(Less Than Significant Impact)**

Impact PS-5:	The project would not 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 other public facilities. **(Less than Significant Impact)**

Community centers, libraries and other public facilities in the City of Hayward could be used by future residents of the proposed project. While use of nearby community centers would likely increase, implementation of the project would not result in degradation of the existing community centers and/or libraries to the point of disrepair. The proposed project would not require the construction or expansion of community center facilities, libraries or other public facilities to accommodate the increase in local population generated by the proposed project. **(Less than Significant Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

Local

City of Hayward General Plan

The City of Hayward General Plan contains policies pertaining to recreational resources. The following General Plan recreation policies are applicable to the proposed project.

Policy	Description
Policy HQL-10.2	The City shall seek to increase the number of parks throughout the City by working with HARD to achieve and maintain the following park standards per 1,000 Hayward residents: • Two acres of local parks, • Two acres of school parks, • Three acres of regional parks, • One mile of trails and linear parks, and • Five acres of parks district-wide.
Policy HQL-10.12	The City shall maintain park dedication requirements and in-lieu fees for new residential development at the maximum allowed under State law.

Hayward Area Recreation and Park District Parks Master Plan

The Hayward Area Recreation and Park District (HARD) is in the process of updating is Parks and Recreation Master Plan; the current plan was prepared in 2006. The Master Plan will provide guidance for both short and long-range planning for HARD by integrating community input and recreation planning standards. The public draft Master Plan was released in May 2019. The Draft Master Plan includes Level of Service (LOS) standards for various recreational amenities, including, but not limited to, athletic fields, playgrounds, and dog parks.

4.16.1.2 *Existing Conditions*

HARD and 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 (2018) 0.8 acres of local parkland per 1,000 residents, which is just below HARD's minimum standard for local parks (1.0 acres per 1,000 residents).

In its Parks and Recreation Master Plan, HARD evaluated existing outdoor and indoor recreational amenities and compared them to the LOS standards established therein. Table 4.16-1 below shows the existing conditions of recreational facilities in the City relative to the LOS standards.

Table 4.16-1: Recreational Level of Service			
Recreational Amenities	**Total Inventory**	**Current Level of Service (per person)**	**Recommended Level of Service (per person)**
Diamond Athletic Fields	38 fields	1 field per 7,691	1 field per 7,500
Rectangle Athletic Fields	26 fields	1 field per 11,241	1 field per 10,000
Disc Golf Course (18 hole)	-	N/A	1 course per 100,000
Playground	76 sites	1 site per 3,856	1 site per 4,000
Dog Park	5 sites	1 site per 58,453	1 site per 50,000
Tennis Court	31 courts	1 court per 9,428	1 court per 12,000
Outdoor Basketball Court	65	1 court per 4,496	1 court per 5,000
Group Picnic Areas	24 sites	1 site per 12,178	1 site per 10,000
18-Hole Golf Course	1.5 courses	1 course per 194,843	1 course per 250,000
Swim Centers	4 pools	1 pool per 73,066	1 pool per 50,000
Skate Park	8 sites	1 site per 36,533	1 site per 50,000
Recreation and Community Centers	160,844 square feet	0.55 square feet	1 square foot

*__Source:__ Hayward Area Recreation and Park District. *Draft Recreation and Parks Master Plan.* May 2019.

As shown in the table above, the City of Hayward requires additional recreational facilities to meet LOS standards established by HARD.

The project site is currently undeveloped and does not provide any recreational opportunities. The closest recreational facility to the project site is Spring Grove Park, located approximately 0.3-mile south of the site. In general, the infill site would be well served by recreational amenities.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) 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?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

As mentioned in Section 4.14 Population and Housing, the proposed project would increase the population by approximately 39 persons. Residents of the proposed development would likely utilize the on-site playground as well as nearby neighborhood and regional parks to fulfill their recreational needs. 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 recreational facilities. The developer will be required to pay applicable park in-lieu fees; 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. Thus, the project's impact on recreational facilities is considered less than significant. **(Less than Significant Impact)**

Impact REC-2: The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The proposed project does not include any recreational facilities aside from an approximately 3,200-square foot playground at the western edge of the site. The effect of the proposed playground on the environment is considered as a component of the project throughout this Initial Study. The project would be well served by recreational facilities in the area, including Spring Grove Park, Memorial Park, and the Plunge community center, and would not require the construction or expansion of recreational facilities which could adversely affect the environment. **(Less than Significant Impact)**

4.17 TRANSPORTATION

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Planning

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Alameda County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources over the next 24 years).

