CITY OF HAYWARD

ATTACHMENT VIII

SOUTH HAYWARD DEVELOPMENT PROJECT

Initial Study/ Mitigated Negative Declaration

March 2018

Prepared for:

City of Hayward

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Hayward, CA 94541

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CITY OF HAYWARD

SOUTH HAYWARD DEVELOPMENT PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

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MARCH 2018

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1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

An initial study is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]). If there is substantial evidence that a project may have a significant effect on the environment, an environmental impact report (EIR) must be prepared, in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15064(a). However, if the lead agency determines the impacts are, or can be reduced to, less than significant, a negative declaration or mitigated negative declaration may be prepared instead of an EIR (CEQA Guidelines Section 15070(b)). Pursuant to CEQA Guidelines Section 15070, a mitigated negative declaration is appropriate when the project's initial study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur; and

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

This Initial Study identifies potentially significant impacts on certain environmental resources. The Mitigated Negative Declaration proposes a range of mitigation measures to reduce all such effects to less than significant levels. Therefore, the City of Hayward (City) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) for the project because all impacts resulting from the project are reduced to less than significant levels through the adoption and implementation of mitigation measures incorporated into the project. This IS/MND conforms to the content requirements of a negative declaration under CEQA Guidelines Section 15071.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 lists criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers." The project will require approvals from the City, including a General Plan Amendment, rezoning, approval of vesting tentative maps, site plan review, improvement plans, formation of a lighting and landscaping district, and grading and building permits. Therefore, based on the criteria described above, the City of Hayward is the lead agency for the proposed project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The applicant is proposing to implement the South Hayward Development Project. The purpose of this IS/MND is to evaluate the potential environmental effects associated with implementation of the project and to provide mitigation where necessary to avoid, minimize, or lessen those effects. This document is divided into the following sections:

1.0 INTRODUCTION

This section provides an introduction and describes the purpose and organization of this document.

2.0 PROJECT DESCRIPTION

This section includes the project background and a detailed description of the proposed project. It also describes the process used for notifying and involving the public during project planning and for coordination with relevant agencies and organizations.

3.0 INITIAL STUDY CHECKLIST

This section describes the environmental setting for each of the environmental subject areas including cumulative impacts; evaluates a range of impacts classified as "no impact," "less than significant impact," "less than significant impact with mitigation incorporated," or "potentially significant impact" in response to the environmental checklist, and includes mitigation measures, where appropriate, to mitigate potentially significant impacts to a less than significant level; and provides an environmental determination for the project.

4.0 SUMMARY OF MITIGATION MEASURES

This section lists the mitigation measures for the proposed project.

5.0 LIST OF PREPARERS

This section identifies staff and consultants responsible for preparation of this document.

6.0 LIST OF ABBREVIATIONS

This section lists the abbreviations used throughout the document.

7.0 REFERENCES

This section identifies resources used in the preparation of the IS/MND.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The project site is located in southeastern Hayward on 21 parcels near the intersection of Mission Boulevard and Industrial Parkway/Alquire Parkway. Mission Boulevard is also designated as State Route (SR) 238; see **Figure 2.0-1, Regional Location**. More specifically, the parcels are located on the east and west sides of Mission Boulevard, north of the Industrial Parkway/Alquire Parkway intersection; on the west side of Mission Boulevard, north of Valle Vista Avenue; and along Industrial Parkway, south of Dixon Street (see **Figure 2.0-2, Project Location**). The parcels along Industrial Boulevard are bounded to the west by the Bay Area Rapid Transit (BART) rail line.

2.2 BACKGROUND AND EXISTING SETTING

The project comprises 21 parcels formerly under the ownership of the California Department of Transportation (Caltrans) and now owned by the City of Hayward, the Hayward Area Recreation and Park District (HARD), the Alameda County Flood Control and Water Conservation District (ACFCD), and the San Francisco Bay Area Rapid Transit District (see **Table 2.0-1, Project Site APNs**).

On January 12, 2016, the City Council adopted Resolution No. 16-004, authorizing the City Manager to negotiate and execute an agreement with Caltrans to acquire property (including 17 of the subject parcels) in the 238 Bypass Corridor to remediate blight and ensure that the area would develop under a coherent development plan that meets the City's land use goals and other public purposes. On May 16, 2017, the City Council adopted Resolution No. 17-058, authorizing the City Manager to negotiate and execute a Purchase and Sale Agreement (PSA) with William Lyon Homes for the subject properties. The PSA detailed the manner in which the subject properties will be conveyed and was subsequently executed on June 2, 2017. The City is currently negotiating with the ACFCD and BART for purchase and conveyance of their respective properties as part of this development project. With regard to the HARD parcel, the City is negotiating a land swap for the existing Valle Vista Park at 381 Valle Vista Avenue and to relocate and redevelop the park as part of the development project.

The parcels on the east side of Mission Boulevard are vacant land. Parcels on the west side of Mission Boulevard are a mixture of vacant land, the existing Valle Vista Park, and some residential development. Parcels south of Dixon Street are vacant land or used for open air storage. An ACFCD channel extends northeast/southwest through the project site from just east of Dixon Street to Mission Boulevard. **Table 2.0-1** lists the project address (where applicable), Assessor's Parcel Number (APN), and ownership for each of the parcels. The project site parcels are shown on **Figure 2.0-3, Project Site Parcels**.

TABLE 2.0-1
PROJECT SITE APNS

Reference Number [a]	Address	APN	Use	Ownership
1	29115 Mission Boulevard	078C-0447-003-01	Parking	City of Hayward
2	29131 Mission Boulevard	078C-0447-003-02	Residence, Parking	City of Hayward
3	380 Valle Vista Avenue	078C-0447-006-02	Undeveloped	City of Hayward
4	29213 Mission Boulevard	078C-0438-006-00	Undeveloped	City of Hayward
5	381 Valle Vista Avenue	078C-0438-005-00	Park	HARD
6	29263 Mission Boulevard	078C-0438-007-00	Undeveloped	City of Hayward

Reference Number [a]	Address	APN	Use	Ownership
7	N/A*	078C-0438-008-00	Undeveloped	City of Hayward
8	29335 Mission Boulevard	078C-0438-009-00	Undeveloped	City of Hayward
9	29339 Mission Boulevard	078C-0438-010-00	Undeveloped	City of Hayward
10	N/A*	078C-0438-011-01	Undeveloped, ACFCD Channel	City of Hayward
11	N/A*	078C-0438-019-01	Undeveloped, ACFCD Channel	City of Hayward
12	N/A*	078C-0435-002-01	Undeveloped	City of Hayward
13	N/A*	083-0460-006-03	Parking, Vacant	City of Hayward
14	N/A*	078C-0436-010-03	Undeveloped	City of Hayward
15	29629 Dixon Street	078C-0436-001-07	Undeveloped	City of Hayward
16	29599 Dixon Street	078C-0435-006-00	Undeveloped	City of Hayward
17	29362 Mission Boulevard	078C-0455-004-00	Undeveloped	City of Hayward
18	29350 Mission Boulevard	078C-0455-003-00	Undeveloped	City of Hayward
19	29380 Mission Boulevard	078C-0455-005-02	Undeveloped	City of Hayward
20	N/A*	083-0460-011-00	Undeveloped	ACFCD
21	N/A*	083-0460-010-00	Undeveloped	BART

a. See Figure 2.0-2
** No assigned address*

As shown on **Figure 2.0-4, Existing and Proposed General Plan Designations**, the General Plan designations for the parcels include Medium Density Residential, Parks and Recreation, and Sustainable Mixed Use. As shown on **Figure 2.0-5, Existing and Proposed Zoning Designations**, zoning includes Industrial (I) District, High Density Residential (RH) District, Civic Space Zone (S-CS) District, Urban General Zone, 17.5 to 35 units per net acre (S-T4) District, and Urban General Zone, 35 to 55 units per net acre (S-T5) District.

SURROUNDING LAND USES

Land uses surrounding the project site parcels include commercial and institutional uses, Valle Vista Park, and vacant land along Mission Boulevard; commercial and residential uses, vacant land, and golf course uses along Industrial Parkway; and the BART rail line and industrial uses along the western edge. Additionally, various areas of the project site are adjacent to multi-family residential and older single-family residential uses. The BART rail line runs parallel to and to the east of the Union Pacific Railroad tracks at the western boundary of the project site. The Mission Hills of Hayward Golf Course and Driving Range facility is located to the south of the project site, on the southern side of Industrial Parkway.

2.3 PROPOSED PROJECT

The project would create a high density mixed use development within approximately one-half mile of the South Hayward BART station along the Mission Boulevard corridor, which runs in a north-south direction through Hayward. The project would develop 21 parcels of land totaling approximately 25 acres with 472 residential housing units, approximately 20,000 square feet of retail space, 2.4 acres of parkland, and internal roadways.

FIGURE 2.0-1
Regional Location

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Figure 2.0-2
Project Location

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T:_CS\Work\Hayward, City of\2017 South Hayward Development Project_161626\Figures

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

LAND USE SUMMARY

PLANNING AREA	NET AREA (AC)	SF / # OF UNITS
PA 1 (MIXED USE)	1.93±	+/−20,000 SF 72 UNITS
PA 1 (RESIDENTIAL)	3.57±	76
PA 2	7.75±	198
PA 3	8.66±	126
PARK*	2.40±	---
ACFC CHANNEL	0.72±	---
TOTAL	25.03±	472

*PARK AREA INCLUDES DEDICATED PARK PARCEL BETWEEN MISSION BOULEVARD AND DIXON STREET, DEDICATED PARK PARCEL AND DEDICATED TRAIL EASEMENTS IN PA 3–1.

Not To Scale

FIGURE 2.0-3
Project Site Parcels

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EXISTING GENERAL PLAN

PROPOSED GENERAL PLAN

LEGEND			
	GENERAL PLAN DESIGNATION	EXISTING AREA (AC)	PROPOSED AREA (AC)
	MDR: MEDIUM DENSITY RESIDENTIAL	1.8 AC	0 AC
	PR: PARKS AND RECREATION	10.2 AC	2.6 AC
	SMU: SUSTAINABLE MIXED USE	13.0 AC	22.4 AC

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

Not To Scale

FIGURE 2.0-4
Existing and Proposed General Plan Designations

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EXISTING ZONING MAP

PROPOSED ZONING MAP

LEGEND

ZONING DESIGNATION	EXISTING AREA (AC)	PROPOSED AREA (AC)
I: INDUSTRIAL	0.4 AC	–
R-H: HIGH DENSITY RESIDENTIAL – MIN. LOT AREA – 1,250 SF	1.5 AC	–
S-CS: CIVIC SPACE ZONE	10.2 AC	2.6 AC
S-T4: T4 URBAN GENERAL ZONE – 17.5 TO 35 UNITS/NET ACRE	5.3 AC	–
S-T5: T5 URBAN CENTER ZONE – 35 TO 55 UNITS/NET ACRE	7.6 AC	–
PD: PLANNED DEVELOPMENT (SOHAY)	–	22.4 AC

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

Not To Scale

FIGURE 2.0-5
Existing and Proposed Zoning Designations

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Retail and commercial uses would front Mission Boulevard, continuing the existing commercial streetscape. Residential uses would be split into 72 rental multi-family residences within the mixed-use building along Mission Boulevard and 400 cluster and row townhouses scattered in various nodes or "planning areas" throughout the remainder of the project site. The existing Valle Vista Park would be relocated from its current location north of the ACFCD channel to a new locality south of the channel. The ACFCD channel would remain on the site in its current location. The proposed conceptual site plan is shown in **Figure 2.0-6, Conceptual Site Plan**.

The proposed project would require amendments to the General Plan and zoning for the property. The project site is divided into three separate planning areas (labeled PA 1, PA 2, and PA 3), Valle Vista Park, and the ACFCD channel, all of which are described in detail below.

LAND USE

General Plan Designations

Currently, the project parcels are designated as *Medium Density Residential*, *Parks and Recreation*, and *Sustainable Mixed Use* in the Hayward General Plan. Each land use designation is described below.

- **Medium Density Residential:** This designation allows for detached single-family homes, attached single-family homes, and multi-family homes. The designation generally applies to suburban and urban areas that contain a mix of housing types and allows density ranges between 8.7 and 17.4 units per acre and 0.6 Floor Area Ratio (FAR) for commercial uses.

- **Parks and Recreation:** Allowed uses under this designation include parks (regional, community, neighborhood), recreation facilities, open space, and golf courses as well as ancillary educational and recreational support uses. The designation also includes special use facilities such as historic homes and gardens, linear parks, and trails.

- **Sustainable Mixed Use:** This designation allows for retail, dining, and office uses as well as single-family homes, multi-family homes, and mixed use with multi-family homes or office space on upper floors. The designation is generally applied to areas near regional transit that are planned as walkable urban neighborhoods. The Sustainable Mixed Use General Plan designation allows density ranges between 4.3 and 100 dwelling units per acre and 2 to 2.75 FAR if located within transit overlay zones.

The project proposes a General Plan Amendment to Sustainable Mixed Use for all three planning areas totaling approximately 22.4 acres. The relocated and expanded Valle Vista Park would be designated as Parks and Recreation for a total of 2.6 acres. Existing and proposed General Plan designations on the site are shown on **Figure 2.0-4, Existing and Proposed General Plan Designations.**

Zoning

The project parcels are currently zoned Industrial (I) District, High Density Residential (RH) District, Civic Space Zone (S-CS) District, Urban General Zone, 7.5 to 35 units per net acre (S-T4) District, and Urban General Zone, 35 to 55 units per net acre (S-T5) District. These zoning districts are described below.

- **Industrial (I):** Provides for and encourages the development of industrial uses in areas suitable for them and to promote a desirable and attractive working environment with a minimum of detriment to surrounding properties.

- **High Density Residential – minimum lot area 1,250 square feet (RH):** Allows for multiple-family dwellings, additions to existing single-family dwellings, and group homes.

- **Civic Space Zone (S-CS):** The purpose of the zone is the provision of public open space, civic buildings, and civic uses.

- **Urban General Zone – 17.5 to 35 units per net acre (S-T4):** Consists of mixed use but primarily residential urban fabric. Includes a mix of building types such as townhouses, apartment buildings, mixed-use buildings, and commercial buildings.

- **Urban Center Zone – 35 to 55 units per net acre (S-T5):** Consists of higher-density mixed-use buildings that accommodate retail, office, and residential uses along with townhouses and apartment buildings.

The project would rezone the proposed Valle Vista Park area to S-CS and rezone the remainder of the project site to PD (Planned Development) District. **Figure 2.0-5, Existing and Proposed Zoning Designations,** shows existing and proposed zoning on the site.

The project site is also in the area of the South Hayward BART/Mission Boulevard Form Based Code, which was analyzed in an Environmental Impact Report (EIR) in 2011. Following up on the adoption of the Mission Boulevard Concept Design Plan in 2006, the Form Based Code refined the regulations for properties in this area, providing policy and design guidelines to encourage transit-oriented development and sustainability.

Table 2.0-2, Project Site General Plan Designations and Zoning, lists the existing and proposed General Plan designations and zoning acreages.

TABLE 2.0-2
PROJECT SITE GENERAL PLAN DESIGNATIONS AND ZONING

General Plan Designation/Zoning	Existing (acres)	Proposed (acres)
General Plan Designation		
Residential–Medium Density	1.8	0
Parks and Recreation	10.2	2.6
Sustainable Mixed Use	13.0	22.4
Zoning		
Industrial	0.4	0
High Density Residential – minimum lot area 1,250 sf	1.5	0
Civic Space Zone	10.2	2.6
Urban General Zone – 17.5 to 35 units/net acre	5.3	0
Urban Center Zone – 35 to 55 units/net acre	7.6	0
Proposed – PD (Planned Development) District	0	22.4

Source: Hayward 2014a, 2017

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FIGURE 2.0-6
Conceptual Site Plan

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PLANNING AREAS

The project is divided into three main planning areas: PA 1, PA 2, and PA 3. As shown in **Figures 2.0-3** and **2.0-6**, these three main planning areas are divided into subareas: PA 1-1 and 1-2, PA 2-1 through 2-4, and PA 3-1 and 3-2. **Table 2.0-3, Proposed Project Planning Area Land Use Summary,** describes the acreage, number of housing units, and square feet of retail space in each planning area. It is currently anticipated that the project would be constructed in one phase. However, depending on the timing of acquisition of the BART and the ACFCD properties, the PA 3-2 portion of the development may be built in a subsequent phase.

TABLE 2.0-3
PROPOSED PROJECT PLANNING AREA LAND USE SUMMARY

Planning Area	Net Area (±acres)	Units	Retail (sq. ft.)
PA 1 (mixed use)	1.93	72	20,000
PA 1 (residential)	3.57	76	—
PA 2	7.75	198	—
PA 3	8.66	126	—
Park [a]	2.40	—	—
ACFCD Channel	0.72	—	—
Total	**25.03**	**472 units**	**20,000**

Source: William Lyon Homes 2018

a. *Park area includes dedicated park parcel between Mission Boulevard and Dixon Street, and a dedicated trail easement in PA 3-1.*

PROJECT CHARACTERISTICS

PA 1 would include multi-family rental housing, cluster townhomes, and retail, while PA 2 and PA 3 only include townhomes. Valle Vista Park would be located between PA 1 and PA 2-1 and 2-2. PA 3-1 and 3-2 would be connected to Dixon Street via a landscaped pathway. **Table 2.0-4, Project Development Summary,** lists each planning area's use, gross and net acreage, number of housing units, density of housing units (units per net area), and square feet of retail. Development in each planning area is described following the table.

TABLE 2.0-4
PROJECT DEVELOPMENT SUMMARY

Planning Area	Use	Gross Area (± acres)	Net Area [a] (± acres)	Units	Density (units per net acre)	Retail (± sq. ft.)
PA 1						
Mixed Use	Retail/Residential	1.93	1.93	72	37.7	20,000
PA 1-1	Residential	2.47	2.47	48	19.3	—
PA 1-2	Residential	1.10	1.10	28	25.5	—
Subtotal		*5.50*	*5.50*	*148*	—	—

Planning Area	Use	Gross Area (± acres)	Net Area [a] (± acres)	Units	Density (units per net acre)	Retail (± sq. ft.)
PA 2						
PA 2-1	Residential	1.34	1.34	34	25.4	—
PA 2-2	Residential	3.34	3.09	88	28.5	—
PA 2-3	Residential	1.99	1.99	46	23.1	—
PA 2-4	Residential	1.38	1.33	30	22.6	—
Subtotal		*8.05*	*7.75*	*198*	—	—
PA 3						
PA 3-1	Residential	6.76	6.16	93	15.1	—
PA 3-2	Residential	2.50	2.50	33	13.2	—
Subtotal		*9.26*	*8.66*	*126*	—	—
Other						
Valle Vista Park (between Mission Boulevard & Dixon Street)		1.86	1.86	—	—	—
Trail/Parkway (between Dixon Street & Industrial Parkway)		0.00	0.54	—	—	—
ACFCD Channel		0.72	0.72	—	—	—
Subtotal		*2.58*	*3.12*	—	—	—
Total		**25.39**	**25.03**	**472**	**18 (avg.)**	**20,000**

Source: William Lyon Homes 2018

a. *Net area excludes public right-of-way dedications on Valle Vista Avenue and Dixon Street. Net area for PA 3-1 also excludes parcel dedicated for public trail use.*

Planning Area 1 (PA 1)

Land Use

PA 1 fronts Mission Boulevard. The neighborhoods are envisioned as a mix of retail, multi-family rental housing, and townhomes. The retail component would be oriented along Mission Boulevard, with parking located behind the commercial buildings. The mass and scale of the commercial buildings would provide a transition from the intense commercial corridor along Mission Boulevard to the residential neighborhoods behind.

PA 1 would be subdivided into PA-MU, PA 1-1 and 1-2. PA-MU would include development of approximately 20,000 square feet of retail uses in two mixed use buildings fronting Mission Boulevard. Retail uses would be located on the ground floor of the buildings and the multi-family rental housing units would be located above the commercial uses. The mixed use buildings would be four stories tall, measuring just over 55 feet to the highest parapet. The buildings would include concrete and fiber cement finishes with a flat roof and parapet to screen rooftop equipment, metal awnings, balconies, and rain screens. The proposed color palette would include white, grey, earth, dark green, and black tones, with copper and brass accents.

PA 1-1 and 1-2 would include 76 residential cluster townhomes in six separate buildings. PA 1-1 would include 48 townhomes in four buildings, while PA 1-2 would include 28 townhomes in two buildings. The three-story, 36-foot-high townhomes would include residential units ranging in size from 964 to 1,684 square feet. The buildings would be U-shaped with interior courtyards. All units would have garages with a mix of one-car, two-car tandem, and two-car side-by-side garages (see **Table 2.0-6** for a summary of project parking). Finish materials would include stucco, horizontal lapped cementitious siding, masonry veneer, and metal railings. The proposed color palette for the PA 1-1 and 1-2 townhomes would include three variations with white, grey, dark green, and bronze tones.

Circulation

PA 1 would be accessed from three points. One entrance would be provided from Mission Boulevard to the south of the commercial retail buildings. Two entrances would be provided from Valle Vista Avenue—one directly behind the retail buildings and one between the two rows of residential buildings. An internal roadway roundabout would be located on the southwestern corner of PA 1.

Streetscape improvements along Mission Boulevard would include the installation of parallel parking bays, bulb-outs, street trees, planting areas, street furniture, and lighting. Off-street parking for retail uses would be located immediately behind the buildings and between the mixed use buildings and the park, would serve as a shared parking area with the adjacent residential units.

Planning Area 2 (PA 2)

Land Use

PA 2 would be subdivided into PA 2-1 through 2-4. The PA 2-1 neighborhood would be located to the west of and behind the PA1 neighborhoods, and north of the ACFCD channel. PA 2-2 would be to the south of the ACFCD channel, PA 2-3 would be the only project area located on the east side of Mission Boulevard, and PA 2-4 would be located along the west side of Mission Boulevard, north of Valle Vista Avenue. The PA 2-3 and 2-4 parcels are smaller noncontiguous parcels fronting on Mission Boulevard. The PA 2-4 parcel is located on a flat site, allowing a linear layout with homes siding on to the access drive. The PA 2-3 parcel is located on a narrow and long site with varied topography in that the grade rises from the front to the back.

The residential units would consist of row townhomes and include a mix of unit types ranging from 477 square foot one-bedroom units to 2,105 square foot four-bedroom units. Garages would be a mix of one-car garages, two-car tandem garages, and standard two-car side by side garages. Finish materials would include stucco, horizontal lapped cementitious siding, stone, masonry veneer, and metal railings. There would be four color schemes that would be similar to the townhomes in PA 1. The buildings would range from four-plex (four townhome units) to nine-plex (nine townhome units). All buildings would be three stories, with a height of approximately 38 feet.