Senate Bill 743

Senate Bill 743 (SB 743), which became effective September 2013, initiated reforms to the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts that "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." Specifically, SB 743 directs the Governor's Office of Planning and Research (OPR) to update the CEQA Guidelines to replace automobile delay—as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with vehicle miles traveled (VMT) as the recommended metric for determining the significance of transportation impacts. OPR has approved the CEQA Guidelines implementing SB 743. Beginning on July 1, 2020, the provisions of SB 743 will apply statewide.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant, or not.

At the time of preparation of this Initial Study, the City of Hayward has not adopted a VMT policy setting specific VMT impact thresholds.

Congestion Management Program

The Alameda County Transportation Commission (ACTC) prepares the Congestion Management Program (CMP), a plan mandated by California law to describe the strategies to address congestion problems on the Metropolitan Transportation System (MTS) and CMP network, which includes State highways and principal arterials. The CMP uses level of service standards as a means to measure congestion and has established LOS standards to determine how local governments meet the objectives of the CMP. MTS and CMP roadways in Hayward include I-880, SR 238 (Mission Boulevard), SR 238 (Foothill Boulevard), SR 185 (Mission Boulevard), SR 92 (Jackson Street),

Hesperian Boulevard, A Street, Tennyson Road, SR 92, Winton Avenue-D Street, B Street, Harder Road, Industrial Parkway, and Whipple Road.

Local

City of Hayward General Plan

The Mobility Element of the City's General Plan contain policies, recommendations, and actions to improve traffic and circulation throughout 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 M-1.1	The City shall provide a safe and efficient transportation system for the movement of people, goods, and services through, and within Hayward.
Policy M-4.5	The City shall develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.
Policy M-4.7	The City shall continue to evaluate circulation patterns and implement appropriate traffic-calming measures to prevent speeding in neighborhoods.

Hayward Bicycle Master Plan

The 2007 Hayward Bicycle Master Plan sets the goals and objectives for providing the opportunity to travel by bicycle as an alternative mode of transportation and recreation for physical, environmental, and social benefits. When the Master Plan was prepared, existing bikeways network totaled about 61 miles, including almost seven miles of Class I bike paths, 22 miles of Class II bike routes, and 32 miles of Class III bike routes. An additional 6.87 miles of bikeways are proposed in the Master Plan. The City is in the process of updating its Master Plan; the Bicycle and Pedestrian Master Plan is expected to be finalized in the first quarter of 2020.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional Accesss

State Route 92 (SR 92) is an east-west highway between Half Moon Bay and downtown Hayward. The project site is accessible from SR 92 via Mission Boulevard.

Local Access

Carlos Bee Boulevard is an east-west, four-lane minor arterial with a portion divided by a median from Mission Boulevard for 1,000 feet east, providing access to California State University at East Bay and residential subdivisions in the Hayward Hills from Mission Boulevard. The posted speed limit along Carlos Bee Boulevard is 35 miles per hour. Sidewalks and parking are only provided along the north side of the street.

Mission Boulevard is a north-south major regional arterial with abutting commercial and institutional uses. It has four travel lanes, two in each direction, and unmarked on-street parking on both sides. There is a raised median south of Jackson Street-Foothill Boulevard and only a center line divider north of Jackson Street-Foothill Boulevard. The posted speed limit is 35 miles per hour. On-street parking is permitted on intermittent sections of Mission Boulevard, with future peak hour parking restrictions to be implemented. Sidewalks are provided along both sides of Mission Boulevard. Mission Boulevard is part of the Alameda County CMP network.

Overlook Avenue is an approximately 600-foot long local street which provides access to Palisade Street and neighborhoods to the north of the project site. Overlook Avenue is a two-way, undivided road which dead-ends just north of Palisade Street. Sidewalks are provided all along the west side of the street and intermittently along the east side.

Existing Traffic Volumes

The daily traffic volume along selected roadway segments in Hayward was collected as part of the 2014 General Plan Update. According to the General Plan Background Report, ADT volume at the Mission Boulevard and Carlos Bee Boulevard intersection is 16,100 vehicle trips.[60] The intersection of Mission Boulevard and Carlos Bee Boulevard was operating at an acceptable LOS D for both AM and PM Peak Hours at the time of evaluation for the General Plan Update.

Existing Pedestrian and Bicycle Facilities

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. An approximately 10-foot wide sidewalk is provided on the north side of Carlos Bee Boulevard, which extends in both directions and connects to sidewalks along Mission Boulevard.

Bicycle facilities include paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. Carlos Bee Boulevard provides a designated Class III bicycle route. Mission Boulevard provides a Class I bicycle path.

Transit Services

The closest bus stops are located along Mission Boulevard (approximately 800 feet west of the site) at Mission Boulevard/Carlos Bee Boulevard and Mission Boulevard/Orchard Avenue, and are served by AC transit routes 99 and 801. Route 99 provides service between the Fremont Bay Area Rapid Transit (BART) station and the Hayward BART station via Mission Boulevard; service is also provided to the South Hayward and Union City BART stations along this route. Route 801 provides service between the 12th Street BART station in Oakland to the Fremont BART station. The closest BART station to the project site is the Downtown Hayward BART station, located approximately one mile northwest of the site.

[60] City of Hayward. *Public Review Draft Background Report.* Figure 2-2: Study Road Segment Locations with Average Daily Traffic Volumes. November 2013.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?	☐	☐	☒	☐
2) For a land use project, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☒	☐

Impact TRN-1: The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. **(Less than Significant Impact)**

The City of Hayward does not currently have an adopted vehicle miles traveled (VMT) policy. The City's adopted transportation policy utilizes level of service (LOS) as the metric by which the City determines the functionality of the roadway system and the effect of new development on the roadway network. The following discussion of LOS is provided as it pertains to consistency with the City's adopted transportation policy.

Local Intersections

The Congestion Management Program requires a traffic impact analysis when a project would result in 100 or more peak hour trips. The project's trip generation estimates are based on trip generation rates obtained from the *Institute of Transportation Engineers' (ITE's) Trip Generation Manual, Tenth Edition, 2017*. The trip generation rates are shown in Table 4.17-1, below.

Table 4.17-1: Project Trip Generation Estimates

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Single-Family Detached Housing*	103	2	6	8	7	4	11

* The average ITE daily trip rate is 2.65 daily trips per resident for a single-family use. AM Peak Hour is 0.21 trips per resident (with 30 percent entering/70 percent exiting) and PM Peak Hour is 0.28 trips per dwelling unit (with 66 percent entering/34 percent exiting).

Based on the ITE Trip Generation Manual, the proposed project (including the six ADUs) would generate 103 net new trips. Of the 103 trips, eight would occur in the AM Peak Hour and 11 would occur in the PM Peak Hour. The new trips associated with the proposed project are well below the CMP threshold of 100 peak hour trips; therefore, the project would result in a less than significant impact on the LOS of local intersections. **(Less than Significant Impact)**

Transit, Pedestrian, and Bicycle Facilities

The nine single-family units and six ADUs would introduce approximately 39 new residents to the area. New residents at the site can reasonably be anticipated to utilize transit opportunities in the surrounding areas. The nearest bus stops are located approximately 800 feet west of the site along Mission Boulevard and provide connections to several BART stations in the area. The minor increase in use of these transit service would not conflict with any plans or policies related to their operation, expansion, or performance.

The project site is served by a Class III bicycle route on Carlos Bee Boulevard and a Class I bicycle path on Mission Boulevard. The project would not interfere with bicycle transportation planning efforts or otherwise inhibit the City from meeting its multimodal transportation goals related to the provision of bicycle facilities.

Pedestrian facilities are limited to sidewalks on the north side of Carlos Bee Boulevard and on both sides of Mission Boulevard. The project would retain the existing sidewalk on Carlos Bee Boulevard and would provide pedestrian pathways connecting the interior of the site to the sidewalk. Construction of the project could temporarily obstruct pedestrian access to nearby residences on Overlook Avenue and further up Carlos Bee Boulevard; however, this would be a temporary condition and would not permanently interfere with pedestrian circulation in the area. For this reason, and those discussed above, the project would not conflict with a policy, program or ordinance addressing the circulation system. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(No Impact)**

This question pertains specifically to VMT as the means of analyzing transportation impacts of a project. Per CEQA Guidelines Section 15064.3(c), agencies can wait as late as July 1, 2020 to adopt a VMT policy. The City of Hayward has not yet adopted a VMT policy. Therefore, the project is not in conflict with any adopted VMT policy. **(No Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

The project proposes a private interior roadway which would provide access to the garages of the proposed dwelling units, as well as to the guest parking areas. There would be a two-way driveway from Overlook Avenue and an Emergency Vehicle Access (EVA) to Carlos Bee Boulevard. Due to safety concerns about speeding and curves along Carlos Bee Boulevard, vehicles from the project site

would not be able to access the EVA and would enter and exit the project site from Overlook Avenue. The project would provide a total of 36 vehicle parking spaces; 18 spaces would be contained within garages in the dwelling units and the remaining 18 spaces would be provided as surface parking spaces along the driveway and at the western edge of the site.