Circulation

Access to PA 2-1 would be via the PA 1 access points from Mission Boulevard and Valle Vista Avenue. Access to PA 2-2 would be via Dixon Street. Access to PA 2-3 would occur from Mission Boulevard. PA 2-4 would include two points of access—one from Valle Vista Avenue and one from Mission Boulevard. PA 2-1 and PA 2-2 would also be connected by a pedestrian bridge crossing the ACFCD channel.

Planning Area 3 (PA 3)

Land use

PA 3 would be located along Industrial Parkway and east of the BART rail line. A pedestrian pathway would extend from neighborhoods PA MU, PA 1 and PA 2 north and east of PA 3, linking to Dixon Street. The PA 3 neighborhoods would consist of row townhomes with three to seven units. Finish materials would include stucco, horizontal lapped cementitious siding, stone, masonry veneer, and metal railings. Three color schemes would be similar to the PA 1 and PA 2 areas. The homes would have standard two-car garages and would generally consist of three-bedroom units. The buildings in PA 3 would be three stories, with a height of approximately 37 feet. Townhome units would range from 1,482 to 1,857 square feet.

Circulation

PA 3 would have two access points. Vehicular access to PA 3 would be via an entry on Industrial Parkway and an entry on Dixon Street. A continuous bicycle/pedestrian pathway would allow access and connection through the site from Industrial Parkway to Dixon Street.

PARKS, OPEN SPACE, AND LANDSCAPING

Park

The existing approximately one-acre Valle Vista Park would be relocated from its current location north of the ACFCD channel to a new locality south of the channel. The park would be expanded to 1.86 acres. To improve connectivity and accessibility, a bicycle/pedestrian parkway would run from PA 3 to the park, creating a continuous pathway connection from Industrial Parkway to Mission Boulevard. Interpretive/wayfinding signage would be installed along the trail.

The existing ACFCD channel, although not a formal part of the park, would be visually integrated into the design with shared pathways, access roads, and decorative fencing. Two pedestrian bridges would cross over the channel connecting and expanding areas located on both sides of the channel. To avoid adverse impacts to the ACFCD Channel from the bridges, the bridge abutments would be installed to span the channel entirely and avoid the banks and bed of the channel. The bridges would include design elements to catch debris from the bridge. Additionally, the portion of the bridges spanning the channel would be constructed at a sufficient height to prevent the vegetated wetland at the bottom of the channel from being converted to unvegetated non-wetland waters as a result of shading. During construction, erosion control measures such as straw wattles and silt fencing would be implemented, debris netting would be deployed, and the area surrounding the abutments would be compacted and returned to the existing grade.

The park would be programmed differently than a typical HARD park. Typically, HARD parks have multi-age play areas whereas the proposed project's park would instead be a multipurpose, multiuse park catering to all segments of the population. Some areas would be programmed, while others would be flexible and adaptive. The uses envisioned for the park include a discovery maze, a sport court, structured and unstructured play areas, jogging and walking paths, food truck areas near Mission Boulevard, a parcourse, interpretive learning kiosks, and benches and seats. As noted in Section 2.2, Background and Existing Setting, the City is currently negotiating a land swap agreement with HARD to allow for the relocation and expansion of the existing Valle Vista Park as proposed. If the land swap is not approved, then the proposed project would require

revisions to the Site Plan and Development Program that could require additional environmental review.

Open Space

The project would incorporate group and private open space areas, as summarized by planning area in **Table 2.0-5, Project Open Space**. Approximately 19.6 percent of the project site would be designated as private and group open space areas, including 14.6 percent of the project site that would be for group open space, available to project residents. The total acreages of private and group open space do not include the relocated and expanded Valle Vista Park, which is considered public open space. The project would also include a landscaped parkway connecting most of the planning areas (with the exception of PA 2-3, which is located across Mission Boulevard).

Each planning area would include shared open spaces ranging from nearly 5 percent of the planning area to nearly 38 percent, as shown on **Figures 2.0-7, 2.0-8, and 2.0-9**. Shared open spaces would include paseos between townhouse cluster buildings that create landscaped front yards, small courtyards and pathways between and t the corners of buildings, and a commercial courtyard between the two mixed use buildings within the PA MU neighborhood. Private open space areas would be in patios and balconies.

TABLE 2.0-5
PROJECT OPEN SPACE

Planning Area	Total Area (net area acres)	Group Open Space Area (sq. ft.)	Private Open Space Area (sq. ft.)	Total Open Space/Net Area Ratio
PA 1				
PA 1-1	4.40	19,000	9,572	15.0 %
PA 1-2	1.10	2,260	2,804	10.6%
PA 2				
PA 2-1	1.34	6,540	3,380	17.0%
PA 2-2	3.09	13,780	8,764	16.7%
PA 2-3	1.99	10,885	4,577	17.8%
PA 2-4	1.33	9,220	2,960	21.0%
PA 3				
PA 3-1	6.16	38,200	11,393	18.5%
PA 3-2	2.50	39,640	3,962	40.0%
Total	**21.91**	**139,525**	**47,412**	**19.6%**

Source: William Lyon Homes 2018

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OPEN SPACE AREA SUMMARY

	PLANNING AREA (NET AREA AC)	PROVIDED GROUP OPEN SPACE AREA (SF)	PROVIDED PRIVATE OPEN SPACE AREA (SF)	TOTAL OPEN SPACE/ NET AREA RATIO
	PA 1–1 RESIDENTIAL/MIXED USE (4.40± AC)	19,000	9,572	15.0%
	PA 1–2 RESIDENTIAL (1.10± AC)	2,260	2,804	10.6%
	PA 2–1 (1.34± AC)	6,540	3,380	17.0%
	PA 2–2 (3.09± AC)	13,780	8,764	16.7%
	PA 2–3 (1.99± AC)	10,885	4,577	17.8%
	PA 2–4 (1.33± AC)	9,220	2,960	21.0%
	PA 3–1 (6.16± AC)	38,200	11,393	18.5%
	PA 3–2 (2.50± AC)	39,640	3,962	40.0%
TOTAL	21.91± AC	139,525	47,412	19.6%

PA 1 RESIDENTIAL - PRIVATE OPEN SPACE SUMMARY

UNIT TYPE	PRIVATE OPEN SPACE (SF PER UNIT)	PA 1-1 UNIT MIX	PA 1-1 (AREA SUBTOTAL)	PA 1-2 UNIT MIX	PA 1-2 (AREA SUBTOTAL)
PLAN 1	120	8	960	4	480
PLAN 2	78	8	624	4	312
PLAN 3	116	8	928	4	464
PLAN 4	94	2	188	4	376
PLAN 5	101	8	808	4	404
PLAN 6	74	8	592	4	296
PLAN 7	118	6	708	4	472
TOTAL		48	4,808	28	2,804

PA-MU - PRIVATE OPEN SPACE SUMMARY

UNIT TYPE	PRIVATE OPEN SPACE (SF PER UNIT)	PA MU UNIT MIX	PA MU (AREA SUBTOTAL)
A1	60	6	360
A2	60	12	720
B2	71	12	852
C1	64	24	1,536
C2	73	12	876
C3	70	6	420
TOTAL		72	4,764

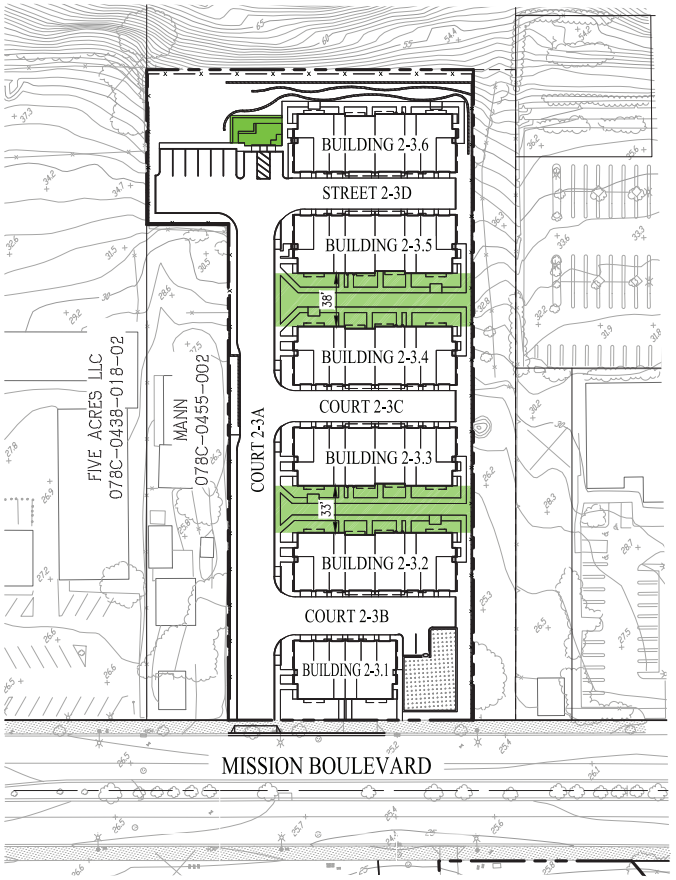
PA 2 - PRIVATE OPEN SPACE SUMMARY

UNIT TYPE	PRIVATE OPEN SPACE (SF PER UNIT)	PA 2-1 UNIT MIX	PA 2-1 (AREA SUBTOTAL)	PA 2-2 UNIT MIX	PA 2-2 (AREA SUBTOTAL)	PA 2-3 UNIT MIX	PA 2-3 (AREA SUBTOTAL)	PA 2-4 UNIT MIX	PA 2-4 (AREA SUBTOTAL)
PLAN 1	0	8	0	20	0	12	0	10	0
PLAN 2	152	8	1,216	20	3,040	12	1,824	10	1,520
PLAN 3	144	8	1,152	20	2,880	12	1,728	10	1,440
PLAN 4	109	4	436	12	1,308	5	545	0	0
PLAN 5	96	6	576	16	1,536	5	480	0	0
TOTAL		34	3,380	88	8,764	46	4,577	30	2,960

PA 3 - PRIVATE OPEN SPACE SUMMARY

UNIT TYPE	PRIVATE OPEN SPACE (SF PER UNIT)	PA 3-1 UNIT MIX	PA 3-1 (AREA SUBTOTAL)	PA 3-2 UNIT MIX	PA 3-2 (AREA SUBTOTAL)
PLAN 1	18	23	2,944	8	1,024
PLAN 2	73	28	2,044	11	803
PLAN 3	113	21	2,373	7	791
PLAN 4	192	21	4,032	7	1,344
TOTAL		93	11,393	33	3,962

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017



PA 2-3

GROUP OPEN SPACE AREA

	PLANNING AREA	PROVIDED AREA (SF)	GROUP OPEN SPACE RATIO
	PA 2–3 (1.99± AC)	10,885	12.6%

Not To Scale

FIGURE 2.0-7

Shared Open Space Areas-PA 2-3

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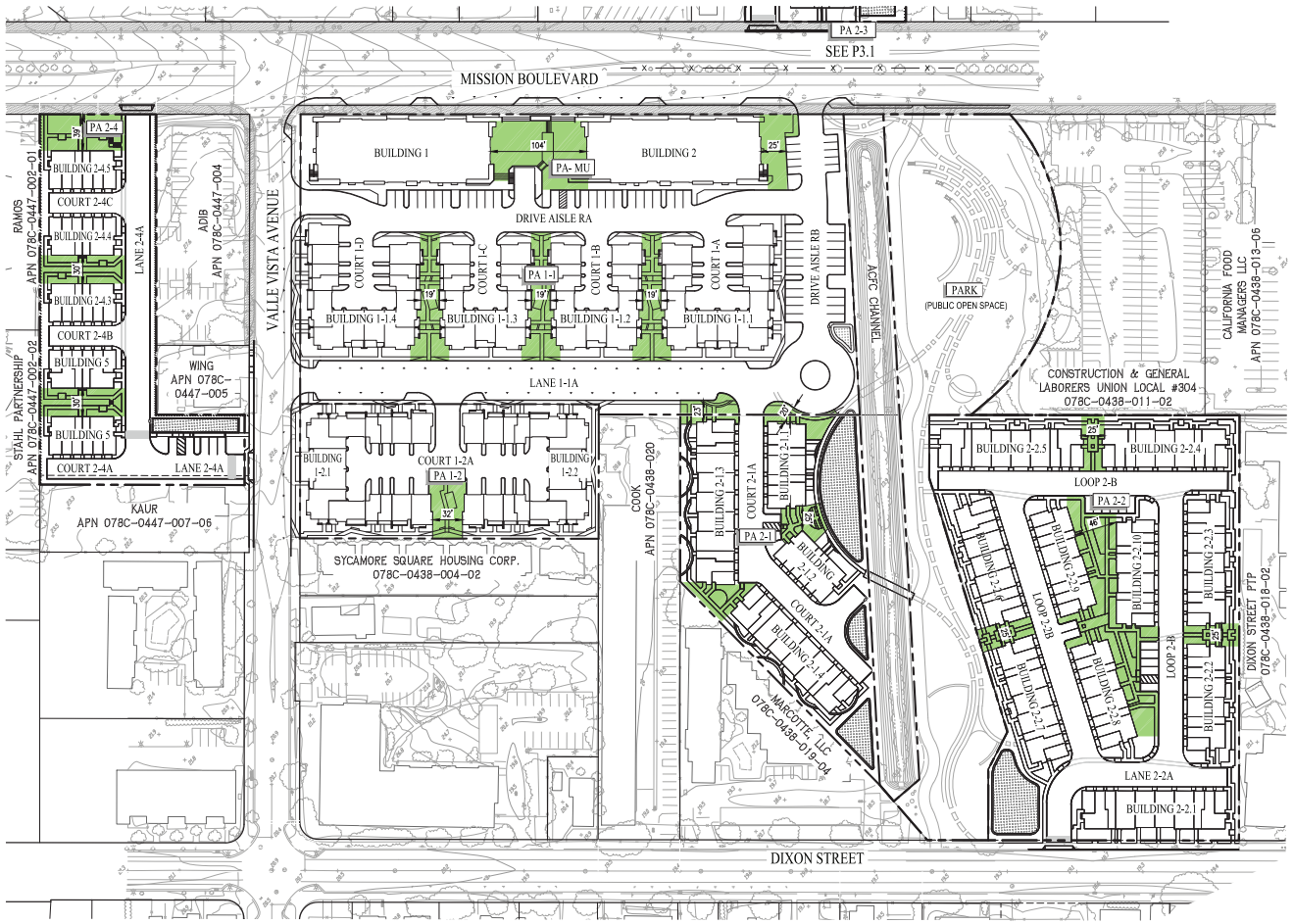

PA 1, 2-1, 2-2 & 2-4

GROUP OPEN SPACE AREA			
	PLANNING AREA	PROVIDED AREA (SF)	GROUP OPEN SPACE RATIO
	PA 1–1 RESIDENTIAL/MIXED USE (4.40± AC)	19,000	10.0%
	PA 1–2 RESIDENTIAL (1.10± AC)	2,260	4.7%
	PA 2–1 (1.34± AC)	6,540	11.2%
	PA 2–2 (3.09± AC)	13,780	10.2%
	PA 2–4 (1.33± AC)	9,220	15.9%

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

Not To Scale

FIGURE 2.0-8

Shared Open Space Areas-PA 1, PA 2-1, 2-2, 2-4

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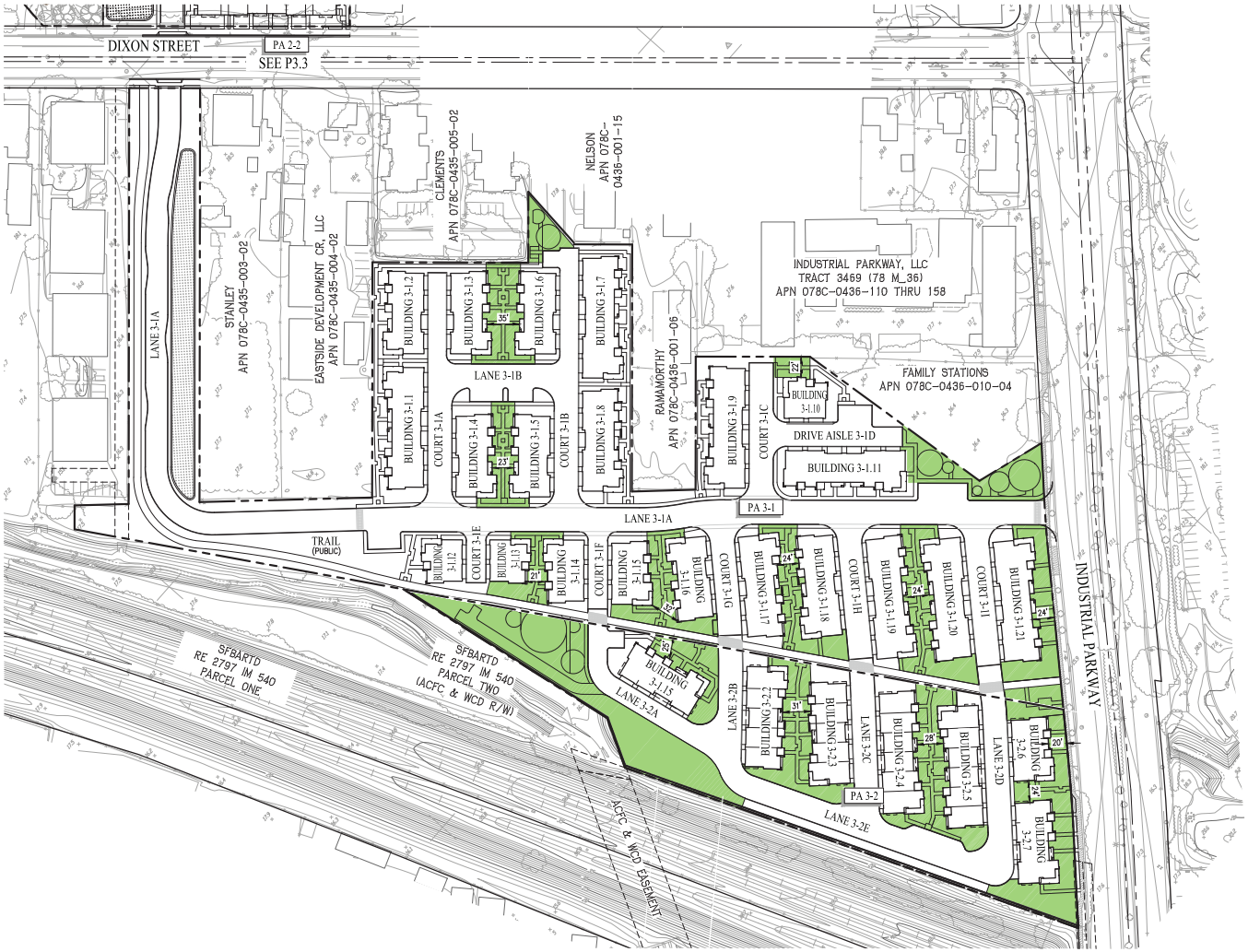

GROUP OPEN SPACE AREA			
	PLANNING AREA	PROVIDED AREA (SF)	GROUP OPEN SPACE RATIO
	PA 3-1 (6.16± AC)	38,200	14.2%
	PA 3-2 (2.50± AC)	39,640	36.4%

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

Not To Scale

FIGURE 2.0-9
Shared Open Space Areas-PA 3

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Landscaping

As shown in **Figures 2.0-6, 2.0-7, 2.0-8, and 2.0-9** the project would include landscaping surrounding buildings, in parking areas, along pathways, in Valle Vista Park, and along Mission Boulevard and Industrial Parkway. The project would incorporate native plants and use drought-tolerant species to reduce water use. Tree plantings would include trees ranging from 34- to 36-inch box size. Species would include coast live oak, pin oak, drake elm, and sweet bay. Shrubs species in 1- to 15-gallon pots would include red yucca, California sagebrush, California poppy, and blue foxtail agave. Valle Vista Park and other open areas would be planted by hydroseeding with six different hydroseed mixtures used in different areas of the development.

PARKING

The project would include three types of parking: covered spaces, driveway spaces, and on-street spaces. On-street spaces would be a mix of bay parking and parallel parking along the streets. **Table 2.0-6, Project Parking,** summarizes the parking planned for each planning area.

TABLE 2.0-6
PROJECT PARKING

Planning Area	Use	Number of Dwelling Units	Covered	Driveway	On-Street*	Total Spaces
PA 1						
PA MU	Retail	N/A	N/A	N/A	89	89
PA MU	Residential (Apartments)	72	72	0	0	72
PA 1-1	Residential	48	80	11	15	106
PA 1-2	Residential	28	48	11	10	69
PA 2						
PA 2-1	Residential	34	44	0	2	46
PA 2-2	Residential	88	116	0	13	129
PA 2-3	Residential	46	56	0	10	66
PA 2-4	Residential	30	30	0	5	35
PA 3						
PA 3-1	Residential	93	186	0	22	208
PA 3-2	Residential	33	66	0	4	70
Total		**472**				**890**

Source: William Lyon Homes 2018
** Assumes parking on one side of the street where applicable. Retail parking includes 12 spaces along Mission Boulevard. PA 1-1 and 1-2 include 10 spaces along Valle Vista Avenue.*

Additionally, the project would include bicycle parking as follows:

- Retail: 10 spaces proposed

- Park: 20 spaces proposed
- PA 3: 5 spaces proposed

CIRCULATION AND ACCESS

As shown in **Figure 2.0-6,** the project's access would be via a total of nine driveways: three limited-access (right-in/right-out) driveways along Mission Boulevard, one limited-access driveway along Industrial Parkway, two full-access driveways on Dixon Street, and three full-access driveways on Valle Vista Avenue. More detailed circulation information is provided above by planning area.

Emergency Access

Internal roadways would vary from approximately 22 to 26 feet in width. Roadways and entries would be sized to accommodate Hayward Fire Department and other emergency vehicles, or would provide adequate access and reach to development from adjacent roadways.

Pedestrian Circulation

The project would provide sidewalks at the project boundaries along Mission Boulevard, Valle Vista Avenue, Industrial Parkway, and Dixon Street. The project would include shared bicycle and pedestrian pathways, including one that would extend from Industrial Parkway to Dixon Street and through the new park to the retail area along Mission Boulevard. The project would include two pedestrian crossings over the ACFCD channel, as well as high-visibility crosswalks on both Dixon Street and Valle Vista Avenue, connecting the separate development areas**.** These multi-use pathways would provide connective trails and small green spaces through the project.