The City has evaluated the proposed project and determined that it would not increase on-site hazards due to the design of the proposed development, including driveway access and width, parking areas, and pedestrian connections. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(Less than Significant Impact)**

Emergency access to the site would be provided by the proposed driveways on Carlos Bee Boulevard and Overlook Avenue. The driveways are sized to provide adequate turning radii for emergency vehicles. Therefore, the project would not result in adequate emergency access. **(Less than Significant Impact)**

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources[61]
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

The project site is currently undeveloped and consists of ruderal vegetation, mature trees and shrubs, and remnant building foundations. The project site was previously developed with single-family homes. As discussed in Section 4.5, Cultural Resources, the site is not considered archaeologically sensitive due to its distance from waterways, prior disturbance, and existing grade.

[61] See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the CRHR and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR "shall include historical resources determined by the commission, according adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a)(b)).

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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)?	☐	☒	☐	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact with Mitigation Incorporated)**

The project site is not known to contain significant tribal cultural resources. Implementation of the proposed project is not expected to uncover previously unknown tribal cultural resources; however, this remains a possibility, particularly during grading and trenching for utilities. The proposed project includes mitigation measures (MM CUL-1.1 and -1.2) which set forth an appropriate process to be followed in the event of accidental discovery of cultural resources. Project mitigation measures would require construction activities to pause if a prehistoric cultural resource is unearthed and allow for examination of the resource by a qualified archaeologist. Additionally, if human remains are discovered and determined to be Native American, the NAHC will be notified and measures will be taken to ensure the remains are treated appropriately. The process detailed in these mitigation measures would ensure that the proposed project does not cause a substantial adverse change in the significance of a tribal cultural resource that is listed, or eligible for listing, in state or local registers. **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact)**

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.

A tribe requested notification on March 2, 2016 for all projects located within the City of Hayward, pursuant to Public Resource Code Section 231080.3.1(b). Tribal notification was commenced on July 13, 2018 for the proposed project (see Appendix E); no comments or further requests for consultation were received during the minimum 30-day period following notification. As described under Impact TCR-1, mitigation measures would be implemented by the project to reduce impacts to as-yet undiscovered resources at the site. Therefore, the proposed project would result in a less than significant impact to any tribal cultural resources determined to be significant by the City. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Hayward adopted its most recent UWMP in June 2016.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program in the Public Resources Code. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing 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

mandatory sets of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels.

Local

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 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.
Policy PFS-7.2	The City shall monitor its solid waste and recycling services franchisee to ensure that services provided are adequate to meet the needs of the community and to meet the provisions of the City's Franchise Agreement.
Policy PFS-7.4	The City shall comply with State goals regarding diversion from landfill, and strive to comply with the provisions approved by the Alameda County Waste Management Authority.
Policy PFS-7.12	The City shall require demolition, remodeling and major new development projects to salvage or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.

4.19.1.2 *Existing Conditions*

Water

Water service to the project site is provided by the City of Hayward. 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.

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 six-inch water mains in Overlook Avenue and Carlos Bee Boulevard available to serve the project.

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's wastewater collection system is comprised of about 350 miles of sewer mains, nine sewage lift stations, and 2.5 miles of force mains. The City maintains a maintenance and replacement program to minimize sanitary sewer overflows and ensure capacity is available to meet demand. The City of Hayward Water Pollution Control Facility (WPCF) treats municipal wastewater and conveys it to the East Bay Dischargers Authority disposal facility. The East Bay Dischargers Authority disposes of the treated wastewater in San Francisco Bay.

The City of Hayward 2015 Urban Water Management Plan estimates that Hayward collected and treated 10.1 mgd of wastewater in 2015.[62] 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. Based on these values, the City has approximately 8.4 mgd of excess treatment capacity remaining at the WPCF.

There is an existing eight-inch sanitary sewer main along Carlos Bee Boulevard available to serve the project.

Storm Drainage

The project site is located within the Old Alameda Creek watershed.[63] Stormwater runoff from the buildings, hardscape, and local streets in the project area is collected and conveyed to Old Alameda Creek via the City's stormwater drainage system.

[62] City of Hayward Urban Water Management Plan. *Table 6-3: Wastewater Treatment and Discharge within Service Area in 2015*. June 2016.
[63] Alameda Flood Control and Water Conservation District. "Interactive Map: Alameda County Watersheds". https://acfloodcontrol.org/resources/explore-watersheds/ Accessed August 28, 2019.