Transit

The project site is served by BART and by AC Transit lines on Mission Boulevard. Although walking distances to the BART station from the planning areas range from approximately 0.5 to 0.8 mile, a majority of the project site is located within one-half mile of the South Hayward BART station.

To eliminate bus and vehicle conflicts and improve visibility, the project would relocate the existing southbound Mission Boulevard bus stop from a point just north of Valle Vista Avenue to a far-side stop on the south side of the Valle Vista signalized intersection.

TRANSPORTATION DEMAND MANAGEMENT

The project would include a Transportation Demand Management (TDM) program. The City will provide initial approval of the Plan as a part of the project review process. Upon 90 percent occupancy of the site, the City may request assessment reports regarding the TDM program, and may authorize modifications to meet trip reduction goals. Surveys would be conducted and submitted to the City's Engineering and Transportation Division annually, once the project is fully occupied.

The TDM program would include the following measures:

- **On-site TDM coordinators.** Separate on-site coordinators for residential and nonresidential uses to promote carpooling and alternative modes of transportation such as transit, bicycling, or walking. On the residential side, the local TDM coordinator would provide rideshare matching, information on shuttle services, car-sharing, bike-sharing, and transit

passes. On the nonresidential side, the TDM coordinator would facilitate carpooling and ridesharing among employees and would care for lockers and bicycle lockers. In addition, bus passes would be coordinated, along with information on bike-sharing.

- **On-site bike/pedestrian amenities.** Bikeways and walkways within the site to facilitate biking and walking to access nearby features and to promote recreational uses by residents.

- **Bicycle racks and lockers for residents, employees, and shoppers.** For retail employees and visitors, park visitors, and residents.

- **Transit passes**. Universal transit passes such as Clipper cards, which would allow residents and employees to have subsidized services for AC Transit and BART.

- **Carpool and vanpool program.** Carpool and vanpool programs would be promoted to residents and employees through the complex's welcome packets.

- **Car Sharing.** Information about the Zipcar program and available nearby locations will be provided in the welcome packet.

- **Bike-share program.** Short- and long-term bike-share memberships to facilitate bike-share trips between the project, BART, and other areas residents may use.

- **Bike maintenance services.** Coupons for bicycle maintenance at a bicycle shop once a year.

- **Shared parking.** May include preferential carpool/vanpool parking for carpooling employees and shared parking between the residential and nonresidential uses, combined with unbundled parking for residential uses. The project would include dedicated car-share parking spaces to be distributed throughout the project site**.**

SUSTAINABLE FEATURES

The project would include sustainable features. All roofs with residential uses would include photovoltaic solar panels. All units would include Energy Star–rated appliances and tankless water heaters. The project would include rainwater harvesting barrels to capture rainwater during storms for irrigation use at a later date. The green and open space areas would be equipped to use recycled water (when it becomes available) to reduce potable water use on the project site. Additionally, open space areas and the relocated Park would include native plants and drought-tolerant landscaping.

The proposed development is considered a transit-oriented development in that it is a mixed-use development located within approximately one-half mile of the South Hayward BART station and in the Mission Boulevard Mixed Use Corridor Priority Development Area (PDA), where regional and local plans call for higher density and intensity development within walking distance to transit and commercial services. In addition, the proposed development includes an integrated network of pedestrian and bicycle trails to link the residential portions of the development to the commercial areas along Mission Boulevard, to the central park, and to BART along Dixon Road—promoting walkability and supporting non-vehicular modes of travel.

FEMA FLOOD ZONE

The Federal Emergency Management Agency (FEMA) is responsible for mapping flood hazard areas in the United States that are affected by the 100-year (1 percent annual chance flood) or 500-year flood (0.2 percent annual chance flood). According to FEMA (2009) mapping on Flood Insurance Rate Map No. 06001C0293G, and as shown on **Figure 2.0-10**, the project site is located in the following flood zone management areas:

- Zone X: Areas determined to be outside the 500-year (0.2 percent annual chance flood) floodplain.
- Zone AE: Special flood hazard areas subject to inundation by the 100-year (1 percent annual chance) flood.

TREE REMOVAL

The project would require the removal of 98 trees, 94 of which are protected. The City's Tree Preservation Ordinance requires a tree removal and cutting permit for the removal of protected trees in the city (WRA 2017). Therefore, the project applicant would be required to obtain tree removal permits from the City and mitigate the loss of the trees in accordance with the ordinance. In addition, the project would include appropriate tree replacement and obtain a tree pruning permit prior to trimming any existing protected trees.

STORMWATER TREATMENT

The project would add a total of 724,650 square feet (16.6 acres) of impermeable surface to the project site. **Table 2.0-7, Project Impervious Surface Area,** shows the pre-project impervious surface area and the additional surface added by the project.

TABLE 2.0-7
PROJECT IMPERVIOUS SURFACE AREA

Type of Impervious Surface	Pre-Project Impervious Surface (sq. ft.)	New Impervious Surface (sq. ft.) [a]
Roof areas	4,335	337,400
Impervious sidewalks, patios, paths, driveways [b]	8,410	95,490
Impervious uncovered parking [b]	17,600	—
Private streets	0	291,760
Totals	30,345	724,650

Source: Carlson, Barbee & Gibson 2017

a. Installation of new impervious surface where existing impervious surface is removed and where there is currently no impervious surface.

b. Pavement that meets the following definition of pervious pavement is NOT an impervious surface. Pervious pavement is defined as pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding unpaved, landscaped areas, or that stores and infiltrates the rainfall runoff volume described in Provision C.3.d.

The project would incorporate the following site design measures in the project plans to reduce stormwater runoff (Carlson, Barbee & Gibson 2017):

- Direct roof runoff onto vegetated areas.
- Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
- Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
- Minimize land disturbance and impervious surface (especially parking lots).
- Maximize permeability by clustering development and preserving open space.
- Protect sensitive areas, including wetland and riparian areas, and minimize changes to the natural topography.

The stormwater system would convey runoff from impervious surfaces to bioretention areas for treatment of the water. The bioretention locations are shown on **Figure 2.0-11, Stormwater Control Plan.**

LIGHTING

The project would include street lights, low-level safety and security lighting, bollard lighting, and interior lighting from the mixed and residential uses, which would be typical of residential-type lighting. Appropriate lighting would be provided along public and private pathways on the project site. All project lighting sources would be shielded, in accordance with the City's standard conditions of approval for development projects.

UTILITIES

Most of the utilities serving the existing uses within the parameters of the project site would be removed. However, storm drains, sanitary sewers, and water pipes within easements would remain in place. Below is a list of the utility providers for the project site.

- Storm drains: private system owned and maintained by the homeowners' association
- Water: City of Hayward
- Sewer: City of Hayward
- Natural gas and electricity: Pacific Gas and Electric Company (PG&E)
- Telephone: AT&T
- Cable: Comcast

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T:_GIS\Alameda_County\Mxds\Hayward\South_Development\Figure 2.0-10_Flood Zone.mxd (3/19/2018)

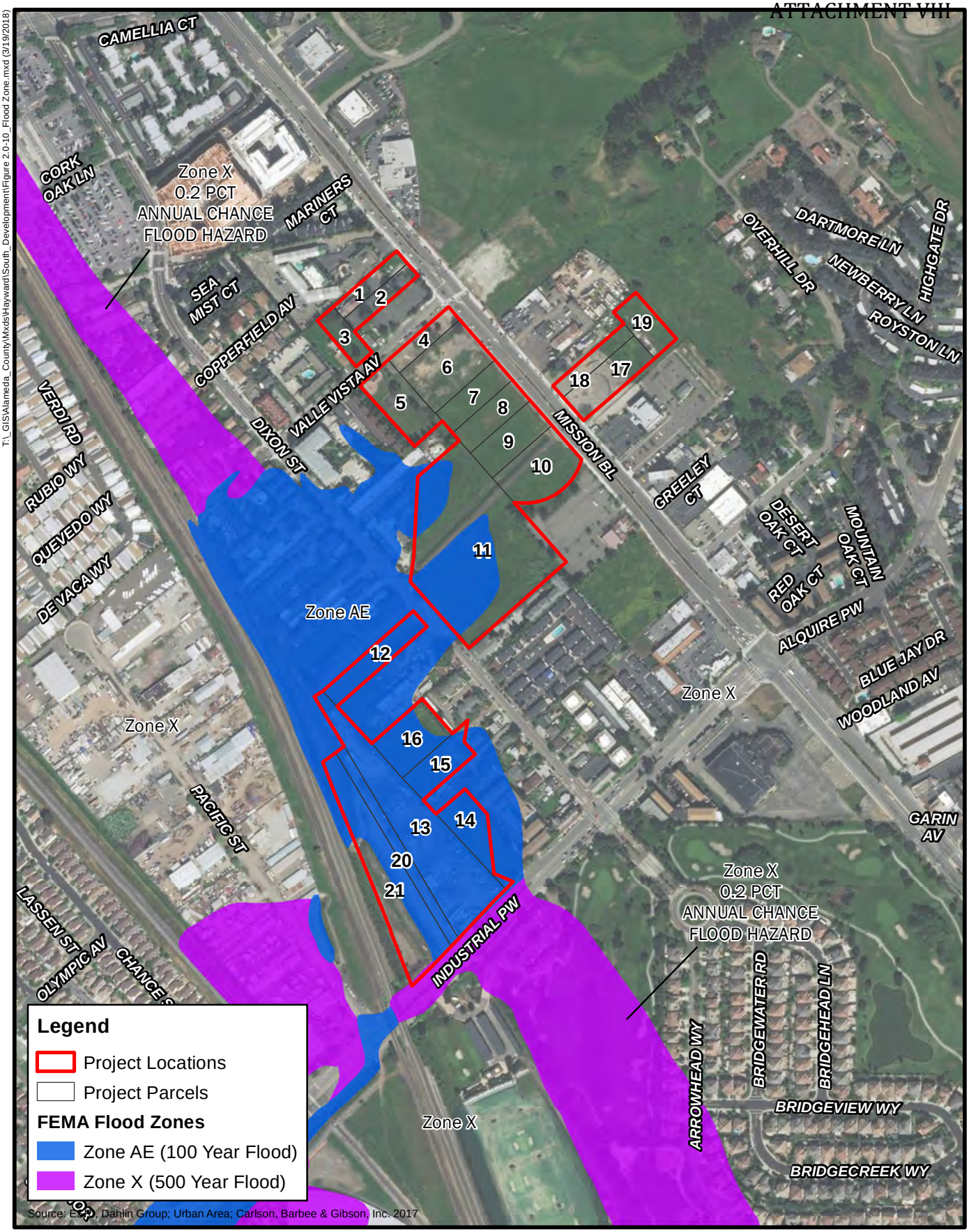

Figure 2.0-10
Flood Zone

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ON-SITE STORMWATER TREATMENT LOCATIONS

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

0 150 300
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FIGURE 2.0-11
Stormwater Control Plan

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CONSTRUCTION

Construction would be anticipated to last approximately 18 months, beginning in June 2018. Construction activities would consist of the following activities: demolition of existing buildings; site preparation, including removal of up to 900 tons of pavement, tree removal, grading, and excavation for building pads and utilities; construction of buildings, including exterior and interior construction; installation of internal roadways and improvements to existing sidewalks and roadways along Mission Boulevard and Industrial Parkway; and installation of landscaping and park improvements. It is currently anticipated that the project would be constructed in one phase. However, in the event the City of Hayward cannot acquire the two parcels owned by BART and the ACFCD to convey to the developer, the PA 3-2 portion of the development would be built in a subsequent phase or eliminated from the project. An alternative site plan for PA 3-1 in the event that PA 3-2 is eliminated from the project is shown on **Figure 2.0-12**.

Construction equipment would include heavy equipment such as bulldozers, scrapers, backhoes, excavators, loaders, cranes, forklifts, welders, compactors, rollers, and paving machines.

Consistent with the City's Noise Ordinance, construction would be permitted Monday through Saturday between the hours of 7:00 a.m. and 7:00 p.m. and on Sundays and holidays between 10 a.m. and 6 p.m., unless otherwise permitted by the City Engineer or the Chief Building Official with the approved grading and building permits, respectively (Hayward 2017).

2.4 PROJECT APPROVALS

The South Hayward Development Project may require the discretionary approvals and permits listed in **Table 2.0-8, Project Approvals**, for actions proposed as part of the project.

TABLE 2.0-8
PROJECT APPROVALS

Agency	Approval
City of Hayward	• Approval of Purchase and Sale Agreements and land swap and related approvals with HARD • Approval of acquisition agreements and related approvals with BART and ACFCD • Adoption of the Initial Study/Mitigated Negative Declaration • Approval of Vesting Tentative Maps (for condominium purposes) • General Plan Amendment • Rezoning and related exceptions or variances from existing zoning • Site Plan Review • Improvement Plans • Grading and Building Permits • Formation of a Lighting and Landscaping District
HARD	• Approval of land swap for Valle Vista Park

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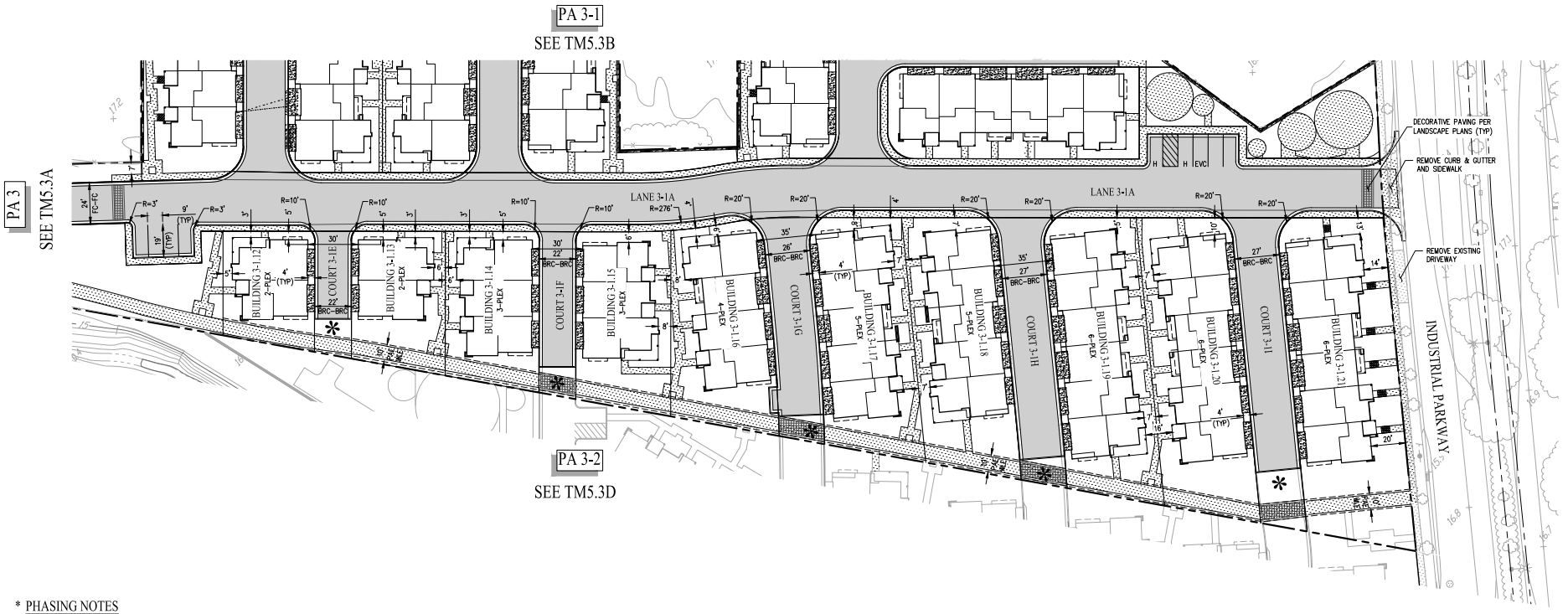
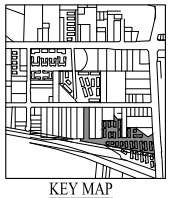


* PHASING NOTES

1. COURTS INCLUDING STREET IMPROVEMENTS AND UTILITIES TO DEAD END IF DEVELOPER IS UNABLE TO ACQUIRE BART AND ACFC PROPERTIES.
2. IMPROVEMENTS TO CONTINUE THROUGH AS SHOWN ON TM5.3D IF SAID PROPERTIES ARE ACQUIRED.



KEY MAP
NOT TO SCALE

DEVELOPMENT SUMMARY

BUILDING TYPE	BUILDING TOTAL	BUILDING MIX (% TOTAL)	UNIT TOTAL
201	3	14%	6
301	2	10%	6
401	6	29%	24
501	3	14%	15
601	7	33%	42
TOTAL	21	100%	93

RESIDENTIAL UNIT MIX SUMMARY

PLAN TYPE	TOTAL
PLAN 1	23
PLAN 2	28
PLAN 3	21
PLAN 4	21
TOTAL	93

RESIDENTIAL PARKING SUMMARY

	PARKING REQUIRED		PARKING PROVIDED	
PARKING TYPE	RATIO	NUMBER OF SPACES	RATIO	NUMBER OF SPACES
GARAGE	2 SPACES/DU	186	2 SPACES/DU	186
ON-STREET*** (PRIVATE)	0.1 SPACES/DU*	19	0.24 SPACES/DU	22
TOTAL	2.1 SPACES/DU	205	2.24 SPACES/DU	208

* PER CITY OF HAYWARD OFF-STREET PARKING STANDARDS FOR MULTI-FAMILY DWELLINGS.
*** ACCESSIBLE PARKING SPACES ARE PROVIDED AT A RATIO OF 0.02 SPACE/DU

Source: Dahlin Group; Urban Area; Carlson, Barbee & Gibson, Inc. 2017

0 30 90
FEET

FIGURE 2.0-12
PA 3-1 Alternative Site Plan If PA 3-2 Eliminated

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3.0 ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Project Title:

South Hayward Development Project (Sohay)

2. Lead Agency Name and Address:

City of Hayward
777 B Street
Hayward, CA 94541

3. Contact Person and Phone Number:

Leigha Schmidt, Senior Planner
(510) 583-4113

4. Project Location:

Twenty-one (21) parcels near the intersection of Mission Boulevard and Industrial Parkway/Alquire Parkway in Hayward, California

5. Project Sponsor's Name and Address:

William Lyon Homes, Inc.
4000 Executive Parkway, Suite 250
San Ramon, CA 94583

6. General Plan Designations and Zoning:

The General Plan designations for the parcels are Residential–Medium Density, Parks and Recreation, and Sustainable Mixed Use. Zoning is Industrial (I), High Density Residential (RH), Civic Space Zone (S-CS), Urban General Zone, 17.5 to 35 units per net acre (S-T4), and Urban General Zone, 35 to 55 units per net acre (S-T5).

7. Description of Project:

The project would develop 21 parcels of land totaling approximately 25 acres with 472 multi-family housing units (72 rental apartments and 400 townhomes), approximately 20,000 square feet of retail space, 2.4 acres of parkland and trails, and internal roadways. The project would include mixed use development with ground floor retail and multi-family residential above along Mission Boulevard and a mix of cluster townhouses and row townhouses throughout the remainder of the project site. The existing Valle Vista Park would be relocated from its current location north of the Alameda County Flood Control and Water Conservation District (ACFCD) channel to a new locality south of the channel. The ACFCD channel would remain on the site in its current location.

8. Surrounding Land Uses and Setting:

Land uses surrounding the project site parcels include commercial and institutional uses, Valle Vista Park, and vacant land along Mission Boulevard; commercial and residential uses, vacant land, and golf course uses along Industrial Parkway; and the Bay Area Rapid Transit (BART) rail line and industrial uses along the western edge. Additionally, various areas of the project site are adjacent to multi-family residential and older single-family residential uses. The Mission Hills of Hayward Golf Course and Driving Range facility is located to the south of the project site, on the southern side of Industrial Parkway.

9. Other Public Agencies Whose Approval Is Required:

In CEQA, the term *responsible agency* includes all public agencies other than the lead agency that may have discretionary actions associated with the implementation of the proposed project. The following agencies may have some role in implementing the proposed project and have been identified as potential responsible agencies:

- Bay Area Air Quality Management District (BAAQMD)
- San Francisco Bay Regional Water Quality Control Board (RWQCB)
- Hayward Area Recreation and Park District (HARD)
- Bay Area Rapid Transit (BART)
- Alameda County Flood Control District (ACFCD)

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors that would be potentially affected by this project and are mitigated to a "Less Than Significant" impact are indicated below.

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

C. DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature

March 30, 2018
Date

Leigha Schmidt
Printed Name

Senior Planner
Title

D. EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect, and construction as well as operational impacts.

3) A "Less Than Significant Impact" applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

4) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

5) "Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The initial study must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcrops, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Hayward is largely urban in character, with a relatively dense development pattern that can restrict scenic views. However, higher elevations in the hills and along portions of the shoreline provide scenic vistas of San Francisco Bay, views to the East Bay Hills, and views of natural topography such as open grassland vegetation (Hayward 2014a).

The project site is in an area identified in the General Plan as the South Hayward BART Urban Neighborhood. The majority of the project site is located on the west side of Mission Boulevard where the project area topography is generally flat. One parcel, in PA 2-3, is located on the east side of Mission Boulevard at the foot of the Hayward Hills and slopes from west to east; however, no portion of the project would be developed on steeply sloped areas.

In the vicinity of the project site, there are no highly visible and unique natural features such as rock outcroppings or natural vegetation on the project site (Hayward 2011). Further, there are no tall or prominently visible man-made structures in the area, although mature trees, either in public streets or on private property, are prevalent (Hayward 2011). Commercial uses are situated along Mission Boulevard, and residential uses are located throughout the area, including single-family homes and apartment complexes of up to three stories.

The project site consists primarily of vacant land. A single-family home and a barn structure are located on two parcels in the northern portion of the site. Several trucks, trailers, and storage containers are situated in the southern area of the site, along Industrial Parkway. The project site also contains the approximately one-acre Valle Vista Park, which includes playground equipment, a basketball court, and landscaping. Photographs of the project site are provided in **Figure 3.1-1, 3.1-2,** and **3.1-3**.