The City of Hayward owns and maintains the municipal storm drainage system serving the project area. The project site is undeveloped and consists of 100 percent pervious surfaces. There are two storm drain inlets located adjacent to the sidewalk at the southern portion of the site. The majority of stormwater naturally infiltrates into the soil or is captured by the storm drain inlets and conveyed to the City's drainage system via a 15-inch storm drain line in Carlos Bee Boulevard. There is also an existing storm drain line in a 10-foot wide easement which conveys runoff from the properties to the north of the site.

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, Inc. (WMI), a private company. WMI subcontracts with a local non-profit, Tri-CED Community Recycling, for residential 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. Additionally, the City has recorded diversion rates of 67 to 71 percent for each of the past four years in an effort to achieve the countywide goal of diverting 75 percent of all generated waste from landfills. When the Hayward City Council approved the current Franchise Agreement with Waste Management of Alameda County in January 2015, the City set a goal of reaching 80 percent diversion by 2018.[64]

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

[64] City of Hayward. "Solid Waste Diversion Rate". https://www.hayward-ca.gov/content/solid-waste-diversion-rate. Accessed September 13, 2019.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

The proposed project would utilize existing water infrastructure, dispose of wastewater at the WPCF, convey stormwater via the City's existing drainage system, and connect to existing utility lines in the vicinity of the site for electricity, natural gas, and telecommunication services.

Water Facilities

The potable and irrigation water demands of the project would be met by existing service providers (City of Hayward), as is discussed under Impact UTL-2, below. Existing water lines in the adjacent streets would serve the proposed project. The project would not require the construction or expansion of water delivery systems or the expansion of the boundaries of the City's service area. Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded water facilities. **(Less than Significant Impact)**

Sanitary Sewer and Wastewater Treatment

The proposed project would connect to the City's existing sanitary sewer system. The project would comply with all applicable Public Works requirements to ensure sanitary sewer and water mains would have capacity for water and sewer service required by the proposed project. Existing sanitary sewer lines in adjacent streets would be used to serve the proposed project. The project proposes a six-inch sewer line in the proposed interior driveway which would connect to existing sewer mains in Carlos Bee Boulevard. New sewer lines and lateral connections would be established during grading and would result in minimal environmental effects. **(Less than Significant Impact)**

Storm Drainage

Development of the site would occur in compliance with the MRP and Hayward Municipal Code requirements, which would remove pollutants and reduce the rate and volume of runoff from the project site to levels that are at or below existing conditions. Development of the project would result in an increase in stormwater runoff; however, as discussed in Section 4.10, Hydrology and Water Quality, the project would implement LID-based treatments of stormwater and would not exceed the capacity of the existing storm drainage system serving the site. No new stormwater treatment or disposal facilities would need to be constructed to accommodate the proposed project. **(Less than Significant Impact)**

Electric Power, Natural Gas and Telecommunications

Existing utility lines would be utilized by the project for electric power and natural gas services. Connecting to the City's energy and communications grid would require trenching on the site, which would not require substantial excavation and is unlikely to result in unanticipated impacts. The project would be required to detail the exact locations for all utility connections and utility plans would be subject to design review by the City. Therefore, the proposed project would not result in significant impacts from construction or relocation of new or expanded utilities. **(Less than Significant Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

As it exists, the project site is undeveloped and creates no water demand. The proposed project would develop the 1.6-acre site with nine single-family dwelling units, six of which would include ADUs. The project would increase the local population by 39 residents. Based on water usage rates of approximately 89 gallons per capita per day (GPCD) set forth in the 2015 UWMP, the proposed project would have a water demand of 3,471 gallons per day.[65] Although the project would increase water demand at the site and in the City as a whole, the project is consistent with its General Plan designation and expected population increases in the City through 2040. The project water demand has been accounted for in the 2015 UWMP, which is based on the City's General Plan. The 2015 UWMP found that the City of Hayward can adequately meet expected increases in demand through 2040 with existing entitlements during normal, dry and multiple dry years, provided water shortage contingency actions are implemented during any future drought years. Therefore, the project would have adequately water supply during normal, dry and multiple dry years. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

[65] City of Hayward. *2015 Urban Water Management Plan*. Page 5-7. June 2016.