T:_CS\Work\Hayward, City of\2017 South Hayward Development Project_161626\Figures

Source: Michael Baker International; 2018

FIGURE 3.1-1
Project Site Photographs

Michael Baker
INTERNATIONAL

T:_CS\Work\Hayward, City of\2017 South Hayward Development Project_161626\Figures

Source: Michael Baker International; 2018

FIGURE 3.1-2
Project Site Photographs

Michael Baker
INTERNATIONAL

T:_CS\Work\Hayward, City of\2017 South Hayward Development Project_161626\Figures

Source: Michael Baker International; 2018

FIGURE 3.1-3

Project Site Photographs (Valle Vista Park)

Michael Baker INTERNATIONAL

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

A scenic vista refers to an expansive view of important landscape features that are observable from a publicly accessible vantage point. According to the Hayward 2040 General Plan Background Report, views of natural topography, open grassland vegetation, rolling hills, and the bay shoreline constitute the prominent elements of Hayward's scenic landscape (Hayward 2014b). In the vicinity of the project site, scenic vistas of the Hayward Hills can be seen from some east/west streets, such as Valle Vista Avenue, and across some of the vacant portions of the project site from certain vantage points, such as from Dixon Street. In addition, as noted in the South Hayward BART/Mission Boulevard Form-Based Code EIR, scenic vistas of the Hayward Hills can be viewed from the existing Valle Vista Park.

The South Hayward BART/Mission Boulevard Form-Based Code EIR noted that future construction of larger and taller buildings in this area could serve to impact views of the Hayward Hills as seen by residents and by motorists and pedestrians using local streets. The EIR included a photo simulation along Valle Vista Avenue, showing that development on a portion of the project site (PA 1) would retain scenic views of the Hayward Hills. The South Hayward BART/Mission Boulevard Form-Based Code EIR also noted that a prior Concept Design Plan Program EIR determined that viewshed impacts particular to the vicinity of the South Hayward BART station could occur. In response, the prior EIR established a mitigation measure necessitating design review for development projects within the Concept Design Plan Area, an area that encompasses the proposed project site. The proposed project, which consists of Planned Development District rezoning, includes a site plan and architectural review as part of the approval of the proposed development. The proposed neighborhood consists of higher density development along Mission Boulevard, which is appropriate given the volumes of traffic and surrounding uses with smaller scale cluster and row townhome development surrounding. The taller mixed-use buildings are broken into two buildings with an approximately 100-foot separation between buildings to allow for easterly views through the project site to the hills beyond. Further, the proposed development includes building articulation and a variety of building materials as well as landscaped setbacks and courtyards to provide visual complexity from right-of-way as required by the City's Design Guidelines.

In addition, the proposed project would relocate and enlarge Valle Vista Park into a linear park providing east-west views toward the hills and providing replacement opportunities to view scenic resources. Due to these factors, potential impacts resulting from the proposed project would be considered **less than significant**.

b) ***No Impact.***

There are no Officially Designated State Scenic Highways in the project vicinity. Eligible State Scenic designated scenic highways in the vicinity of Hayward include Interstate 580 (I-580) from the San Leandro city limits to SR-24 in Oakland. I-580, Interstate 880 (I-880), and State Route (SR) 92 are Alameda County designated scenic highways (Hayward 2014a). According to the California Department of Transportation Scenic Highway Program, Mission Boulevard/SR 238, which is adjacent to the project site, is not identified as Officially Designated or an Eligible State Scenic Highway–Not Officially Designated (Caltrans 2011). There are no other state highways in the vicinity of the project site. Therefore, the proposed project would have **no impact**.

c) ***Less Than Significant Impact.***

The proposed project would result in a high density mixed-use development, with a combination of residential, retail, and public open space uses, on a cluster of underutilized sites in close proximity to public transit. The proposed development is consistent with the vision set forth for the area in the South Hayward Form Based Code and the General Plan.

Construction activities would temporarily reduce the aesthetic qualities of the site in the project area by introducing construction equipment, materials, and work crews. General construction activities would include demolition, excavation, earth movement, and building construction. However, these construction activities would be short term in duration, and impacts to surrounding aesthetic resources would be temporary in nature.

The proposed project would change the existing character of the project site, which is currently characterized by vacant property, two small structures, and storage, to a large-scale mixed-use neighborhood. Retail uses and multi-family rental housing units would be located along Mission Boulevard, a busy corridor with existing commercial uses. The remainder of the project site would generally include three-story townhomes, which would be consistent with the surrounding residential neighborhood which includes a mix of apartment buildings and townhomes of similar height as well as a few scattered single-family homes. The project would relocate and enlarge the approximately one-acre Valle Vista Park, providing new open space features for both residents of the development and the surrounding community. In addition to the park, the project would include new residential and commercial uses at a range of densities, a variety of public and private landscaping and open spaces, a parkway and roadways connecting the various neighborhoods, and a cohesive design, which would add architectural variety and interest to the streetscape.

The project site is designated as *Medium Density Residential*, *Parks and Recreation*, and *Sustainable Mixed Use* in the Hayward General Plan. The project proposes a General Plan Amendment to *Sustainable Mixed Use* for all three planning areas to allow for a cohesive design across the project area from the more intense mixed-use development along Mission Boulevard to the lower scale neighborhoods. The relocated and expanded Valle Vista Park would be designated as *Parks and Recreation* and would provide a contemporary linear park that interacts with the ACFCD with pedestrian pathways and a variety of amenities.

The change in visual character on the site would be consistent with both the existing and proposed General Plan designations. Therefore, the proposed project would not degrade the existing visual character or quality of the site and its surroundings. The impact would be **less than significant.**

d) ***Less Than Significant Impact.***

The area surrounding the project site is urban in character and already has exterior lighting from other uses and street lighting. Although the project site is primarily vacant, its existing uses contribute some light sources that affect views of and from the project site.

No construction work would be conducted during the nighttime; therefore, there would be no potential for light and glare impacts during construction. However, the proposed project would have the potential to introduce new lighting sources through the development of new residences and mixed-use buildings. Lighting installed by the project

would be typical of residential type lighting and would include street lights, low-level safety and security lighting, bollard lighting, and interior lighting from the mixed and residential uses. New sources of light and glare associated with the proposed project would not be substantial in the context of existing lighting sources in the area. All project lighting sources would be shielded, and would therefore not spillover to other properties, in accordance with the City's standard conditions of approval for development projects. Therefore, compliance with the City's Municipal Code and applicable standards would ensure that light and glare impacts from the proposed project would be **less than significant**.

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

ENVIRONMENTAL SETTING

The project site is in Alameda County in the San Francisco Bay Area. The site is in an urbanized area that consists of roadways, utility improvements, vacant land, Valle Vista Park, and commercial development; no portions of the project site are currently used for any agricultural purposes. In addition, the project site has been classified by the Farmland Mapping and Monitoring Program as Urban and Built-Up Land (DOC 2017) and is currently designated Industrial (I) District, High Density Residential (RH) District, Civic Space Zone (S-CS) District, Urban General Zone, 17.5 to 35 units/net acre (S-T4) District, and Urban General Zone, 35 to 55 units/net acre (S-T5) District. There are no nearby agricultural activities, and no adjacent parcels are zoned for agricultural uses. No nearby parcels are subject to a Williamson Act contract. The project site and the surrounding area are not zoned for or considered forestland.

CHECKLIST DISCUSSION

a, b) *No Impact*.

As described above, the project site is classified by the Farmland Mapping and Monitoring Program as Urban and Built-Up Land (DOC 2017). Therefore, implementation of the proposed project would not result in conversion of any Important Farmland. Furthermore, the project site is surrounded by commercial and industrial uses and is not subject to a

Williamson Act contract. There would be **no impact** to agricultural resources from implementation of the proposed project.

c, d, e) ***No Impact***.

As described above, the project site is not located on land designated as forestland, is not zoned for forestry uses, and is not actively utilized as a forestry operation. Therefore, there would be **no impact** to forestland from implementation of the proposed project.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

This subsection evaluates air quality impacts associated with development and implementation of the proposed project. Illingworth and Rodkin, Inc., prepared an air quality and greenhouse gas assessment for the proposed project in November 2017. The study is included in **Appendix AIR,** and the results are summarized throughout this subsection.

ENVIRONMENTAL SETTING

REGIONAL SETTING

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the San Francisco Bay Area Air Basin (SFBAAB), which encompasses the project site, pursuant to the regulatory authority of the Bay Area Air Quality Management District (BAAQMD).

San Francisco Bay Area Air Basin

The San Francisco Bay Area Air Basin (SFBAAB) comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. There are 11 climatological subregions in the SFBAAB. The project site is in Hayward in the Southwestern Alameda County subregion. The subregion encompasses the southeast side of San Francisco Bay, from Dublin Canyon to north of Milpitas. The subregion is bordered on the east by the East Bay Hills and on the west by the bay. Most of the area in the subregion is flat.

This subregion is indirectly affected by marine air flow. Marine air entering through the Golden Gate is blocked by the East Bay Hills, forcing the air to diverge into northerly and southerly paths. The southern flow is directed down the bay, parallel to the hills, where it eventually passes over

southwestern Alameda County. These sea breezes are strongest in the afternoon. The farther from the ocean the marine air travels, the more the ocean's effect is diminished. Although the climate in this region is affected by sea breezes, it is affected less than the regions closer to the Golden Gate.

The climate of southwestern Alameda County is also affected by its proximity to San Francisco Bay. The bay cools the air with which it comes in contact during warm weather, while during cold weather the bay warms the air. The normal northwest wind pattern carries this air onshore. Bay breezes push cool air onshore during the daytime and draw air from the land offshore at night.

Winds are predominantly out of the northwest during the summer months. In the winter, winds are equally likely to be from the east. Easterly–southeasterly surface flow into southern Alameda County passes through three major gaps: Hayward/Dublin Canyon, Niles Canyon, and Mission Pass. Areas north of the gaps experience winds from the southeast, while areas south of the gaps experience winds from the northeast. Wind speeds are moderate in this subregion, with annual average wind speeds close to the bay at about 7 miles per hour (mph), while farther inland they average 6 mph.

Air temperatures are moderated by the subregion's proximity to San Francisco Bay and to the sea breeze. Temperatures are slightly cooler in the winter and slightly warmer in the summer than East Bay cities to the north. During the summer months, average maximum temperatures are in the mid-70s. Average maximum winter temperatures are in the high 50s to low 60s. Average minimum temperatures are in the low 40s in the winter and in mid-50s in the summer.

Pollution potential is relatively high in this subregion during the summer and fall. When high pressure dominates, low mixing depths and San Francisco Bay and ocean wind patterns can concentrate and carry pollutants from other cities to this area, adding to the locally emitted pollutant mix. The polluted air is then pushed up against the East Bay Hills. In the wintertime, the air pollution potential in southwestern Alameda County is moderate. Air pollution sources include light and heavy industry, as well as motor vehicles. Increasing motor vehicle traffic and congestion in the subregion may increase the Southwestern Alameda County region's pollution as well as that of its neighboring subregions (BAAQMD 2017a).

Pollution Potential Related to Emissions

Although air pollution potential is strongly influenced by climate and topography, the air pollution that occurs in a location also depends on the amount of air pollutant emissions in the surrounding area or those that have been transported from more distant places. Air pollutant emissions generally are highest in areas that have high population densities, high motor vehicle use, and/or industrialization. Contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals (BAAQMD 2017a).

Criteria Air Pollutants

Air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOx), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$), lead, and fugitive dust are primary air pollutants. Of these, CO, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NOx are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3)

and nitrogen dioxide (NO_2) are the principal secondary pollutants. Presented in **Table 3.3-1** is a description of each of the primary and secondary criteria air pollutants and their known health effects.

TABLE 3.3-1
CRITERIA AIR POLLUTANTS – SUMMARY OF COMMON SOURCES AND EFFECTS

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NOx) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Particulate Matter (PM_{10} & $PM_{2.5}$)	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO_2)	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2011

Ambient Air Quality

The US Environmental Protection Agency (EPA) and the State of California have established health-based ambient air quality standards (CAAQS) for the criteria pollutants described above, as well as for lead, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Air quality standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Areas with air quality that exceed adopted air quality standards are designated as nonattainment areas for the relevant air pollutants, while areas that comply with air quality standards are designated as attainment areas for the relevant air pollutants. The SFBAAB's current attainment status with regard to federal and state ambient air quality standards is summarized in **Table 3.3-2**. The region is nonattainment for federal ozone and $PM_{2.5}$ standards, as well as for state ozone, PM_{10}, and $PM_{2.5}$ standards (BAAQMD 2017a).

TABLE 3.3-2
FEDERAL AND STATE AMBIENT AIR QUALITY ATTAINMENT STATUS FOR THE SAN FRANCISCO BAY AREA AIR BASIN

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	8 Hours	0.070 ppm (137μg/m3)	N	0.070 ppm	N
	1 Hour	0.09 ppm (180 μg/m3)	N	No standard	Not applicable
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m3)	A	9 ppm (10 mg/m3)	A
	1 Hour	20 ppm (23 mg/m3)	A	35 ppm (40 mg/m3)	A
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 μg/m3)	A	0.100 ppm	U
	Annual Arithmetic Mean	0.030 ppm (57 μg/m3)		0.053 ppm (100 μg/m3)	A
Sulfur Dioxide (SO_2)	24 Hours	0.04 ppm (105 μg/m3)	A	0.14 ppm (365/μg/m3)	—
	1 Hour	0.25 ppm (665 μg/m3)	A	0.075 ppm (196/μg/m3)	—
	Annual Arithmetic Mean			0.030 ppm (80/μg/m3)	—
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 μg/m3	N	No standard	Not applicable
	24 Hours	50 μg/m3	N	150 μg/m3	U
Particulate Matter – Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 μg/m3	N	15 μg/m3	A
	24 Hours			35 μg/m3	N
Sulfates	24 Hours	25 μg/m3	A	—	—
Lead	30-Day Average	1.5 μg/m3		—	A
	Calendar Quarter	—	—	1.5 μg/m3	A
	Rolling 3-Month Average	—	—	0.15 μg/m3	—
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m3)	U	—	—
Vinyl Chloride (chloroethene)	24 Hours	0.01 ppm (26 μg/m3)	No information available	—	—
Visibility-Reducing Particles	8 Hours (10:00 to 18:00 PST)	—	U	—	—

Source: BAAQMD 2017a

Notes: A = attainment; N = nonattainment; U = unclassified; mg/m^3 = milligrams per cubic meter; ppm = parts per million; ppb = parts per billion; μg/m^3 = micrograms per cubic meter

Based on the nonattainment status, O_3, PM_{10}, and $PM_{2.5}$ are the pollutants most intensely affecting the SFBAAB. Ambient concentrations of these pollutants at specific sites will vary due to localized variations in emission sources and climate. Concentrations near the project site can be inferred from ambient air quality measurements conducted by the BAAQMD at nearby air quality monitoring stations. The Hayward-La Mesa air quality monitoring station is the closest station to the project site, approximately 1.8 miles to the northeast. The closest monitoring station with data for $PM_{2.5}$ is the Oakland-9925 International Boulevard station, 10 miles to the northwest. No monitoring stations in the region collect data for PM_{10}. **Table 3.3-3** summarizes the published data since 2014 from the closest air quality monitoring stations for each year that monitoring data is provided.

TABLE 3.3-3
SUMMARY OF AMBIENT AIR QUALITY DATA

Pollutant Standards	2014	2015	2016
Ozone (Hayward-La Mesa Station)			
Maximum 1-hour concentration (ppm) state	0.096	0.103	0.083
Number of days above state 1-hour standard	1	2	0
Maximum 8-hour concentration (ppm) state	0.076	0.085	0.065
Number of days above state 8-hour standard (0.070 ppm)	4	2	0
Maximum 8-hour concentration (ppm) federal	0.075	0.084	0.064
Number of days above federal 8-hour 2015 standard (0.070 ppm)	4	2	0
Fine Particulate Matter ($PM_{2.5}$) (Oakland-9925 International Boulevard Station)			
Maximum 24-hour concentration ($\mu g/m^3$) federal	37.6	44.7	15.5
Number of days above federal standard	1	1	0

Source: CARB 2018

Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million

Air Quality Attainment Plan

The BAAQMD is responsible for preparing plans to attain ambient air quality standards in the San Francisco Bay Area Air Basin. The BAAQMD prepares ozone attainment plans for the national ozone standard and clean air plans for the California standard, both in coordination with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The BAAQMD adopted the Bay Area 2017 Clean Air Plan in April 2017. Details regarding the plan and included in the Regulatory Framework – Regional discussion below.

Toxic Air Contaminants

In addition to the criteria air pollutants listed above, another group of pollutants, commonly referred to as toxic air contaminants (TACs) or hazardous air pollutants, can result in health effects that can be quite severe. The California Air Resources Board (CARB) has designated 244 compounds as TACs. Many TACs are confirmed or suspected carcinogens, or are known or suspected to cause birth defects or neurological damage. Secondly, many TACs can be toxic at very low concentrations. For some chemicals, such as carcinogens, there are no thresholds below which exposure can be considered risk-free.

Industrial facilities and mobile sources are significant sources of TACs. However, common urban facilities also produce TAC emissions, such as gasoline stations (benzene), hospitals (ethylene oxide), and dry cleaners (perchloroethylene). Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. In addition, diesel particulate matter (diesel PM) is a TAC. Diesel PM differs from other toxic air contaminants in that it is not a single substance but rather a complex mixture of hundreds of substances. BAAQMD research indicates that mobile-source emissions of diesel PM, benzene, and 1,3-butadiene represent a substantial portion of the ambient background risk from toxic air contaminants in the SFBAAB (BAAQMD 2014).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others because of the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases (OEHHA 2007).

Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

Because the proposed project includes residential development and a public park, the project itself is considered a future sensitive receptor. The closest existing sensitive receptors are residences adjacent to the project property boundaries in multiple locations. The closest school to the project site is Cesar Chavez Middle School, approximately 2,680 feet (0.51 mile) to the northwest of PA 2-4.

Odors

The land uses identified by the BAAQMD as sources of odors include wastewater treatment plants, wastewater pumping facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, painting/coating operations, rendering plants, coffee roasters, food processing facilities, confined animal facilities, feedlots, dairies, green waste and recycling operations, and metal smelting plants. If a source of odors is proposed to be located near existing or planned sensitive receptors, it could have the potential to cause operational-related odor impacts. With respect to operational impacts, the BAAQMD recommends screening criteria based on the distance between the receptor and the types of sources known to generate odors.

REGULATORY FRAMEWORK

FEDERAL

US Environmental Protection Agency

The EPA is the federal agency responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. The EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) describing a strategy for the means to attain the federal standards for ozone and particulate matter. The SIP must integrate federal,

state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs.

Clean Air Act

The federal Clean Air Act, as amended, establishes air quality standards for several pollutants. These standards are divided into primary and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. The act requires that regional plans be prepared for nonattainment areas illustrating how the federal air quality standards could be met.

Regulation of toxic air contaminants is achieved through federal and state controls on individual sources. The 1990 Clean Air Act Amendments offered a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated hazardous air pollutants, with a goal of achieving the EPA's one in 1 million cancer risk from toxic air contaminants.

STATE

California Air Resources Board

CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs in California. In this capacity, CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

REGIONAL

Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the federal Clean Air Act, the Clean Air Act Amendments, and the California Clean Air Act. The BAAQMD is responsible for preparing plans to attain ambient air quality standards in the air basin.

Air Quality Attainment Plan

The BAAQMD adopted the Bay Area 2017 Clean Air Plan in April 2017, which addresses nonattainment of the national 1-hour ozone standard in the SFBAAB. The Clean Air Plan establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and vehicle miles traveled (VMT) projections for the region. The Clean Air Plan defines a control strategy that the BAAQMD and its partners will implement to (1) reduce emissions and

decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce greenhouse gas emissions to protect the climate. In addition to updating the previously prepared ozone plan, the Clean Air Plan also serves as a multipollutant plan to protect public health and the climate. In its dual role as an update to the state ozone plan and a multipollutant plan, the Bay Area 2017 Clean Air Plan addresses four categories of pollutants (BAAQMD 2017b):

- Ground-level ozone and its key precursors, ROG and NOx
- Particulate matter: primary PM2.5, as well as precursors to secondary PM2.5
- Air toxics
- Greenhouse gases

The Clean Air Plan provides local guidance for the State Implementation Plan, which includes the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards.

LOCAL

City of Hayward 2040 General Plan

The following goals and measures from the City's General Plan are directly applicable to the proposed project (Hayward 2014a):

GOAL NR-2: Improve the health and sustainability of the community through continued local efforts to improve regional air quality, reduce greenhouse gas emissions, and reduce community exposure to health risks associated with toxic air contaminants and fine particulate matter.

> NR-2.2 New Development: The City shall review proposed development applications to ensure projects incorporate feasible measures that reduce construction and operational emissions of reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter (PM_{10} and $PM_{2.5}$) through project location and design.
>
> NR-2.15 Community Risk Reduction Strategy: The City shall maintain and implement the General Plan as Hayward's community risk reduction strategy to reduce health risks associated with toxic air contaminants (TACs) and fine particulate matter ($PM_{2.5}$) in both existing and new development.
>
> NR-2.16 Sensitive Uses: The City shall minimize exposure of sensitive receptors to toxic air contaminants (TACs), fine particulate matter ($PM_{2.5}$), and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and $PM_{2.5}$-emitting sources and odor sources in order to minimize health risk.
>
> NR-2.18 Exposure Reduction Measures for New Receptors: The City shall require development projects to implement all applicable best management practices that will reduce exposure of new sensitive receptors (e.g., hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to odors, toxic air contaminants (TACs) and fine particulate matter ($PM_{2.5}$).

In addition, the Hayward 2040 General Plan Background Report recommends setback distances for siting new sensitive land uses. These recommendations are from the CARB 2005 Air Quality and Land Use Handbook, which recommends a 500-foot setback distance from high-traffic roads, such as Mission Boulevard, and a 300-foot setback distance from gas-dispensing facilities (Hayward 2014b).

City of Hayward Municipal Code

Hayward Municipal Code Article 24, South Hayward BART/Mission Boulevard Form-Based Code, establishes requirements in Section 10-24.296, Air Quality Mitigation Measures, for developments occupied by sensitive receptors located within 500 feet of Mission Boulevard, including the implementation of MERV 13 air filtration or equivalent (Hayward 2017).