The proposed project would result in an increase in wastewater generation of approximately 2,950 gallons per day.[66] Wastewater flows from the proposed project would be conveyed by a new six-inch sewer line in the project driveway to the six-inch sewer line in Carlos Bee Boulevard. The Hayward WPCF currently treats 10.1 mgd of wastewater and is permitted to provide treatment for up to 18.5 mgd, which is anticipated to be reached by 2035. The City has approximately 8.4 mgd of excess treatment capacity remaining at the WPCF and the project would only use a fraction of existing capacity. Therefore, the Hayward WPFC has adequate capacity to serve the wastewater treatment demands of the proposed project. **(Less than Significant Impact)**

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

According to the CalEEMod solid waste generation rates of 0.42 metric tons per resident per year for single-family land uses, the proposed project would generate approximately 16.38 tons of solid waste per year.[67] CalRecycle reported in 2015 that the Hayward's contribution to solid waste landfilled at Altamont Landfill was 100,123 tons in 2015.[68] Assuming this rate has remained relatively constant, the proposed project would generate less than one-tenth of one percent of the total solid waste in Hayward. Waste generated by the project would be disposed of at Altamont Landfill, which has an expected closure date of 2040. Therefore, the project would not dispose of waste at a landfill that is approaching capacity.

Implementation of General Plan Policies, including Policy PFS-7.12, PFS-7.4, and PFS-7.2, and the City's Construction and Demolition Debris Recycling Ordinance, would ensure that the proposed project is compliant with federal, state, and local solid waste reduction goals. For this reason, and those mentioned above, the project would not generate solid waste in excess of the capacity of local infrastructure or impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

Impact UTL-5:	The project would not be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

Implementation of General Plan policies and the City's Construction and Demolition Debris Recycling Ordinance would ensure that the project meets federal, state, and local solid waste management statutes and regulations. Thus, the impact would be less than significant. **(Less than Significant Impact)**

[66] Based on the standard wastewater generation rate of 85 percent of total water use.
[67] CalEEMod. *Appendix D – Default Data Tables – Table 10.1 Solid Waste Disposal Rates.* September 2016.
[68] City of Hayward. *Ersted Residential Project Draft Initial Study.* August 2018.

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

Local

City of Hayward General Plan

The Safety Element, Natural Resources Element and Hazards Element of the City's General Plan contains policies, recommendations, and actions to avoid or mitigate wildfire hazards within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Goal HAZ-1	Promote a disaster-resilient region by reducing hazard risks through regional coordination and mitigation planning.
Goal HAZ-5	Protect life and minimize potential property damage from urban wildfire hazards in hillside areas.

City of Hayward Hillside Design and Urban/Wildland Interface Guidelines

The City has adopted guidelines for development proposed in hillside areas and in the Urban/Wildland Interface. The purpose of the Urban/Wildland Interface Guidelines is to mitigate through proper planning, design, and management the high fire danger associated with development located in an Urban/Wildland Interface (U/WI) Zone. Guidelines address building construction standards for fire protection, fuel modification and management at the urban/wildland interface, and fire-resistant landscaping.

4.20.1.2 *Existing Conditions*

The proposed project is located in an urban area of Hayward which has not been designated as a Very High Fire Hazard Zone on CalFire maps. [69,70] The project site is, however, located within an identified high fire hazard area and a U/WI Zone in the City's General Plan EIR.[71] The project site is undeveloped and consists of ruderal vegetation and mature trees and shrubs. The site is surrounded by residential development to the north and east, an undeveloped field to the south, and mixed commercial and institutional uses to the west.

4.20.2 **Impact Discussion**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

[69] CAL FIRE. *Alameda County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[70] CAL FIRE. *Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area*. September 2008.
[71] City of Hayward. *Hayward 2040 General Plan Background Report.* Figures 5-3 and 5-4. November 2013.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Impact WF-1:	The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The project is an infill development in an urban area of Hayward. The project would not obstruct roadways, remove emergency access routes or remove emergency response facilities. Therefore, the project would not interfere with the City of Hayward Comprehensive Emergency Management Plan. **(Less than Significant Impact)**

Impact WF-2:	The project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. **(Less than Significant Impact)**

While the project site is located in a WUI and high fire hazard zone identified by the City, the project would be built in accordance with the City's Hillside Design and Urban/Wildland Interface Guidelines. The project would require appropriate fire safe design measures be incorporated into the project design to avoid contributing to wildland fire hazards in the surrounding neighborhoods. The project would be required to meet or exceed the minimum California Fire Safe Guidelines and include sprinkler systems, double-paned windows, decks made from non-combustible materials, fire-resistant planting, and other fire safe design elements. The proposed project would also be required to establish a fuel management program that focuses on homeowner education, shaded fuel breaks, and fuel management zones. Adherence to the City's Urban/Wildland Interface Guidelines would ensure the project does not exacerbate wildfire risk. **(Less than Significant Impact)**