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

The most recent applicable clean air plan is the 2017 Clean Air Plan, adopted by the BAAQMD in April 2017. The proposed project would not conflict with the latest clean air planning efforts because the project would have emissions below the BAAQMD thresholds (see checklist item b), would be considered urban infill, would be located near employment centers, and would be a high density mixed use development located less than one mile to transit with regional connections (South Hayward BART). The proposed project would include a Transportation Demand Management (TDM) program and would not exceed any of the air criteria pollutant significance thresholds (Illingworth and Rodkin 2017). Thus, impacts would be **less than significant**.

b) ***Less Than Significant Impact with Mitigation Incorporated.***

The proposed project is within the jurisdiction of the BAAQMD. The SFBAAB is considered a nonattainment area for ground-level ozone and $PM_{2.5}$ under the federal Clean Air Act. Additionally, the air basin is considered a nonattainment area for ground-level ozone, $PM_{2.5}$, and PM_{10} (criteria pollutants) under the California Clean Air Act. The area has attained both state and federal ambient air quality standards for carbon monoxide. The BAAQMD has developed project-level thresholds of significance to provide a conservative indication of whether a proposed project could result in potentially significant air quality impacts. To meet the project-level threshold of significance for construction-related criteria air pollutant and precursor impacts, the proposed project must emit no more than 54 pounds per day (lbs/day) of reactive organic gases (ROG), nitrogen oxides (NOx), and/or exhaust-related $PM_{2.5}$, and no more than 82 lbs/day of exhaust-related PM_{10} (BAAQMD 2017a). Project emissions of criteria pollutants and precursors were quantified in the air quality and greenhouse gas assessment for the project (Illingworth and Rodkin 2017; see **Appendix AIR**).

Short-Term Construction Period Emissions

The project would generate short-term emissions from construction activities such as site preparation, grading, paving, and building construction. Common construction emissions include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. Off-road construction equipment is often diesel-powered and can be a substantial source of NOx emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips

and architectural coatings are dominant sources of ROG emissions. Construction emissions are summarized in **Table 3.3-4**.

TABLE 3.3-4
CONSTRUCTION-RELATED CRITERIA POLLUTANT AND PRECURSOR EMISSIONS

Construction Activities	ROG	NO_x	Exhaust PM_{10}	Exhaust $PM_{2.5}$
Year 2018 (tons)	0.30	3.09	0.15	0.14
Year 2019 (tons)	3.93	3.67	0.17	0.16
Total construction emissions (tons)	4.23	6.67	0.32	0.30
Average daily emissions (pounds per day)	*21.4*	*34.1*	*1.6*	*1.5*
BAAQMD Potentially Significant Impact Threshold (pounds per day)	54	54	82	54
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**

*Source: Illingworth and Rodkin 2017, see **Appendix AIR***

During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The BAAQMD considers fugitive dust impacts to be less than significant if the Basic Construction Mitigation Measures shown in **Table 3.3-5** are implemented. Mitigation measure **MM AQ-1** would require the implementation of BAAQMD Basic Construction Mitigation Measures.

TABLE 3.3-5
BAAQMD BASIC CONSTRUCTION MITIGATION MEASURES

BAAQMD Basic Construction Mitigation Measures
1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be visible to ensure compliance with applicable regulations.

Source: BAAQMD 2017a

Long-Term (Operational Phase) Air Quality Impacts

The project would result in long-term operational emissions of criteria air pollutants and ozone precursors (i.e., ROG and NO_x). Project-generated increases in emissions would be predominantly associated with motor vehicle use, energy required for commercial and residential building operations, energy used due to water consumption, energy used in solid waste collection and disposal, and area sources such hearths and use of landscaping equipment. The California Emissions Estimator Model (CalEEMod) was used to estimate emissions from operation of the proposed project assuming full buildout of the project. CalEEMod input and assumptions include:

- To be conservative, the earliest potential full year of operation was assumed to be 2020. Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased in over time. Emissions associated with buildout later than 2020 would be lower.
- The daily trip data and the retail pass-by rate of 34 percent from the project traffic impact analysis were used (included in **Appendix TIA**). The CalEEMod default trip lengths were used.
- CalEEMod defaults for energy use were used, which include 2013 Title 24 Building Code Standards.
- Per BAAQMD Regulation 6, Rule 3, no wood-burning devices shall be installed in a new building construction.

Project operational emissions for the year 2020 are summarized in **Table 3.3-6**.

TABLE 3.3-6
OPERATIONAL-RELATED CRITERIA POLLUTANT AND PRECURSOR EMISSIONS

	ROG	NO_X	Exhaust PM_{10}	Exhaust $PM_{2.5}$
Maximum Daily Emissions (pounds per day)				
Project Operation Emissions	18.8	38.0	14.6	4.4
BAAQMD Potentially Significant Impact Threshold	54	54	82	82
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**
2020 Maximum Annual Emissions (tons)				
Project Operation Emissions	3.4	6.9	2.7	0.8
BAAQMD Potentially Significant Impact Threshold	54	54	82	54
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**

*Source: Illingworth and Rodkin 2017, see **Appendix AIR***

As shown in **Table 3.3-6** the operational-related criteria pollutant and precursor emissions would not exceed the BAAQMD thresholds of significance. Impacts would be less than significant.

Therefore, with implementation of mitigation measure **MM AQ-1**, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The impact would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM AQ-1 Prior to the issuance of grading or building permits, the City of Hayward shall ensure that the BAAQMD Basic Construction Mitigation Measures are noted on the construction documents. These Basic Construction Mitigation Measures include the following:

- 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 miles per hour (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 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 manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Timing/Implementation: *Prior to issuance of Building Permits and during grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, Inspections, and Building Division*

c) ***Less Than Significant Impact.***

By its very nature, air pollution is largely a cumulative impact. According to the BAAQMD, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. According to the BAAQMD (2017a), if a project exceeds its identified significance thresholds, the project's impacts would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered to have cumulatively considerable impacts. As described under checklist item b), the project would not exceed BAAQMD thresholds, nor would it come close to those thresholds, for air pollutant emissions during construction, with the implementation of mitigation, or during operation. Therefore, because the project would not exceed BAAQMD significance thresholds, its contribution would be **less than significant**.

d) ***Less Than Significant Impact with Mitigation Incorporated.***

Operational Community Risk

The project would introduce new sensitive receptors (residences) in the proximity of nearby TAC sources, such as Mission Boulevard and railroad traffic. The project would not be a substantial source of localized TACs. No stationary sources such as emergency backup generators are proposed.

The effect of existing sources of TACs on future residents of the project is considered an effect of environment on the project and as such, is not a CEQA consideration. However, it is a planning consideration. Potential risk and hazards associated with placing sensitive receptors (residences) at the proposed site are addressed in accordance with the Hayward Community Risk Reduction Plan (CRRP). In conjunction with the 2040 General Plan update, the City prepared a CRRP to minimize community health risks associated with TACs and $PM_{2.5}$ in both existing and new development. The CRRP technical support documentation indicates that the project area would not fall within the excessive health risk zones for either the base year of 2014 or for future conditions in 2040 (Hayward 2014c). However, Hayward Municipal Code Article 24, South Hayward BART/Mission Boulevard Form-Based Code, establishes requirements in Section 10-24.296, Air Quality Mitigation Measures, for developments occupied by sensitive receptors located within 500 feet of Mission Boulevard, including the implementation of MERV 13 air filtration or equivalent. As part of the project design, the proposed project would include high-efficiency air filtration (MERV 13+) for all residential uses. Therefore, community risk from existing sources of TACs affecting future project residents would be addressed by adhering to the requirements of the City's Municipal Code.

Carbon Monoxide Hot Spots

The primary mobile-source criteria pollutant of local concern is carbon monoxide (CO). Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of

high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. Modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

Based on the BAAQMD (2017a) CEQA Guidelines, projects meeting all of the following screening criteria would be considered to have a less than significant impact on localized carbon monoxide concentrations:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plans, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at project-affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Consistency of the project with applicable congestion management programs and plans is analyzed in subsection **3.16, Transportation/Traffic**. As detailed in that section, the project is consistent with all applicable congestion management plans. Further, the traffic impact analysis report created for the project did not identify any intersections in the analysis area that would exceed 24,000 vehicles per hour. Therefore, the impact due to CO hot spots would be less than significant.

Project Construction Community Risk

Temporary project construction activity would generate dust and equipment exhaust that could affect nearby sensitive receptors.

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. As discussed above in checklist item b), mitigation measure **MM AQ-1** would require the implementation of BAAQMD Basic Construction Mitigation Measures, which would minimize health risks resulting from project-generated fugitive dust.

Construction equipment and associated heavy-duty truck traffic generates diesel PM, a known toxic air contaminant as discussed in the Environmental Setting subsection above. As shown above in checklist item b), these exhaust air pollutant emissions would not contribute substantially to existing or projected air quality violations. However, construction exhaust emissions may still pose community health risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer and chronic health risks resulting from exposure to diesel PM and $PM_{2.5}$.

A community risk assessment of the project construction activities was conducted as part of the Air quality and greenhouse gas assessment prepared for the project (see **Appendix AIR**). Emissions and dispersion modeling was conducted to estimate the on-site diesel PM and $PM_{2.5}$ concentrations near existing sensitive receptors resulting from project construction. The

results of this assessment indicate that the maximum excess cancer risks for existing sensitive receptors would be 34.1 in one million for an infant exposure and 0.6 in one million for an adult exposure. These exposures would exceed the BAAQMD threshold for excess cancer risk of 10 in one million. Mitigation measure **MM AQ-2** would require that all diesel-powered construction equipment with more than 25 horsepower operating on the project site for more than two days meet the standards for EPA Tier 4 engines. The EPA Tier 4 standards were introduced in 2004 and phased in between 2008 and 2015. All diesel powered off-road construction equipment manufactured in the U.S. since 2015 must comply with the requirements of Tier 4 to reduce emissions of PM and NO_x by approximately 90 percent compared to equipment manufactured prior to 1994.

With implementation of mitigation measures **MM AQ-1** and **MM AQ-2**, the maximum increased cancer risk for existing sensitive receptors resulting from construction-generated diesel PM and $PM_{2.5}$ would be 3.1 in one million, below the BAAQMD threshold of 10 in one million.

Therefore, with implementation of mitigation measures **MM AQ-1** and **MM AQ-2**, the project would not expose sensitive receptors to substantial pollutant concentrations and the impact would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM AQ-2 Prior to the issuance of grading or building permits, the project applicant or the applicant's designated contractor shall provide to the City of Hayward a plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet average of at least 71 percent reduction in diesel PM emissions compared to the current statewide construction fleet emissions target, by one or more of the following methods:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, the EPA particulate matter emissions standards for Tier 4 engines or equivalent; and/or
- The use of equipment that includes CARB-certified Level 3 diesel particulate filters or alternatively fueled equipment (i.e., non-diesel); and/or
- Other added exhaust devices, or a combination of measures, provided that these measures are approved by the City and are demonstrated to achieve the fleet average minimum 71 percent reduction in diesel PM emissions.

Timing/Implementation: *Prior to issuance of Building Permits and during grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, Inspections, and Building Division*

e) ***Less Than Significant Impact.***

The project would generate localized, temporary, and intermittent emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may result in a noticeable odor to nearby sensitive receptors. Equipment exhaust odors would dissipate quickly and are common in an urban environment. Construction-related odors associated with the project would not be anticipated to create objectionable odors affecting a substantial number of people over time.

The proposed project does not include any of the land uses that have been identified by the BAAQMD as odor sources, nor would it locate new receptors near any of these sources. The project is not anticipated to create objectionable odors affecting a substantial number of people. Therefore, the project would not create objectionable odors affecting a substantial number of people and the impact would be **less than significant**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

This subsection evaluates biological resource impacts associated with implementation of the proposed project. WRA, Inc., prepared a biological resources assessment for the proposed project in November 2017. The study is included in **Appendix BIO,** and the results are summarized throughout this section. To reduce the potential for impacts to sensitive communities and special-status species, the study recommended the following general best management practices (BMPs). These measures, which the project applicant would implement during construction, are considered part of the proposed project:

- All access, staging, and work areas would be delineated with orange construction fencing or similar, and all work activities shall be limited to these areas.
- All access, staging, and work areas would be the minimum size necessary to conduct the work.

- All staging, maintenance, and storage of construction equipment would be performed in a manner to preclude any direct or indirect discharge of fuel, oil, or other petroleum products into the project area. No other debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete or washings thereof, or other construction-related materials or wastes would be allowed to enter into or be placed where they may be washed by rainfall or runoff into wetland areas. All such debris and waste would be picked up daily and shall be properly disposed of at an appropriate facility. If a spill of fluid materials occurs, the area would be cleaned and contaminated materials disposed of properly. The affected spill area would be restored to its natural condition.

- Disturbance or removal of vegetation would not exceed the minimum necessary to conduct the work.

- Areas of ground disturbance shall be revegetated using an appropriate erosion control seed mix (for both sensitive and non-sensitive habitats) or will be covered with rock, wood chips, or other suitable erosion control materials as appropriate (for non-sensitive habitats only).

- Appropriate erosion control measures shall be installed around any stockpiles of soil or other materials which could be transported by rainfall or other flows.

- Stockpiles of soil or other materials that can be blown by wind shall be covered when not in active use.

- All trucks hauling soil, sand, and other loose materials shall be covered.

ENVIRONMENTAL SETTING

The project site consists of disturbed, degraded, weedy, or developed urban infill lots. The site provides little to low quality or no habitat value for special-status plant and wildlife species. As described below, the project site contains one biological community considered sensitive under CEQA, potential habitat for one special-status bat species and two special-status bird species, and protected trees.

The one sensitive biological community present is a small, engineered, maintained flood control channel, the primary hydrological source of which is drainage from the surrounding urban areas. Although it is potentially regulated by the US Army Corps of Engineers (USACE) and the San Francisco Bay Regional Water Quality Control Board (RWQCB) and is therefore a sensitive resource, this channel provides little to no habitat value for special-status plant and wildlife species. The channel is an engineered flood control channel constructed in uplands to convey stormwater.

BIOLOGICAL COMMUNITIES

The project site contains one sensitive biological community, which is the 0.59-acre Alameda County Flood Control and Water Conservation District (ACFCD) channel. The channel is a small, engineered, maintained flood control channel, the primary hydrological source of which is drainage from the surrounding urban areas. It is potentially within the jurisdiction of the USACE under Section 404 of the Clean Water Act (CWA) and within the jurisdiction of the RWQCB under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and CWA Section 401. Therefore, the channel is considered a sensitive resource, although it provides little to no habitat value for special-status plant and wildlife species.

SPECIAL-STATUS PLANT SPECIES

It was determined that the project site does not have moderate or high potential to support any of the 35 special-status plant species documented in the vicinity of the project site.

SPECIAL-STATUS WILDLIFE SPECIES

The project site has moderate potential to host three special-status wildlife species: pallid bat, white-tailed kite, and Allen's hummingbird. In addition, the project site has potential to host non-special-status birds protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FGC). Activities that result in the direct removal of active nests or disturbance to nesting birds sufficient to result in the abandonment of active nests may be considered a significant impact under CEQA and a potential violation of the Migratory Bird Treaty Act and the California Fish and Game Code.

PROTECTED TREES

A total of 94 trees that meet the definition of "protected tree" under the City's Tree Protection Ordinance were documented within all parcels constituting the project site in developed and nonnative grassland areas. The project proposes to remove all of the 94 protected trees, plus 4 more, for a total of 98 trees removed. The removal, relocation, cutting, or shaping of protected trees requires an application for a tree removal or cutting permit from the City pursuant to Hayward Municipal Code Chapter 10, Article 15, Tree Preservation; the permit must be processed prior to the issuance of any grading, trenching, encroachment, demolition, or building permit. In addition, tree protection measures and appropriate tree replacement are required in accordance with the ordinance.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact with Mitigation Incorporated.***

No plant species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the US Fish and Wildlife Service (USFWS) are expected to occur in the project area (WRA). As such, no impacts to such species or their habitats are expected to occur as a result of the project. Therefore, no mitigation for sensitive plant species is proposed.

Pallid bat (CDFW Species of Special Concern; Western Bat Working Group High Priority) has potential to occur in association with the buildings in the northwesternmost portion of the project site (WRA). The buildings located in the northwesternmost portion of the project site may provide habitat to roosting pallid bats (ibid). Planned demolition of these buildings has potential to impact any bats roosting within these structures. Implementation of mitigation measure **MM BIO-1** would reduce potential impacts to special-status bat species to a **less than significant** level.

The proposed project has the potential to impact two special-status bird species: white-tailed kite and Allen's hummingbird. These two species were determined to have a moderate potential to occur within the project site due to the presence of ornamental landscaped trees of sufficient size to support nesting and the species' generalist foraging requirements (WRA). The project also has potential to impact common bird species protected by the MBTA and FGC. Potential impacts to these species or their habitat could

occur during the removal of trees and vegetation and/or other ground disturbance. Removal of vegetation could result in the direct take of these species and/or the direct removal or destruction of active bird nests, including those of white-tailed kite and Allen's hummingbird. Activities that result in the direct removal of active nests or disturbance to nesting birds sufficient to result in the abandonment of active nests would be considered a significant impact under CEQA and a violation of MBTA and FGC. Implementation of mitigation measure **MM BIO-2** would reduce potential impacts to protected nesting bird species to a **less than significant** level.

Mitigation Measures

MM BIO-1 Preconstruction roost assessment survey: A qualified biologist shall conduct a roost assessment survey of the existing buildings on the project site. The survey shall assess use of the structures for roosting as well as for the potential presence of bats. If the biologist finds no evidence of or potential to support bat roosting, no further measures are required. If evidence of bat roosting is present, the additional measures described below shall be implemented:

1. Work activities outside the maternity roosting season: If evidence of bat roosting is discovered during the preconstruction roost assessment and demolition is planned during the period from August 1 through February 28 (outside the bat maternity roosting season), a qualified biologist shall implement passive exclusion measures to prevent bats from re-entering the structures. After sufficient time to allow bats to escape and a follow-up survey to determine if bats have vacated the roost, demolition may continue and impacts to special-status bat species will be avoided.

2. Work activities during the maternity roosting season: If the preconstruction roost assessment discovers evidence of bat roosting in buildings during the maternity roosting season (March 1 through July 31) and determines maternity roosting bats are present, demolition of maternity roost structures shall be avoided during the maternity roosting season or until a qualified biologist determines the roost has been vacated.

Timing/Implementation: *No more than 14 days prior to construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

MM BIO-2 Preconstruction nesting bird survey: If ground disturbance or removal of vegetation occurs during the breeding bird season (February 1 through August 15), preconstruction surveys shall be performed by a qualified biologist no more than 14 days prior to commencement of such activities to determine the presence and location of nesting bird species. If active nests are present, establishment of temporary no-work buffers around active nests will prevent adverse impacts to nesting birds. The appropriate buffer distance shall be determined by a qualified biologist, depending on species, surrounding vegetation, and topography. Once active nests become inactive, such as when young fledge the nest or the nest is subject to predation, work may continue in the buffer area and no adverse impact to birds will result.

Timing/Implementation:	*No more than 14 days prior to grading and/or construction activities*
Enforcement/Monitoring:	*City of Hayward Planning Division and Building Division*

b) ***Less Than Significant Impact.***

The project site does not contain riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS (WRA).

Two pedestrian bridges would cross over the ACFCD channel, an engineered trapezoidal channel that is considered a sensitive biological community. At the time of the June 2017 biological site visits, vegetation on the entirety of the southeast bank of the channel had been mowed as part of channel maintenance. Although the vegetation between the perennial wetland and the top of bank of the channel do not meet wetland criteria, RWQCB and CDFW jurisdiction typically extends to the top of bank of channelized features absent riparian vegetation extending further into uplands. To avoid adverse impacts to the ACFCD Channel, the bridge abutments would be installed to span the channel entirely (e.g. approximately 10 feet or greater from the top of bank). Several vegetated areas would be established on the northwest side, between the top of the channel bank and the buildings and roads to the northwest to function as a water quality buffer, filtering surface water runoff by capturing or slowing before it enters the channel. The vegetated areas would be sited a minimum of 10 feet from the top of bank of the channel. The bridges would include design elements to catch debris from the bridge. Additionally, the portion of the bridges spanning the channel would be constructed at a sufficient height to prevent the vegetated wetland at the bottom of the channel from being converted to unvegetated non-wetland waters as a result of shading.

During construction, erosion control measures such as straw wattles and silt fencing would be implemented, debris netting would be deployed, and the area surrounding the abutments would be compacted and returned to the existing grade. Therefore, the project would avoid the ACFCD channel and impacts to riparian habitat or sensitive natural communities as a result of the project would be **less than significant**.

c) ***Less Than Significant Impact.***

Federally protected wetlands and non-wetland waters potentially subject to jurisdiction by the USACE under CWA Section 404 and the RWQCB under CWA Section 401 on the project site are limited to the 0.09-acre perennial wetland portion of the ACFCD channel.

State-protected wetlands and non-wetland waters potentially subject to jurisdiction by the RWQCB under the Porter-Cologne Act in the project area are limited to the 0.59-acre ACFCD channel, including both the 0.09-acre perennial wetland portion and the remaining 0.50-acre portion between the edges of the perennial wetlands and the tops of banks.

The project as proposed would not require an application for a permit. The project would not result in discharge of dredge or fill material to water of the State or waters of the United States. The proposed project includes BMPs and design elements to avoid impacts to any areas under state and federal jurisdiction within the ACFCD channel, including erosion control measures, appropriate bridge abutment locations and bridge heights, and vegetated water quality buffer areas as described in **Section 3, Project Description**. The

pedestrian bridges would span the engineered channel from the landward side of channel top of bank to the opposite landward side of channel top of bank that delineates the engineered channel. Construction methods applied would involve no temporary construction or appurtenant structures within the regulated engineered channel feature, and the proposed project includes controls during construction of the bridge spans to ensure no discharge of sediment or untreated stormwater would occur. Therefore, no activities regulated under CWA Sections 404 or 401 would occur as part of the project. Furthermore, no activities that require a permit under the Porter-Cologne Act would occur because the project would include controls during construction of the bridge spans to ensure no discharge of sediment or untreated stormwater would occur. In addition, the completed bridge spans would not alter the chemical, physical, nor biological characteristics of the engineered channel, including the perennial wetlands. Similarly, there will be no discharge of pollutants to waters of the State such that the features would be adversely impacted temporarily or permanently by a discharge or by dredging, nor would the project result in alteration of beneficial uses of water of the State.

Consequently, no permit approvals are required for the proposed project. Furthermore, no mitigation for federally and state-protected wetlands and non-wetland waters would be required. With these project design measures and the incorporation of the general avoidance and measures described above, impacts to federally and state-protected wetlands and non-wetland waters would be **less than significant**.

d) ***No Impact.***

The project site is in a developed urban area, is surrounded by urban development, and the site itself is highly disturbed. In addition, the ACFCD channel is disconnected from any natural watercourse that would serve as a corridor for resident or migratory fish or wildlife species (WRA). Given the location of the site in a developed urban area, the high level of disturbance at the site, and the lack of a direct connection to a natural watercourse, the project site does not represent a migratory corridor for resident or migratory fish or wildlife species, nor is it a wildlife nursery site (ibid). More specifically, the project site does not provide habitat for any native fish species. Other aquatic or semi-aquatic wildlife cannot disperse into the project site through the highly marginal and disconnected water feature present on the site (ibid). As such, the project would not interfere substantially with the movement of wildlife species or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites. **No impact** is anticipated to wildlife corridors or nursery sites from project activities.

e) ***Less Than Significant Impact with Mitigation Incorporated.***

Hayward Municipal Code Chapter 10, Article 15, Tree Preservation Ordinance declares it unlawful to remove, destroy, cut branches over one-inch diameter, disfigure, or cause to be removed or destroyed any protected tree in Hayward without first obtaining a tree removal and cutting permit. The ordinance requires that all removed or disfigured trees be replaced with like-size, like-kind trees or an equal value tree or trees as determined by the City's landscape architect. In addition, the permit will be accompanied by the arborist's report detailing the results of the survey of the site where trees are proposed to be removed or disfigured and protected and non-protected tree information and appraisals (included as Appendix D, of **Appendix BIO**). Per that report, the project proposes to remove 94 protected trees. Implementation of mitigation measure **MM BIO-3** would reduce adverse impacts to protected trees to a **less than significant** level.

Mitigation Measures

MM BIO-3 In order to satisfy the requirements of the Hayward Tree Protection Ordinance, a tree removal and cutting permit application shall be submitted to the City of Hayward. The findings, information, and tree appraisals of the arborist's report dated June 20, 2017 (see Appendix D of **Appendix BIO**) shall be included with the permit application. All protected trees identified in the arborist's report that would be removed as a result of the project shall be replaced at a one-to-one ratio with like-size, like-kind trees or an equal value tree or trees, or other acceptable mitigation per the determination of the City's Landscape Architect. All required measures and conditions of approval included in the permit, including replacement of like-size, like-kind trees or an equal value tree or trees or acceptable mitigation, shall be implemented.

Timing/Implementation: *Prior to issuance of grading permits and during construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division; Public Works – Engineering Division, Inspections.*

f) ***No Impact.***

The project site is not in an area that is covered by any habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would result in **no impact** on a local or regional level.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

The setting and impact analysis in this subsection is based on several resources, including a records search conducted at the Northwest Information Center (NWIC), map review, historical society consultation, field survey, and cultural resources evaluations for inclusion in the California Register of Historical Resources (California Register) and the local Hayward Register. Michael Baker International (2018) prepared a cultural resources technical study for the project, which is provided in **Appendix CUL,** with the results summarized throughout this section.

Concepts and Terminology for Identification of Cultural Resources

Cultural resources include historical resources and archaeological resources (as defined in Public Resources Code Section 15064.5). Cultural resources are any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource is considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California Register of Historical Resources (California Code of Regulations Title 14(3) Section 15064.5(a)(3)).

ENVIRONMENTAL SETTING

The project area is generally flat (although slightly sloping in certain areas). The project area is at an elevation of 16–40 feet above sea level in a residential and commercial area of Hayward. Geologically, the project area contains terrace alluvial deposits of Rincon clay loam and basin deposit of Clear Lake clay. The nearest water source is San Lorenzo Creek, approximately 3.5 miles northwest of the project site.

PREHISTORIC BACKGROUND

The Paleo-Archaic-Emergent cultural sequence developed by Fredrickson and recalibrated by Rosenthal, White, and Sutton is commonly used to interpret the prehistoric occupation of the project area. The recalibrated sequence is divided into three broad periods: the Paleoindian period (11,550–8550 cal BC); the three-staged Archaic period, consisting of the Lower Archaic

(8550–5550 cal BC), Middle Archaic (5550–550 cal BC), and Upper Archaic (550 cal BC–cal AD 1100); and the Emergent period (cal AD 1100–Historic).

The Paleo period began with the first entry of people into California. These people probably subsisted mainly on big game and minimally processed plant foods, and had no trade networks. Current research, however, indicates more sedentism, plant processing, and trading than previously believed. The Archaic period is characterized by increased use of plant foods, elaboration of burial and grave goods, and increasingly complex trade networks. The Emergent period is marked by the introduction of the bow and arrow, the ascendance of wealth-linked social status, and the elaboration and expansion of trade networks, signified in part by the appearance of clam disk bead money.

ETHNOGRAPHIC CONTEXT

Ethnographically, the project area is in Costanoan territory.

Costanoan

The project area was formerly the territory of the Costanoan within the Ohlone language group. The basic Ohlone social unit was the patrilineal family household. Households grouped together to form villages, and villages combined to form tribelets. There were approximately 40 Ohlone tribelets who traded goods such as obsidian, shell beads, and baskets; participated in ceremonial and religious activities together; intermarried; and maintained extensive reciprocal obligations to one another involving resource collection.

For the Ohlone, acorns served as a dietary staple. Acorns were knocked from trees with poles, leached to remove bitter tannins, and eaten as mush or bread. The Ohlone used a range of other plant resources including buckeye, California laurel, elderberries, strawberries, manzanita berries, gooseberries, toyon berries, wild grapes, wild onion, cattail, amole, wild carrots, clover, and an herb called chuchupate. The Ohlone also hunted black-tailed deer, Roosevelt elk, antelope, and marine mammals; smaller mammals such as dog, skunk, raccoon, rabbit, and squirrel; birds, including geese and ducks; and fish such as salmon, sturgeon, and mollusks.

The Ohlone lived in dome-shaped shelters thatched with ferns, tule, grass, and carrizo. The Ohlone also built small sweathouses dug into creek banks and roofed with brush; and circular dance areas enclosed by fences woven from brush or laurel branches. Basketmaking was generally done by women who crafted cooking and storage containers. Tightly woven baskets, decorated with feathers or shell, were valued exchange items.

Animal bones, teeth, beaks, and claws were used to make awls, pins, knives, and scrapers. Pelts and feathers were used to make clothing and bedding, and sinews were used for cordage and bow strings. Feathers, bone, and shells were crafted into ornaments.

By the late eighteenth century, Spanish settlers established the mission system in Northern California. Mission records indicate that the first tribelet arrived at Mission San Francisco in the fall of 1794. Following the secularization of the missions in 1834, many Ohlone worked as manual laborers on ranchos.

HISTORIC BACKGROUND

Alameda County

Early American Period and Statehood

Beginning in the eighteenth century, California was a territory of Spain, and later of Mexico. In the mid-1840s, Mexico's interest in developing and strengthening its hold on California decreased as the Mexican government became distracted by political developments in central Mexico. The native-born Spanish speakers of Alta California, known as Californios, long accustomed to governmental neglect, experienced relative peace and enjoyed minimal intrusion into their social, political, and economic affairs. During this period, the United States aggressively sought access to the Pacific Ocean, resulting in the Mexican-American War.

Following the American victory and ratification of the Treaty of Guadalupe Hidalgo in 1848, California became a United States territory and, on September 9, 1850, formally joined the Union as the thirty-first state. Alameda County was created from portions of Santa Clara and Contra Costa counties on March 25, 1853.

Hayward

Present-day Hayward began in the 1850s, during the Gold Rush, as several small settlements scattered from San Francisco Bay's edge up to the coastal ridge. The settlements included Mount Eden, Russell City, Wicks Landing, Thompson's Landing, Johnson's Landing, Russell's Landing, and Eden Landing. The center of this grouping was the small town of Haywards. Over time, the small settlements and modern subdivisions were officially incorporated into Hayward. This process occurred slowly through the first half of the twentieth century and accelerated at an exponential pace after World War II.

Agricultural Development

Agriculture served as the foundation of the regional economy during the nineteenth and twentieth centuries. During the nineteenth century, Hayward's ports were the closest shipping points for much of the Livermore and Amador valleys, and railroads increased Hayward's importance as a regional rail hub. The immediate availability of ports and railroad spurred the development of agriculture including vast orchards and smaller farms. Further, truck farming became a mainstay of the local and regional economy.

Agricultural growth accelerated during the beginning of the twentieth century as Hayward became a regional food processing and commercial center. Workers were drawn to the growing number of industries located along the railroad corridor located west of town.

Hayward also maintained a diverse range of livestock and poultry husbandry and processing businesses, which included everything from dairy cows to pigeons used for meat to pelts. Shipments were sent across the United States and the globe. For a brief portion of the early twentieth century, Hayward maintained a worldwide reputation for squab.

Prior to and for some time after World War II, Hayward's economic drivers included crop cultivation, animal husbandry, and food processing and export. When land became valuable for housing, Hayward switched its economic focus to industrial and port-related businesses, and began developing residential housing required for the growing business communities throughout the San Francisco Bay Area.

Modern Subdivisions and Development

Prior to World War II, subdivisions were small, one to two blocks, and lots were sold to individual families who constructed a house. In the post-World War II period, development dramatically changed to where subdivisions encompassed entire neighborhoods and houses were mass produced by developers. By 1926, Hayward maintained an estimated population of 6,000, and the greater Hayward area maintained an estimated population of 25,000.

In the post-World War II period, Hayward grew exponentially, nearly doubling in population every 10 years. This type of explosive growth put extreme pressures on the city's municipal services and dramatically changed the community character from an agriculturally focused regional trade center to a suburban bedroom community. After World War II, developers worked to consolidate small lots or split large tracts of farmland and to improve land with roads, lighting, streetscape landscaping, utilities, and commercial businesses, as well as houses.

The project site is surrounded by residential development and by commercial development along Mission Boulevard.

RESEARCH

Records Search

Staff at the NWIC conducted a records search at the request of Michael Baker International. The records search (NWIC File No. 17-0811) was conducted for the project area with a quarter-mile search radius on October 5, 2017. The NWIC, of the California Historical Resources Information System, California State University, Sonoma, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Alameda County.

Three cultural resources studies were identified in the project area, and 13 identified within a quarter-mile radius. None of the reports identified resources within the project site.

Historical Map Search

Michael Baker International reviewed publications, maps, local historical directories, and websites for archaeological, ethnographic, historical, and environmental information about the project area and its vicinity. Historical maps show that the project area remained largely unsettled throughout much of the nineteenth and early twentieth centuries. Historic maps dating from between 1857 and 1915 depict no features in the project area. The project area was once part of the Rancho Arroyo de la Alameda. Aerial views and maps beginning in 1946 depict the project area west of Valle Vista Avenue with three buildings (extant) and east of Valle Vista Avenue with five buildings (not extant). No resources are depicted south of Dixon Street. By 1959, six buildings are depicted within the project area east of Valle Vista Avenue (not extant) and no resources are located south of Dixon Street.

Historical Society Consultation

On September 27, 2017, Michael Baker International sent a letter describing the project with maps depicting the project area to the Hayward Area Historical Society. The letter requested any information or concerns about cultural resources in the area. No response was received.

Pedestrian Survey

Michael Baker staff conducted an archaeological and built environment field survey of the project area on October 11, 2017. The surveys were conducted to identify archaeological deposits and built environment resources within and adjacent to the project site. Archaeological survey methods consisted of pedestrian transects over open land where permitted, with an emphasis on exposed sediment. Ground visibility was poor (<5 percent) due to dense vegetation. No archaeological materials, artifacts, residues, or features were observed. Field survey observations were documented with field notes and digital photographs, and built environment resources were evaluated on DPR 523 Series forms. Some vacant/occupied parcels were not surveyed because of a lack of permission to enter or access and safety concerns. Safety concerns include but are not limited to potentially dangerous individuals as well as dangerous animals.

An abundance of modern trash and garbage was found throughout the project site. The pedestrian survey did not identify archaeological deposits within the site. Two built environment resources were identified and evaluated in the project area.

Resource Name	Resource Type
29115 Mission Boulevard	Ancillary building
29131 Mission Boulevard	Single-family residence

These resources do not appear eligible for listing in the California Register or the Hayward Register, nor do they qualify under the remaining criteria for consideration as historical resources under CEQA. See **Appendix CUL** for full evaluations.

CHECKLIST DISCUSSION

a) ***No Impact.***

Two properties were evaluated as part of the project (at 29115 and 29131 Mission Boulevard). Neither property appears eligible for inclusion in the California Register or the Hayward Register. No archaeological deposits were identified as part of the project. Therefore, no historical resources are located in the project area, and the proposed project would result in **no impact**.

b–d) ***Less Than Significant Impact with Mitigation Incorporated.***

Standard, late-discovery mitigation measures are recommended because no archaeological materials, artifacts, or features were observed on the project site.

In the event that archaeological or paleontological resources are observed during project construction-related activities, mitigation measures **MM CUL-1** and **MM CUL-2** are required to reduce impacts to a **less than significant** level.

Mitigation Measures

MM CUL-1 If prehistoric or historic-period archaeological deposits or paleontological resources are discovered during project construction activities, all work within 25 feet of the discovery shall be redirected and the archaeologist/ paleontologist shall assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery.

Impacts to archaeological deposits and paleontological resources should be avoided by project activities, but if such impacts cannot be avoided, the deposits shall be evaluated for their California Register eligibility. If the deposits are not California Register–eligible, no further protection of the finds is necessary. If the deposits are California Register–eligible, they shall be protected from project-related impacts or such impacts mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of paleontological resources and archaeological deposits, recording the resource, preparing a report of findings, and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Timing/Implementation: *During grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

MM CUL-2 Any human remains encountered during project ground-disturbing activities shall be treated in accordance with California Health and Safety Code Section 7050.5. The project applicant shall inform its contractor(s) of the project area's sensitivity for human remains and verify that the following directive has been included in the appropriate contract documents:

> If human remains are encountered during project activities, the project applicant or its contractor shall comply with the requirements of California Health and Safety Code Section 7050.5. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Alameda County coroner has determined the manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel/construction workers shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American most likely descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods within 48 hours of being allowed access to the site.

Timing/Implementation: *During grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would became unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

This subsection evaluates geological and soils issues associated with the proposed project. ENGEO Incorporated prepared a preliminary geotechnical exploration report for the proposed project in June 2017. The study is included in **Appendix GEO,** and information from the report is summarized throughout this subsection.

ENVIRONMENTAL SETTING

GEOLOGY AND SEISMICITY

The San Francisco Bay Area contains numerous active faults. The project site is not located within a Alquist-Priolo Earthquake Fault Zone for known active faults. Based on the US Geological Survey (2010) Quaternary Fault and Fold Database, the nearest known active fault is the Hayward fault, about 0.6 mile northeast of the study area. The Calaveras fault and the San Andreas fault are located about 7.6 miles and 17.9 miles to the northeast and southwest, respectively. Because of

the presence of nearby active faults, the Bay Area is considered seismically active. Numerous small earthquakes occur every year in the San Francisco Bay Area region, and larger earthquakes have been recorded and can be expected to occur in the future.

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking, soil liquefaction, and lateral spreading. These hazards are discussed below. Based on topographic and lithologic data, the risk from regional subsidence or uplift, tsunamis, landslides, and seiches is considered low at the project site.

GROUND RUPTURE

As noted above, the project site is not located within an Alquist-Priolo Earthquake Fault Hazard Zone. Fault rupture is unlikely within the limits of the project site.

GROUND SHAKING

An earthquake of moderate to high magnitude generated in the San Francisco Bay Area region, similar to those that have occurred in the past, could cause considerable ground shaking at the project site. To mitigate the shaking effects, all structures would be designed using sound engineering judgment and the latest California Building Code (CBC) requirements at a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. The code-prescribed lateral forces are generally substantially smaller than the expected peak forces that would be associated with a major earthquake. Therefore, structures should be able to resist minor earthquakes without damage, resist moderate earthquakes without structural damage but with some nonstructural damage, and resist major earthquakes without collapse but with some structural and nonstructural damage. Conformance to the current building code does not constitute a guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake. However, it is reasonable to expect that a well-designed and well-constructed structure will not collapse or cause loss of life in a major earthquake.

LIQUEFACTION

The site is located within a California Seismic Hazard Zone for areas that may be susceptible to liquefaction. Soil liquefaction results from loss of strength during cyclic loading, such as that imposed by earthquakes. Soil most susceptible to liquefaction is clean, loose, saturated, uniformly graded, fine-grained sand. Empirical evidence indicates that loose to medium dense gravel, silty sand, low-plasticity silt, and some low-plasticity clay are also potentially liquefiable.

Layers of sandy soil were encountered at the project site below the groundwater level. A detailed liquefaction potential analysis of the cone penetration tests was performed to estimate liquefaction potential for the soil encountered below the assumed water table. The results indicate that medium stiff to stiff silt and medium dense sand layers encountered in the borings and cone penetration tests are potentially liquefiable.

Seismically Induced Settlement Analyses

Seismically induced settlement can be generally subdivided into two categories for granular soil: settlement due to liquefaction of saturated or nearly saturated soils, and dynamic densification of non-saturated soils. Research has also shown that low-expansive cohesive soil can also undergo post-seismic settlement.

Liquefaction Settlement and Cyclic Softening

Deformation of the ground surface is a common result of liquefaction. Vertical settlement may result from densification of the deposit or volume loss from venting to the ground surface. Densification occurs as excess pore pressures dissipate, resulting as vertical settlement at the ground surface.

Clay-like (cohesive) soil can develop pore pressures during cyclic loading, but generally does not reach zero effective stress and are typically considered non-liquefiable. However, clay-like soil can deform during cyclic earthquake loading and can experience volumetric strains and post-earthquake reconsolidation. The volumetric strains for clay-like soil are generally small compared to cohesionless soils (sand-like), since clay-like soil often retains some original soil structure.

The geotechnical report calculated potential liquefaction-induced and clay reconsolidation settlement estimates. Differential settlement during a liquefaction event is expected to be less than 3 inches over a horizontal distance of 30 feet. Boring logs were used to develop estimates of potential liquefaction settlement, based on methods published by Idriss and Boulanger. Based on exploration data, total liquefaction-induced settlement across the project site was calculated to be less than 6 inches.

Dynamic Densification Settlement

Densification of loose granular soil above the water table can cause settlement of the ground surface due to earthquake-induced vibrations. The majority the site soil above the water table is clay; therefore, the risk of dynamic densification is nominal.

LATERAL SPREADING AND EARTHQUAKE-INDUCED LANDSLIDING

Lateral spreading and earthquake-induced landsliding involve lateral ground movements caused by seismic shaking. These lateral ground movements are often associated with a weakening or failure of an embankment or soil mass overlying a continuous layer of liquefied sand or weak soils. Because of the lack of free faces or significant slopes at the project site, lateral spreading is unlikely. The project site is generally flat-lying, so is unlikely to be susceptible to earthquake-induced landsliding. However, steep areas adjacent to portions of the site are mapped as being potentially susceptible to landsliding as the result of an earthquake. These areas appear to be offset from the project site enough to not impact development of the site (ENGEO 2017).

TOPOGRAPHY AND SOILS

The geotechnical investigation encountered existing fill in several borings. Based on site history, fill likely exists at various locations on the project site due to existing and former structures. Without documentation indicating existing fill was properly engineered at the time of placement, it is assumed to be non-engineered. Non-engineered fill can experience settlement leading to differential foundation movement due to the unknown density of the fill and differences in material properties; this effect can be compounded in structures that span from the fill to native materials. Typical mitigation for non-engineered fill is removal to native soil and replacement as engineered fill. The surface soils at the site have experienced years of discing and generally consist of soft and dry clays. Because of the project site's history, it should be assumed that the upper two to three feet of the subsurface is highly disturbed and can behave similarly to non-engineered fill. The upper two to three feet of the site in areas formerly disced should be mitigated similar to the fill.

Several borings indicated the presence of highly expansive near-surface soil. Expansive soil changes in volume with changes in moisture. This soil can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures on shallow foundations.

CHECKLIST DISCUSSION

a) i) ***No Impact.***

The project site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972; therefore, conditions necessary for ground rupture do not exist on the site. **No impact** would occur.

ii) ***Less Than Significant Impact.***

The project site is in a seismically active region and is located about 0.6 mile from the Hayward fault, 7.6 miles from the Calaveras fault, and 17.9 miles from the San Andreas fault. Building permit application plans would incorporate recommendations of the geotechnical report, and would be designed in accordance with the latest California Building Code requirements, at a minimum. The plans would be reviewed and approved as part of the standard building permit plan check process. Therefore, the potential for the proposed project to expose people to risk as a result of ground shaking would be **less than significant**.

iii) ***Less Than Significant Impact.***

As noted above, the project site is in a California Seismic Hazard Zone for areas that may be susceptible to liquefaction. The geotechnical report includes a series of recommendations for initial land planning and preliminary estimating purposes (see **Appendix GEO**). As recommended in the geotechnical report, a more detailed, site-specific design-level geotechnical exploration would be performed as part of the design process. The exploration would include additional borings and laboratory soil testing to provide data for preparation of specific recommendations regarding grading, foundation design, and drainage for the proposed development. The exploration would also allow for more detailed evaluations of geotechnical issues and afford the opportunity to provide recommendations regarding techniques and procedures to be implemented during construction to mitigate potential geotechnical/geological hazards. Final recommendations regarding site grading and foundation construction would be provided and incorporated into building permit application plans after additional site-specific exploration has been undertaken. With these measures, the impact is considered **less than significant**.

iv) ***Less Than Significant Impact.***

The project site is generally flat and is therefore unlikely to be susceptible to earthquake-induced landslides. However, steep areas adjacent to portions of the project site are mapped as being potentially susceptible to earthquake-induced landslides. These areas appear to be offset such that they would not impact development of the project site; however, this assumption would be further evaluated through a more detailed, site-specific design level geotechnical investigation, as described in item a) iii. With this measure, this impact is considered **less than significant**.

b) ***Less Than Significant Impact.***

The proposed project would replace existing structures, paved areas, open space, and vacant areas with new buildings, parking and access roads, landscaping, and open space. Excavation and grading associated with construction of the proposed project could result in short-term erosion or loss of topsoil. However, project construction would not change the local topography and would not result in an increased potential for erosion. As noted above in item a) iii, a more detailed, site-specific design-level geotechnical exploration would be performed as part of the design process. Final recommendations regarding site grading and foundation construction would be provided and incorporated into building permit application plans after additional site-specific exploration has been undertaken. With these measures, this impact is considered **less than significant**.

c) ***Less Than Significant Impact.***

As discussed above, the project area is relatively flat, and therefore landslides are not anticipated. However, steep areas adjacent to the project site are mapped as being potentially susceptible to earthquake-induced landslides. These areas appear to be offset such that they would not impact development of the project site; however, this assumption would be further evaluated at the design level. The project site is located within a California Seismic Hazard Zone for areas that may be susceptible to liquefaction. The geotechnical report includes a series of recommendations for initial land planning and preliminary estimating purposes (see **Appendix GEO**). As noted above in item a) iii, a more detailed, site-specific design-level geotechnical exploration would be performed as part of the design process. Final recommendations regarding site grading and foundation construction would be provided and incorporated into building permit application plans after additional site-specific exploration has been undertaken. With these measures, this impact is considered **less than significant**.

d) ***Less Than Significant Impact.***

Several borings conducted as part of the geotechnical study indicated the presence of highly expansive near-surface soil. Structures on expansive soil require special attention during construction. Expansive soil changes in volume with changes in moisture. This soil can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures on shallow foundations. It is imperative that exposed soil be kept moist prior to placement of concrete for foundation construction. Specific grading recommendations for compaction of clay soil at the site would be provided in a design-level study, as described above. The purpose of these recommendations is to reduce the swell potential of the clay by compacting the soil at a high moisture content and controlling the amount of compaction. With these measures, this impact is considered **less than significant.**

e) ***No Impact.***

The project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. Therefore, there would be **no impact**.