Impact WF-3:	The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. **(Less than Significant Impact)**

The proposed project would be designed in a fire safe manner in accordance with the City's Hillside Design and Urban/Wildland Interface Guidelines. The project would not install infrastructure that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. **(Less than Significant Impact)**

Impact WF-4:	The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **(Less than Significant Impact)**

The proposed project would be located in a high fire hazard zone and could be vulnerable to fire hazard risks; however, adherence to the City's Hillside Design and Urban/Wildland Interface Guidelines, and continued implementation of the mitigation strategies outlined in the 2016 Local Hazard Mitigation Plan, would reduce the project's exposure to fire hazards and secondary impacts from fire. This conclusion is consistent with the City's General Plan DEIR, which found that implementation of General Plan policies and enforcement of fire prevention codes would reduce potential wildfire risks resulting from General Plan buildout. **(Less than Significant Impact)**

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2)	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)?	☐	☐	☒	☐
3)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

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

As discussed in Section 4.4 Biological Resources, the project may impact nesting birds protected under the Migratory Bird Treaty Act and therefore requires implementation of mitigation measures MM BIO-1. Additionally, the project would remove a significant number of protected trees and complete construction in the vicinity of several mature trees. Mitigation measures MM BIO-5.1 and -5.2 would reduce impacts to protected and preserved trees and ensure all removed trees are replace in accordance with the City of Hayward Municipal Code.

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 mitigation measures if project construction encounters unknown buried archaeological resources.

As discussed in Section 4.13 Noise, project construction may result in significant noise impacts to nearby sensitive receptors. Implementation of NOI-1.1, which would require the applicant to prepare and implement a noise control plan, would reduce potential construction noise related impacts to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact)**

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." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not treated as significant for purposes of later environmental review and need not be discussed in detail.

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, standard measures, and adherence to General Plan policies and the Municipal Code, 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 would generate noise during construction and operation. Typically, a three dBA noise increase would be perceivable by sensitive receptors. In order for traffic noise to increase by three dBA, traffic volumes would need to double along a local roadway. The proposed project and cumulative growth in the area would not double existing daily traffic volumes along Carlos Bee Boulevard or Mission Boulevard. The project would result in a minor increase in traffic noise which would not be cumulatively considerable.

The project site is not located adjacent to any approved or under construction developments; however, the approximately 30-acre vacant parcel to the east of the site (APN 445-0180-001-00) is the subject of a Master Plan for 500 townhomes and 125 units of student housing currently being

evaluated by the City. The Master Plan project would be required to address project-level air quality, biological resources, GHG emissions, noise, traffic, and hazardous materials impacts as a component of its environmental review and mitigate any identified significant impacts accordingly. Additionally, approximately five acres of a vacant site west of the project site (APN 445-0200-012-01) is undergoing review for a proposed car dealership. Similarly, the project would be subject to project-level environmental analysis and would be required to incorporate mitigation measures to reduce project-level impacts. Therefore, the proposed project would not result in significant environmental impacts when considered cumulatively with any nearby projects. **(Less than Significant Impact)**

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact)**

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, wildfire hazards, and noise. However, implementation of mitigation 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 Impact)**

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

California Department of Transportation. California Scenic Highway Mapping System. Accessed August 16, 2019. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html.

Alameda County. Scenic Route Element of the General Plan. Adopted May 1966, Amended May 1994.

California Department of Conservation. "Farmland Mapping and Monitoring Program". http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

California Department of Conservation. "Williamson Act". http://www.conservation.ca.gov/dlrp/lca. Accessed August 28, 2019.

Cal Fire. "FRAP". http://frap.fire.ca.gov/ Accessed August 14, 2019.

California Department of Conservation, Farmland Mapping and Monitoring Program. Alameda County Important Farmland 2016. August 2018.

California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed October 17, 2019. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

BAAQMD. Final 2017 Clean Air Plan. April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Bay Area Air Quality Management District. CEQA Air Quality Guidelines. Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes. Updated May 2011.

United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed August 22, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

City of Hayward. Public Review Draft Background Report. Table 1-2: Officially Designated Architecturally and Historically Significant Buildings. November 2013.

California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed October 17, 2019. http://www.bsc.ca.gov/.

California Energy Commission (CEC). "2016 Building Energy Efficiency Standards." Accessed October 17, 2019. http://www.energy.ca.gov/title24/2016standards/index.html.