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

This subsection evaluates air quality impacts associated with implementation of the proposed project. Illingworth and Rodkin, Inc. prepared an air quality and greenhouse gas assessment for the proposed project in November 2017. The study is included in **Appendix AIR,** and the results are summarized throughout this subsection.

ENVIRONMENTAL SETTING

Greenhouse gases (GHGs) are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities as well as many natural processes. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. **Table 3.7-1** describes the primary GHGs attributed to global climate change, including a description of their physical properties and primary sources.

TABLE 3.7-1
GREENHOUSE GASES

Greenhouse Gas	Description
Carbon dioxide (CO_2)	CO_2 is a colorless, odorless gas and is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[a]
Methane (CH_4)	CH_4 is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH_4 is emitted from both human-related and natural sources. Methane's atmospheric lifetime is about 12 years.[b]
Nitrous oxide (N_2O)	N_2O is a clear, colorless gas with a slightly sweet odor. N_2O is produced by natural and human-related sources. Primary human-related sources are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The atmospheric lifetime of N_2O is approximately 120 years.[c]

Sources: a. EPA 2016a, b. EPA 2016b, c. EPA 2016c

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Estimates of GHG emissions are commonly presented in carbon dioxide equivalents (CO_2e), which weighs each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would

occur if only CO_2 were being emitted. GHG emissions quantities in this analysis are presented in metric tons (MT) of CO_2e.

GHG emissions contribute, on a cumulative basis, to significant adverse environmental impacts. While no single project could generate enough GHG emissions to noticeably change the global average temperature, the combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts, and as such, GHG emissions are addressed only as a cumulative impact.

The State of California has adopted various administrative initiatives and legislation relating to climate change, much of which set aggressive goals for GHG emissions reductions in the state. Although lead agencies must evaluate climate change and greenhouse gas emissions of projects, the State CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or specific thresholds of significance and do not specify GHG reduction mitigation measures. Instead, the guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. In addition, no state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating significant effects in CEQA documents. Thus, lead agencies exercise their discretion in determining how to analyze greenhouse gases.

REGULATORY FRAMEWORK

California Global Warming Solutions Act (Assembly Bill 32)

The primary acts that have driven GHG regulation and analysis in California include the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), which instructs the California Air Resources Board to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a greenhouse gas emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020.

AB 32 Scoping Plan

CARB adopted the Scoping Plan to identify how the state would achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of year 2013.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where

further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal established in Executive Order S-3-05, though not yet adopted as state law, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update does not establish or propose any specific post-2020 goals, but it identifies such goals adopted by other governments or recommended by various scientific and policy organizations.

However, CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target (40 percent below 1990 levels) set by Executive Order B-30-15 and codified by Senate Bill (SB) 32.

Senate Bill 32

In August 2016, Governor Brown signed SB 32 (Amendments to California Global Warming Solutions Action of 2006), which extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide greenhouse gas emissions reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by Executive Order B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in Executive Orders S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050. As of the date of publication of this document, no specific policies or emissions reduction mechanisms have been established.

Other Legislation

Table 3.7-2 provides a brief overview of the other California legislation relating to climate change that may directly and/or indirectly affect the emissions associated with the proposed project.

TABLE 3.7-2
CALIFORNIA STATE CLIMATE CHANGE LEGISLATION

Legislation	Description
Assembly Bill 1493 and Advanced Clean Cars Program	Assembly Bill 1493 (the Pavley Standard) (Health and Safety Code Sections 42823 and 43018.5) aims to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO_2e emissions and 75 percent fewer smog-forming emissions. *Applicability to proposed project*: Would help reduce GHG emissions from project residents' and retail customers' vehicle trips.
Low Carbon Fuel Standard (LCFS)	Executive Order S-01-07 (2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California. The regulation took effect in 2010 and is codified at Title 17, California Code of Regulations, Sections 95480–95490. The LCFS will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. *Applicability to proposed project*: Would help reduce GHG emissions from project residents' and retail customers' vehicle trips and retail delivery trucks.

Legislation	Description
Renewables Portfolio Standard (Senate Bill X1-2 & Senate Bill 350)	California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. The passage of Senate Bill 350 in 2015 updates the RPS to require the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. The bill will make other revisions to the RPS program and to certain other requirements on public utilities and publicly owned electric utilities. *Applicability to proposed project:* The Pacific Gas and Electric Company (PG&E) is the electricity provider in Hayward. The RPS may indirectly help reduce GHG emissions associated with project's energy demand.
Senate Bill 375*	SB 375 (codified in the Government Code and the Public Resources Code) took effect in 2008 and established a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires metropolitan planning organizations (MPOs) to incorporate a Sustainable Communities Strategy in their Regional Transportation Plans that will achieve GHG emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities. *Applicability to proposed project:* SB 375 implements the requirements of Plan Bay Area 2040, the regional Sustainable Communities Strategy.
California Building Energy Efficiency Standards	In general, the California Building Energy Efficiency Standards require the design of building shells and building components to conserve energy. The California Energy Commission adopted changes to the 2016 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code). The 2016 update to the standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. New efficiency requirements for elevators and direct digital controls are included in the nonresidential standards. The 2016 standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. The 2016 Building Energy Efficiency Standards are 28 percent more efficient than previous standards for residential construction and 5 percent better for nonresidential construction. Energy-efficient buildings require less electricity, and increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. *Applicability to proposed project*: The project is new construction that is required to comply with the most current energy standards at the time of construction.
California Green Building Standards	The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also includes voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017. *Applicability to proposed project*: The project is new construction that is required to comply with the most current CALGreen regulations at the time of construction.

** Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01, as well as at Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.*

California Executive Orders

In addition to the legislation identified in **Table 3.7-2**, two Executive Orders—California Executive Order S-03-05 (2005) and California Executive Order B-30-15 (2015)—highlight GHG emissions reduction targets, although such targets have not been adopted by the State and remain only a goal of the Executive Orders. Specifically, Executive Order S-03-05 seeks to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050, and Executive Order B-30-15 seeks to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030. The Executive Orders are not laws but do provide the governor's direction to state agencies in their actions to reinforce existing laws. For instance, as a result of the AB 32 legislation, the State's 2020 reduction target is backed by the adopted AB 32 Scoping Plan, which incorporates a specific regulatory framework of requirements for achieving the 2020 reduction target. The State-led GHG reduction measures identified in **Table 3.7-2**, such as the Low Carbon Fuel Standard and the Renewables Portfolio Standard, are largely driven by the AB 32 Scoping Plan. Executive Orders S-03-05 and B-30-15 do not have any such framework and therefore provide no specific emissions reduction mechanisms.

Bay Area Air Quality Management District

The BAAQMD provides direction and recommendations for the analysis of a project's GHG impacts and an approach to mitigation measures in its CEQA Guidelines. The guidance in the handbook was used to prepare this analysis. The BAAQMD (2017a) CEQA Guidelines provide three options for evaluating the impact of a project's operational GHG emissions:

- Meet all screening criteria for the land use type listed in Table 3-1 of the BAAQMD CEQA Guidelines; or
- Be located in a community with an adopted qualified GHG Reduction Strategy, and the project identifies and implements all applicable feasible measures and policies from the strategy; or
- Have estimated GHG operational emissions that are quantified and fall below the bright-line threshold of significance of 1,100 metric tons of CO_2e per year or the efficiency threshold of significance of 4.6 metric tons of CO_2e per service population per year.

The BAAQMD GHG thresholds were developed based on overall projections of development in the region, and how the region would come into compliance with the goals established by AB 32. BAAQMD thresholds were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions would normally not be cumulatively considerable under CEQA (BAAQMD 2009, 2017a).

The BAAQMD recommends that lead agencies determine appropriate air quality thresholds to use for each project they review based on substantial evidence that they should include in the administrative record for the project. The BAAQMD (2009) provides the following reference for determining appropriate thresholds: CEQA Thresholds Options and Justification Report developed by staff in 2009.

Plan Bay Area 2040

As required by the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the Association of Bay Area Governments and the Metropolitan Transportation Commission have developed a Sustainable Communities Strategy as a component of Plan Bay Area 2040 (ABAG and MTC 2017). This plan seeks to reduce GHG and other mobile source emissions through coordinated transportation and land use planning to reduce vehicle miles traveled (VMT).

The proposed project site is located within a Priority Development Area (PDA). Priority Development Areas (PDAs) are identified by Bay Area communities as areas for investment, new homes and job growth. PDAs are the foundation for sustainable regional growth in the Plan Bay Area. A PDA must be: 1) within an existing community; 2) within walking distance of frequent transit service; 3) designated for more housing in a locally adopted plan or identified by a local government for future planning and potential growth; and 4) nominated by the local jurisdiction where the PDA is located.

City of Hayward General Plan and Climate Action Plan

Hayward's original Climate Action Plan was adopted by the City Council on July 28, 2009, and then incorporated into the City's General Plan in 2014. The overall objectives of the Climate Action Plan's policies and implementation programs are to reduce Hayward's GHG emissions by 20 percent below 2005 baseline levels by 2020, 62.7 percent below 2005 levels by 2040, and 82.5 percent below 2005 levels by 2050. The following goals and policies from the City's (2017a) General Plan are directly applicable to the proposed project:

GOAL Natural Resources (NR)-2: Improve the health and sustainability of the community through continued local efforts to improve regional air quality, reduce greenhouse gas emissions, and reduce community exposure to health risks associated with toxic air contaminants and fine particulate matter.

> NR-2.6 Greenhouse Gas Reduction in New Development: 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.

GOAL NR-4: Reduce energy consumption through increased production and use of renewable energy, sustainable energy purchasing, and improved energy efficiency.

> NR-4.3 Efficient Construction and Development Practices: 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.
>
> NR-4.6 Renewable Energy: The City shall encourage and support the generation, transmission, use, and storage of locally-distributed renewable energy in order to promote energy independence, efficiency, and sustainability. The City shall consider various incentives to encourage the installation of renewable energy projects (i.e., reduced permit fees and permit streamlining).

NR-4.11 Green Building Standards: 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 exceeding the State's zero net energy goals by 2020.

NR-4.12 Urban Forestry: 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.

GOAL NR-6: Improve overall water quality by protecting surface and groundwater sources, restoring creeks and rivers to their natural state, and conserving water resources.

NR-6.9 Water Conservation: The City shall require water customers to actively conserve water year-round, and especially during drought years.

NR-6.15 Native Vegetation Planting: 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.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

GHG emissions associated with development of the proposed project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic in the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project were analyzed in the air quality and greenhouse gas assessment (Illingworth and Rodkin 2017; see **Appendix AIR**). CalEEMod was used to estimate emissions from operation of the proposed project assuming full buildout of the project. CalEEMod input and assumptions include:

- The daily trip data and the retail pass-by rate of 34 percent from the project traffic impact analysis (included in **Appendix TIA**). The CalEEMod default trip lengths were used.
- The electricity generation emissions rate was updated to reflect the most recent 2015 rate reported by PG&E—404.5 pounds of CO_2e per megawatt of electricity produced.
- The model defaults include the 2013 Title 24 Building Standards.
- Per BAAQMD Regulation 6, Rule 3, no wood-burning devices shall be installed in a new building construction.

The project service population is based on the number of future residents and full-time employees. The number of future residents was calculated to be 1,510 based on the latest US Census data of 3.2 average persons per household in Hayward. The number of future employees was calculated to be 50 for the retail uses based on an assumption of 2.5 employees per 1,000 square feet for commercial/retail. Thus, the total service population was estimated at 1,560 (Illingworth and Rodkin 2017).

Construction Emissions

GHG emissions associated with construction were estimated to be 1,110 metric tons (MT) of CO_2e for the total construction period (Illingworth and Rodkin 2017). These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor the BAAQMD has an adopted threshold of significance for construction-related GHG emissions, though the BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction.

Operational Emissions

Annual emissions associated with operation of the fully developed site under the proposed project were estimated using CalEEMod. **Table 3.7-3** summarizes annual GHG emissions resulting from operation of the proposed project.

TABLE 3.7-3
GREENHOUSE GAS EMISSIONS – PROJECT OPERATIONS

Emissions Source	Metric Tons CO_2e per Year
Area	25
Energy	1,210
Mobile	3,213
Waste	120
Water	89
Total	4,657
Efficiency (Total GHG 4,657/Service Population 1,560) (Metric Tons CO_2e/Service Population/Year)	**3.0**
Annual Threshold Comparison	
BAAQMD Potentially Significant Impact Threshold (Metric Tons CO_2e/Service Population/Year)	4.6
Exceed BAAQMD Threshold?	**No**

*Source: Illingworth and Rodkin 2017; see **Appendix AIR***

As shown, the estimated operational GHG emissions of 3.0 MT CO_2e per service population per year would be below the BAAQMD efficiency threshold of 4.6 MT CO_2e per service population per year. Therefore, the project would not generate greenhouse gas emissions that may have a significant impact on the environment. The impact would be **less than significant**.

b) ***Less Than Significant Impact.***

While the project would require a General Plan Amendment, the growth projections in the General Plan would not be exceeded. The project would include features to increase energy efficiency and water conservation and to reduce mobile emissions:

- Proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, and residential uses would exceed the energy compliance pathway by 15 percent.

- Ten percent of energy needs would be generated on-site through solar photovoltaics.
- Buildings would include Energy Star appliances, high efficiency lighting, and home energy system monitors.
- Drought-tolerant, non-invasive, and California native species would be used for landscaping.
- Buildings would include WaterSense water-efficient fixtures and toilets, and tankless water heaters.
- Environmentally preferable materials would be used for interior finishes.
- The project site would be considered urban infill and would include connections to pedestrian pathways, traffic-calming strategies, and a TDM program to minimize single occupancy vehicle trips, and homes would be located within half a mile of a major transit stop and along a heavily traveled bus corridor.

Therefore, the proposed project would not conflict with or otherwise interfere with the statewide greenhouse gas reduction measures identified in CARB's AB 32 Scoping Plan or the City's Climate Action Plan. The impact would be **less than significant**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The approximately 25-acre project site primarily consists of vacant land and also includes a single-family home, a barn structure, open-air storage, and a park. The analysis in this subsection is based on information contained in three documents prepared by ENGEO Incorporated that are included as **Appendix HAZ**: a Phase I Environmental Site Assessment (ESA) (2016a); a Phase II ESA (2016b); and a second Phase II ESA (2016c).

The Phase I ESA was prepared in conformance with 40 Code of Federal Regulations (CFR) Part 312 and ASTM 1527-13. It identified, as a Recognized Environmental Condition (REC), two active leaking underground storage tank (LUST) sites less than 0.25 mile from the project site. In addition, the Phase I noted that asbestos-containing waste, while not considered a REC, was removed from the project site in 1998. The Phase I ESA recommended that an asbestos and lead-based paint survey be conducted prior to the demolition of the existing structures on the project site.

The Phase I ESA noted that the southern portion of the project site (approximately 14 acres) was used for agricultural purposes from at least the 1930s to the 1950s. Based on the findings of the Phase I, a Phase II ESA (ENGEO 2016b) was undertaken to determine if the historic agricultural use impacted near-surface soil. The Phase II ESA determined that concentrations of target analytes, including organochlorine pesticides, lead, and arsenic, were below respective residential screening levels (allowing unrestricted reuse) and/or within expected background concentrations.

The second Phase II ESA (ENGEO 2016c) was undertaken to determine if the RECs identified in the Phase I ESA (i.e., the two active LUST sites) have impacted the groundwater, soil, and/or soil gas on the project site. The Phase II ESA found that soil gas and groundwater target analyte concentrations are below regulatory screening levels for residential land use. Accordingly, this Phase II ESA concluded that the neighboring contaminated media do not pose a potential risk to future development of the project site, and that redevelopment of the project site is appropriate for residential uses without consideration of potential environmental remediation measures.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

Project construction would involve the routine transportation, storage, use, and disposal of small quantities of hazardous materials such as construction equipment fuels and lubricants, hydraulic fluid, and solvents. The storage and handling of these materials would be managed in accordance with applicable state and federal laws for safe handling of hazardous substances, which include developing project-specific hazardous materials management and spill control plans, storing incompatible hazardous materials separately, using secondary containment for hazardous materials storage, requiring the contractor to use trained personnel for hazardous materials handling, and keeping spill cleanup kits available on-site. Routine transport, storage, use, or disposal of hazardous materials during construction would not create substantial hazards to the public or the environment.

The project consists of residential, commercial, parking, and open space uses. During operation, no use or storage of hazardous materials would be expected from the proposed project beyond cleaning and landscaping chemicals. Therefore, impacts would be **less than significant**.

b) ***Less Than Significant Impact with Mitigation Incorporated.***

The Phase I ESA for the project noted that asbestos-containing waste was removed from the project site in 1998, suggesting that asbestos-containing materials may exist within the remaining structures on the project site. Demolition of these buildings may result in airborne release of hazardous building materials, such as asbestos fibers or lead dust, which would be a significant impact. However, compliance with federal and state laws that require inspection and removal of hazardous building materials, including asbestos-containing materials and lead-containing substances, would be required. If asbestos and lead are

found in building materials removed, abatement practices such as containment and removal would be required prior to demolition as identified in mitigation measure **MM HAZ-1**. In addition, the project applicant would be required to obtain clearance for asbestos removal from the BAAQMD prior to issuance of a demolition permit. Therefore, due to existing regulations and through implementation of mitigation measure **MM HAZ-1**, the potential for public health hazards associated with the release of airborne asbestos fibers or lead at the project site would be considered less than significant**.**

No other project-related processes or operations would create reasonably foreseeable upset and accident conditions involving the release of large amounts of hazardous materials into the environment. Fluorescent lights and materials containing polychlorinated biphenyls (PCBs) would be handled and disposed in accordance with applicable state and federal regulations. Hazardous materials used during construction, such as fuel for construction equipment and vehicles, would be managed in accordance with applicable laws and regulations as described above in checklist item a). Project operations would not expose persons or the environment to a hazardous substance. Through implementation of mitigation measure **MM HAZ-1**, any potential asbestos- or lead-related impacts would be reduced to a level that is **less than significant.**

Mitigation Measures

MM HAZ-1 Prior to demolition of existing structures on the project site, asbestos-containing materials and lead-based paint surveys shall be conducted to determine the presence of hazardous building materials and results of those surveys shall be provided prior to the issuance of demolition or building permits. Should asbestos-containing materials, lead-based paint, or other hazardous substance–containing building materials be identified, these materials would be removed using proper techniques in compliance with all applicable state and federal regulations, including the BAAQMD rule related to asbestos.

Timing/Implementation: *Prior to issuance of building permits*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

c) ***No Impact.***

The project site is not located within one-quarter mile of any public schools. The closest school is Cesar Chavez Middle School, approximately 0.5 mile from the PA 2-4 portion of the project site. In addition, project construction and operation would not result in hazardous emissions or handling of hazardous waste as described above under checklist items a) and b). Project construction would comply with all state and federal laws governing hazardous materials during demolition and construction. **No impact** would occur.

d) ***No Impact.***

As described in the Environmental Setting subsection above, the project site is not on any list of hazardous materials sites. A Phase II ESA determined that concentrations of target analytes on the project site, including organochlorine pesticides, lead, and arsenic, were below respective residential screening levels (allowing unrestricted reuse) and/or within expected background concentrations (ENGEO 2016b). The second Phase II ESA was

undertaken to determine if two active LUST sites in the vicinity of the project site have impacted the groundwater, soil and/or soil gas of the site. The second Phase II ESA found that soil gas and groundwater target analyte concentrations are below regulatory screening levels for residential land use. Accordingly, this Phase II ESA concluded that the neighboring contaminated media do not pose a potential risk to future development of the project site, and that redevelopment of the project site is appropriate for residential uses without consideration of potential environmental remediation measures (ENGEO 2016c). Therefore, **no impact** would occur.

e, f) ***No Impact.***

The project site is not located within an airport land use plan or within two miles of a public or public use airport or private airstrip. The closest airport to the project site, Hayward Executive Airport, is approximately 3.5 miles from PA 2-4. Given the distance from any airport, project construction and operation would not result in a safety hazard for people residing or working at the project site. Therefore, the proposed project would have **no impact** on airport land use plans or people residing or working at the project site.

g) ***Less Than Significant Impact.***

The project would not result in any interference with emergency response or evacuation plans, including Hayward's Emergency Communications and Operations Manual, as it would comply with all fire and building code requirements and standards. Project construction could result in temporary lane closures on streets adjacent to the project site. However, one lane would remain open at all times, and traffic control plans prepared and implemented per California Department of Transportation (Caltrans) standards would ensure the steady flow of traffic. Therefore, the project would have a **less than significant** impact on emergency response times.

h) ***Less Than Significant Impact.***

No wildlands are located within the project site. Portions of the project are designated as having high or moderate fire hazard severity according to the Local Responsibility Area (LRA) Alameda County Fire Hazard Severity Zone map (Cal Fire 2007). Development in the mapped high fire hazard severity zone would be subject to risk from wildland fires. However, mandatory compliance with the City of Hayward Hillside Design and Urban/Wildland Interface Guidelines through the building permit review process would ensure potential impacts associated with this risk are reduced to a **less than significant** level.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☒	☐	☐
h) Place within 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☒	☐	☐
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

This subsection evaluates hydrology and water quality impacts associated with implementation of the proposed project. Carlson, Barbee & Gibson, Inc., prepared a Stormwater Control Plan for the proposed project in July 2017. The study is included in **Appendix HYD,** and information from the study is included in this subsection.