California Air Resources Board. "The Advanced Clean Cars Program." Accessed October 17, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 1, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Energy Information Administration. State Profile and Energy Estimates, 2017. Accessed August 1, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.

California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 22, 2019. http://ecdms.energy.ca.gov/elecbycounty.aspx.

East Bay Community Energy. "Power Mix". https://ebce.org/power-mix/ Accessed August 22, 2019.

California Gas and Electric Utilities. 2018 California Gas Report. Accessed August 22, 2019. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

California Geological Survey. "Earthquake Zones of Required Investigation". https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed August 23, 2019.

Alan Kropp & Associates, Inc. Geotechnical Investigation – Carlos Bee Condominiums – Hayward, California. March 15, 2019.

Harris and Lee Environmental Sciences, LLC. Phase I Environmental Site Assessment. November 4, 2017.

City of San José. "Priority Development Areas". http://www.sanjoseca.gov/index.aspx?NID=2041 Accessed September 9, 2019.

CARB. "The Advanced Clean Cars Program". Accessed October 17, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

City of Hayward. Hayward 2040 General Plan Draft Environmental Impact Report. January 2014.

CalEPA. "Cortese List Data Resources". Accessed August 23, 2019. https://calepa.ca.gov/sitecleanup/corteselist.

CAL FIRE. Alameda County Fire Hazard Safety Zone Map – State Responsibility Area. November 2007.

CAL FIRE. Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area. September 2008.

City of Hayward. Hayward 2040 General Plan Background Report. January 2014.

City of Hayward. "Hayward Executive Airport". 2016. https://www.hayward-ca.gov/airport Accessed August 27, 2019.

Alameda County Airport Land Use Commission. Hayward Executive Airport Land Use Compatibility Plan. August 2012.

Alameda Flood Control and Water Conservation District. "Interactive Map: Alameda County Watersheds". https://acfloodcontrol.org/resources/explore-watersheds/ Accessed August 28, 2019.

California Department of Water Resources. "SGMA Portal – City of Hayward GSA". https://sgma.water.ca.gov/portal/gsa/print/200#intro Accessed August 28, 2019.

Federal Emergency Management Agency. Flood Insurance Rate Map 06001C0287G. August 3, 2009.

Institute of Transportation Engineers. Trip Generation Manual 10th Edition – Volume 2: Data – Residential (Land Uses 200-299). Single-Family Detached Housing. September 2017.

Alameda County. Hayward Executive Airport - Airport Land Use Compatibility Plan. Figure 3.3 HWD Noise Compatibility Zones. August 2012.

State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change—January 1, 2018 and 2019. May 2019.

ABAG. "Projections 2040 – Forecasts for Population, Household and Employment for the Nine County San Francisco Bay Area Region." http://projections.planbayarea.org/ Accessed September 9, 2019.

Davis Demographics. Newark Unified School District – Student Population Projections by Residence - School Year 2016/2017 Report. August 2017.

City of Hayward. Hayward Bicycle Master Plan. October 2007.

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

Alameda Flood Control and Water Conservation District. "Interactive Map: Alameda County Watersheds". https://acfloodcontrol.org/resources/explore-watersheds/ Accessed August 28, 2019.

City of Hayward. "Solid Waste Diversion Rate". https://www.hayward-ca.gov/content/solid-waste-diversion-rate Accessed September 13, 2019.

City of Hayward. 2015 Urban Water Management Plan. June 2016.

CalEEMod. Appendix D – Default Data Tables – Table 10.1 Solid Waste Disposal Rates. September 2016.

City of Hayward. Ersted Residential Project Draft Initial Study. August 2018.

CAL FIRE. Alameda County Fire Hazard Safety Zone Map – State Responsibility Area. November 2007.

CAL FIRE. Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area. September 2008.

SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Akoni Danielsen, Principal Project Manager
Daniel DeBrito, Associate Project Manager
Zach Dill, Graphic Artist

Illingworth & Rodkin, Inc.
Air Quality and Noise Consultants
James Reyff, Principal
Casey Divine, Staff Consultant

HortScience/Bartlett Consulting
Consulting Arborists
Darya Barar, Consulting Urban Forester

Alan Kropp & Associates, Inc.
Geotechnical Consultants
M. Jeroen van den Berg, C.E., Senior Engineer

Earth Focus Geological Services, Inc.
Geological Consultants
Patrick L. Drumm, PG, CEG, CHG, Senior Engineering Geologist

Harris and Lee Environmental Sciences, LLC.
Hazardous Materials Consultants
Robert Harris, Senior Scientist
Walter Beach, Partner