ENVIRONMENTAL SETTING

GROUNDWATER

Hayward is underlain by the Santa Clara Valley Groundwater Basin. Two subbasins coincide with the land within the basin's boundaries: the East Bay Plain Subbasin and the Niles Cone Subbasin. The Niles Cone Subbasin corresponds with the southern portions of Hayward. During the geotechnical investigation of the project site, groundwater was encountered at depths ranging from approximately eight to 15 feet below the ground surface (see **Appendix GEO**).

SURFACE WATER

The major storm drainage facilities in Hayward are owned and maintained by the Alameda County Flood Control and Water Conservation District (ACFCD), including the channel that runs through the project site. Stormwater runoff from Hayward is collected by the City's storm drain system and conveyed to underground storm drain lines or open channels owned by the ACFCD.

FLOODING

According to the Federal Emergency Management Agency (FEMA) (2009), and as shown on **Figure 2.0-10**, portions of the project site (including PA 2-1, PA 2-2, PA 3-1, and PA 3-2) are located in Flood Zones X and AE, special flood hazard areas subject to inundation by the 0.2 percent and one percent annual chance flood, respectively.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

During construction of the proposed project, there is a potential for increased erosion, sedimentation, and discharge of polluted runoff from the project site. New construction in Hayward is subject to mandatory water quality requirements and regulations imposed by the San Francisco Bay Regional Water Quality Control Board, and are consistent with the National Pollutant Elimination Discharge System (NPDES) permit granted to all jurisdictions in Alameda County pursuant to the Alameda County Clean Water Program. New development projects are required to implement best management practices for both construction and post-construction periods that limit periods during which grading occurs, filtration of stormwater prior to its entering public drainage systems, and similar requirements.

The proposed project would create approximately 724,650 square feet of impervious surface on the project site, compared to approximately 30,345 square feet of impervious surface currently. As a result, the amount of runoff generated from the project site would increase. To help ensure that drainage from new development meets discharge control standards, a Stormwater Control Plan was prepared for the project and reviewed by the City (**Appendix HYD)**. The Stormwater Control Plan calculated the change in impervious surfaces on the site and defined needed drainage improvements per City standards, the state Stormwater Management and Urban Runoff Control Program, and the Alameda Countywide Clean Water Program. All site runoff would be directed from on-site drainage pipes to the City's existing municipal storm drainage system and ultimately to the Countywide drainage system, including run-off in the existing ACFCD channel on the

project site. All project related drainage improvements would be constructed as part of the project as the City's standard conditions for new development.

The proposed project is also subject to requirements listed in provision C.3 of the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (or MRP) (Regional Water Quality Board Order R2-2009-0074, and Order R2-2011-0083) and the Alameda County Clean Water Programs. This permit requires permittees to comply with the discharge prohibitions and receiving water limitations through the timely implementation of control measures and other actions as specified in the permit (San Francisco Bay RWQCB 2009). Development on the project site would be required by law to comply with applicable NPDES requirements to retain run-off and treat it onsite before discharge for stormwater quality purposes. The City has reviewed the Stormwater Control Plan for adequacy. Accordingly, the project design includes a series of stormwater treatment systems, as listed in **Appendix HYD**. The project would incorporate the following site design measures in the project plans to reduce and treat stormwater runoff (Carlson, Barbee & Gibson 2017):

- Direct roof runoff onto vegetated areas.
- Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
- Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
- Minimize land disturbance and impervious surface (especially parking lots).
- Maximize permeability by clustering development and preserving open space.
- Protect sensitive areas, including wetland and riparian areas, and minimize changes to the natural topography.

The project would include bioretention areas and stormwater Best Management Practices for pollution prevention, treatment and detention on the project site. The bioretention locations are shown on **Figure 2.0-7.** Therefore, with these measures, development of the proposed project would not result in any stormwater discharges that would violate water quality standards or waste discharge requirements. With these standard development requirements and measures in place, the impact would be **less than significant** (Sharma 2018).

b) ***Less Than Significant Impact.***

The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. In the project area, the underlying groundwater basin is not utilized as a water supply, and no pumping activities currently occur in Hayward. While development of the proposed project would increase the overall amount of impervious surfaces on the project site, the project would incorporate stormwater BMPs, including detention basins to retain stormwater onsite, which would assist with groundwater recharge. Therefore, the impact would be **less than significant**.

c) ***Less Than Significant Impact.***

The project would require grading on the site. However, the project would not alter the existing ACFCD channel that runs through the project site and conveys stormwater for ultimate discharge into San Francisco Bay. The proposed project would be required to control soil erosion or siltation during construction through the preparation and implementation of a stormwater pollution prevention plan (SWPPP). Implementation of the SWPPP would reduce the potential for erosion on the project site and minimize the discharge of sediment during construction into the storm drain system. Once the proposed project is constructed, the project would include landscaping and stormwater detention basins as outlined in the Stormwater Control Plan, which would control erosion from the site. The proposed stormwater system for the project would convey water from impervious surfaces to bioretention areas for treatment of the water. The bioretention locations are shown on **Figure 2.0-11**. This system would minimize the potential for erosion and sedimentation in the long term. The proposed project's stormwater drainage system would be designed in accordance with criteria listed in the Alameda County C.3 Stormwater Technical Guidance Handbook, thus minimizing the potential for erosion on- or off-site (see **Appendix HYD**). Therefore, this impact is considered **less than significant**.

d) ***Less Than Significant Impact.***

The project would require grading on the site. However, the project would not alter the existing ACFCD channel that runs through the project site. The proposed project would be designed to control for and manage on-site flooding. As discussed above, stormwater generated by development of the proposed project would be directed toward existing storm drainage facilities, including the ACFCD channel that runs through the project site. The project would incorporate stormwater BMPs and comply with applicable regulations, as detailed above in checklist item a) and in **Appendix HYD**. Therefore, this impact is considered **less than significant**.

e) ***Less Than Significant Impact.***

As described above in checklist item a), the project would create approximately 724,650 square feet of impervious surface on the project site, compared to approximately 30,345 square feet of impervious surface currently. As a result, the amount of runoff generated on the project site would increase. To address this increase, the project would be required to implement the following:

- Best management practices for both construction and post-construction periods that limit periods during which grading occurs, filtration of stormwater prior to entering public drainage systems, and similar requirements.

- Applicable NPDES requirements for stormwater quality, per provision C.3 of the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Regional Water Quality Board Order R2-2009-0074, and Order R2-2011-0083). The project design includes a series of stormwater treatment systems to comply with the permit, as listed in **Appendix HYD**. The stormwater system would convey water from impervious surfaces to bioretention areas for treatment of the water.

All site runoff would be directed from on-site drainage pipes to the City's existing municipal storm drainage system and ultimately to the Countywide drainage system, including run-off in the existing ACFCD channel on the project site. All project related drainage

improvements would be constructed as part of the project per the City's standard conditions for new development. As noted above, the proposed project is subject to NPDES requirements per the Municipal Regional Permit and the Alameda County Clean Water Programs. The project would include bioretention areas and stormwater Best Management Practices for pollution prevention, treatment and detention on the project site. With these standard development requirements and measures in place, the impact on stormwater drainage systems would be less than significant (Sharma 2018).

f) ***Less Than Significant Impact.***

The project would be required to implement a series of measures that would address water quality issues. Please see checklist item a) above for specifics. Therefore, project impacts on water quality would be **less than significant.**

g, h) ***Less Than Significant Impact with Mitigation Incorporated.***

As noted above, portions of the project site (including PA 2-1, PA 2-2, PA 3-1, and PA 3-2) are located in Flood Zone AE, the 100-year flood zone, and a portion of the site is located in Flood Zone X, the 500-year flood zone (FEMA 2009). To mitigate this potentially significant impact, the South Hayward BART/Mission Boulevard Form-Based Code EIR identified mitigation measures from the prior Concept Design Plan EIR, noting that they are applicable and address the previously identified impacts. Through implementation of mitigation measure **MM HYD-1**, any potential flooding impacts associated with the proposed project would be reduced to a level that is **less than significant.**

Mitigation Measures

MM HYD-1 Flooding Impacts. Prior to construction in a 100-year floodplain area, project developers shall do one of the following:

1. Submit a hydrology and hydraulic study prepared by a California-registered civil engineer proposing to remove the site from the 100-year flood hazard area by increasing the topographic elevation of the site or similar steps to minimize flood hazards. The study shall demonstrate that floodwaters would not be increased on any surrounding sites, to the satisfaction of City staff.

2. Comply with Hayward Municipal Code Section 9-4.110, General Construction Standards, which establishes minimum health and safety standards for construction in a flood hazard area.

3. Apply to the City for a Conditional Letter of Map Revision (CLOMR) to remove the site from the FEMA Flood Insurance Rate Map 100-year flood hazard area (South Hayward BART/Mission Boulevard Form-Based Code EIR mitigation measure Hyd-3; Concept Design Plan EIR mitigation measure 4.4-2).

Timing/Implementation: *Prior to issuance of grading and building permits*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

i, j) ***Less Than Significant Impact.***

The project site is not located in a dam failure inundation zone and would not be subject to inundation by seiche or tsunami (Hayward 2011). As described above for checklist item g, h), through implementation of mitigation measure **MM HYD-1**, any potential flooding impacts associated with the proposed project would be reduced to a level that is less than significant. As described in the response to checklist item a) in subsection 6, Geology and Soils, a geotechnical report prepared for the project includes a series of recommendations for initial land planning and preliminary estimating purposes (see **Appendix GEO**). As recommended in the geotechnical report, a more detailed, site-specific design-level geotechnical exploration would be performed as part of the design process. The exploration would include additional borings and laboratory soil testing to provide data for preparation of specific recommendations regarding grading, foundation design, and drainage for the proposed development. The exploration would also allow for more detailed evaluations of geotechnical issues and afford the opportunity to provide recommendations regarding techniques and procedures to be implemented during construction to mitigate potential geotechnical/geological hazards, such as landslides and mudflows. Final recommendations regarding site grading and foundation construction would be provided and incorporated into preparation of building permits application submittal plans, after additional site-specific exploration has been undertaken. Therefore, this impact would be **less than significant**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING. Would the project**:**				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The study area for the analysis of land use and planning encompasses the area of construction disturbance and nearby land uses that would be potentially affected by construction or operation of the proposed project.

The project site currently includes vacant land, the existing Valle Vista Park, commercial development, open-air storage, and the ACFCD channel. As shown on **Table 3.10-1**, the General Plan designations for the project site parcels are *Medium Density Residential*, *Parks and Recreation*, and *Sustainable Mixed Use*. The parcels are zoned Industrial (I) District, High Density Residential (RH) District, Civic Space Zone (S-CS) District, Urban General Zone, 17.5 to 35 units per net acre (S-T4) District, and Urban General Zone, 35 to 55 units per net acre (S-T5) District. The project site is in an area identified in the General Plan as the South Hayward BART Urban Neighborhood.

TABLE 3.10-1
PROJECT SITE GENERAL PLAN DESIGNATIONS AND ZONING

General Plan Designation/Zoning	Existing (acres)	Proposed (acres)
General Plan Designation		
Residential–Medium Density	1.8	0
Parks and Recreation	10.2	2.6
Sustainable Mixed Use	13.0	22.4
Zoning		
Industrial	0.4	0
High Density Residential – minimum lot area 1,250 sf	1.5	0
Civic Space Zone	10.2	2.6
Urban General Zone – 17.5 to 35 units/net acre	5.3	0
Urban Center Zone – 35 to 55 units/net acre	7.6	0
Proposed – PD (Planned Development) District	0	22.4

Source: Hayward 2014a, 2017

Land uses surrounding the project site parcels include commercial and institutional uses and vacant land along Mission Boulevard; commercial and residential uses, vacant land, and golf course uses along Industrial Parkway; and the BART rail line and industrial uses along the western edge. Additionally, various areas of the project site are adjacent to multi-family residential and older single-family residential uses. The Mission Hills of Hayward Golf Course and Driving Range facility is located to the south of the project site, on the southern side of Industrial Parkway.

CHECKLIST DISCUSSION

a) ***No Impact.***

The proposed project would not result in any changes that could physically divide an existing community. Instead, the proposed project would result in the development of an underutilized, primarily vacant site with residential and retail uses, as well as a relocated and updated public park with a variety of amenities. Overall, the proposed development includes a complete community composed of neighborhood serving retail spaces connected by commercial courtyards, multi-family residential uses above the retail spaces, clustered and linear townhomes at a variety of sizes connected by a parkway, pathways, sidewalks, and a series of public and private open spaces, including the relocated and expanded Valle Vista Park.

To improve connectivity to the surrounding neighborhood and accessibility throughout the site, sidewalks and internal pedestrian pathways as well as a dedicated pedestrian and bicycle parkway would connect residential uses in PA 3 to the relocated park, creating a continuous pathway connection from Industrial Parkway to Mission Boulevard. Interpretive/wayfinding signage would be installed along the parkway. The existing ACFCD channel, although not a formal part of the park, would be visually integrated into the design with shared pathways, access roads, and decorative fencing. Two pedestrian bridges would cross over the channel, connecting and expanding areas located on both sides of the channel. Land uses adjoining the site include residential and commercial uses. Given the existing adjacent compatible uses, the proposed project would not physically divide an established community. There would be **no impact**.

b) ***Less Than Significant Impact.***

Currently, the project parcels are designated as *Medium Density Residential*, *Parks and Recreation*, and *Sustainable Mixed Use* in the Hayward General Plan and zoned Industrial (I) District, High Density Residential (RH) District, Civic Space Zone (S-CS) District, Urban General Zone, 7.5 to 35 units per net acre (S-T4) District, and Urban General Zone, 35 to 55 units per net acre (S-T5) District. The proposed project includes a General Plan amendment and rezoning to develop the scattered sites as one cohesive neighborhood with a variety of land uses as described above.

The proposed project would involve a General Plan amendment to convert a small portion of the site from the *Medium Density Residential* (approximately 1.8 acres) to *Sustainable Mixed Use*; and to convert approximately 7.6 acres of the existing 10.2 acres of land with *Parks and Recreation* to *Sustainable Mixed Use*. The amendments would result in approximately 22.4 acres of land with a *Sustainable Mixed Use* General Plan designation and approximately 2.6 acres with a *Park and Recreation* General Plan designation.

The proposed project also involves rezoning from the current various zoning districts to PD (Planned Development) District. Pursuant to Hayward Municipal Code 10-1.2505, the purpose of the PD District is to encourage development and redevelopment through efficient and attractive space utilization that is harmonious with characteristics of the land and incorporates open space, recreational opportunities. An additional purpose is to foster well designed development that incorporates a variety of housing types by allowing a diversification of uses, building architectural designs, lot sizes, yard areas and open spaces that may not be achievable under applicable zoning districts among others. The proposed development would be a cohesive neighborhood that would cluster a mix of commercial and high density residential uses along Mission Boulevard, with development stepping back into a variety of townhome styles in surrounding planning areas. The proposed development would be interspersed with pathways and common and private open spaces to provide connectivity and continuity throughout the project site. While the PD District zoning would result in the development of a cohesive neighborhood on the project site, it would also connect to the adjacent existing neighborhood through continuous sidewalks, roadways, and a relocated and expanded linear park that would be open to the public.

The proposed project would be consistent with the following General Plan Goals and Policies related to development of a complete community:

GOAL LAND USE (LU)-2: Revitalize and enhance Hayward's Priority Development Areas to accommodate and encourage growth within compact, mixed-use, and walkable neighborhoods, and districts that are located near the City's job centers and regional transit facilities.

> Policy LU-2.8: South Hayward BART Urban Neighborhood and Mixed-Use Corridor. The City shall encourage the development of vibrant, compact, mixed-use, and walkable urban neighborhoods within the South Hayward BART Urban Neighborhood and the South Hayward BART Mixed-Use Corridor.

GOAL LU-3: Create complete neighborhoods that provide a mix of housing options and convenient access to parks, schools, shopping, jobs, and other community amenities.

GOAL LU-4: Create attractive commercial and mixed-use corridors that serve people traveling through the City while creating more pedestrian oriented developments that foster commercial and social activity for nearby residents and businesses.

GOAL MOBILITY (M)-1: Provide a comprehensive, integrated, and connected network of transportation facilities and services for all modes of travel.

GOAL HEALTH AND QUALITY OF LIFE (HQL)-2: Create convenient and safe opportunities to incorporate physical activity into the everyday activities of residents, employees and visitors.

> Policy HQL-10.4: Urban Infill Parks. The City shall, for development in urban infill areas where traditional neighborhood and community parks are not feasible or appropriate work with HARD and developers to provide creative and flexible solutions for creating new urban parks, such as plazas and rooftop gardens.

While the proposed development is generally consistent with General Plan Goals and Policies related to Land Use, Mobility and Health and Quality of Life, the proposed project is potentially inconsistent with one of the goals of the Hayward General Plan related to parks and recreation. Specifically, General Plan Policy HQL-10.2 states that the City shall seek to increase the number of parks throughout Hayward 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.

Currently, the City is not meeting these goals, as the existing condition is:

- 1.1 acres of local parks,
- 0.31 acre of school parks,
- 2.11 acres of community parks,
- 0.068 mile of trails and linear parks, and
- 3.59 acres of parks district-wide per 1,000 residents (Tiernan 2018).

According to the General Plan Background Report, the following additional acreages are needed to meet the General Plan goals for parks per population by 2040:

- Approximately 33 acres are needed to meet the Local Park standard of one acre per 1,000 residents;
- Approximately 23.52 acres are needed to meet the School Park standard of one acre per 1,000 residents;
- Approximately 247.29 acres are needed to meet the Districtwide Park standard of three acres per 1,000 residents; and
- No additional parkland is needed to meet the Regional Parkland standard of three acres per 1,000 residents in that 550 acres are needed where 4,965 acres are provided.

Under current General Plan designations, 10.2 acres of the project site are categorized as *Parks and Recreation* (see **Table 3.10-1**). Of the 10.2 acres currently designated as *Parks and Recreation*, only one acre is currently developed as Valle Vista Park, a public park that is owned and maintained by HARD, while the remaining 9.2 acres are City-owned, vacant and undeveloped land that are not open to the public.

According to the project description, the existing one-acre Valle Vista Park would be relocated and expanded from one acre to approximately 1.86-acres and redeveloped with high quality amenities including, but not limited to, a sport court, discovery maze, play areas for all ages, nature play area, public art and pedestrian bridges across the existing channel. Further, the proposed project would include an approximately 0.5-acre parkway connecting the western part of the project site with the proposed park area.

Ultimately, the expanded park would be dedicated to HARD and open to the public. The remaining 7.6 acres would be redesignated to *Sustainable Mixed Use* General Plan land use designation and developed with project uses. While the project would decrease land designated as *Parks and Recreation*, HARD has no plans, funding, or programming in place to create parkland on the remaining 7.6 acres. Therefore, while conversion of approximately 7.6 acres of City-owned land from *Parks and Recreation* to *Sustainable Mixed Use* would reduce the acreage designated for *Parks and Recreation* in the City, development of this land to a park is not planned or foreseeable.

While the reduction in land designated for *Parks and Recreation* per the General Plan would not be consistent with meeting the established park standards outlined above and would reduce the acreage allocated to *Parks and Recreation* in the General Plan, the proposed relocation and expansion of the Valle Vista Park from its existing condition would provide improved parkland in an urban, infill location in close proximity to transit. The relocated and expanded Valle Vista Park would ultimately benefit the surrounding neighborhood residents.

Therefore, notwithstanding the proposed amendment to the City's General Plan, the proposed project would result in an increase in the quantity and quality of developed, usable park space and public trails on the infill project site. The proposed solution for a relocation and expansion both in land area and quality of park amenities as part of the proposed development fulfills HQL Policy 10.4, related to urban infill development and working with developers to provide creative and flexible solutions for creating new urban parks.

In addition, the project applicant would be required to comply with the standard requirements set forth in Hayward Municipal Code Chapter 10, Article 16, Property Developers – Obligations for Parks and Recreation, related to park dedications and/or payment of in lieu fees, as described in checklist item d) in subsection 14, Public Services. There are no other Hayward General Plan EIR mitigation measures related to land use policy or regulation with which the proposed project would conflict. Thus, while the proposed project requires a General Plan Amendment and a rezoning, these actions would facilitate a compact, walkable, mixed-use development in an appropriate location with development of an appropriately sized urban infill park in accordance with numerous General Plan goals and policies. The impact would be considered **less than significant**.

c) ***No Impact.***

The project site is not in an area that is covered by a habitat conservation plan or natural community conservation plan. Therefore, there would be **no impact**.

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

ENVIRONMENTAL SETTING

The US Geological Survey has identified 11 past, present, or prospective mining sites in Hayward. The past and present mining sites include those owned by the American Salt Company, the Oliver Salt Company, the East Bay Excavation Company, and the Ideal Cement Company, as well as the La Vista Quarry and Mill. These sites contain or contained a variety of mineral resources, including: stone, limestone, clay, fire clay, halite, and salt. There are three sites identified for prospective stone and clay extraction (Hayward 2014b). The only designated mineral resource "sector" of regional significance in Hayward is the La Vista Quarry, located in the area east of Mission Boulevard and Tennyson Road. The quarry is designated as Sector N, a greenstone deposit. "Probable" and "potential" resource zones have been designated in the vicinity of the quarry. No other significant aggregate or mineral resources are located in the city (Hayward 2014b). All operations at the La Vista Quarry site have been terminated due to depletion of the accessible aggregate resource. The Surface Mining Permit for the quarry issued by Alameda County expired in 2008. The City annexed the La Vista Quarry in 2006.

CHECKLIST DISCUSSION

a, b) ***No Impact.***

The project site is in an urbanized area with developed structures, roadways, and other infrastructure. As noted in the South Hayward BART/Mission Boulevard Form-Based Code EIR, there are no mineral resources in the vicinity of the project site. Since no mineral resources of value are located in the area, there would be **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project:				
a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

This subsection evaluates noise impacts associated with implementation of the proposed project. Charles M. Salter Associates, Inc., prepared a Revised Environmental Noise Impact Assessment for the proposed project in January 2018. The study is included in **Appendix NOI,** and the results are summarized throughout this subsection.

EXISTING SETTING

NOISE AND VIBRATION OVERVIEW

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). There is a strong correlation between A-weighted sound levels and the way the human ear perceives sound. All noise levels reported in this section are in terms of dBA but may be expressed as dB, unless otherwise noted.

Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while changes of 1–2 dBA generally are not perceived.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources near the ground. Noise levels may also be reduced by the introduction of intervening structures.

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by man-made activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) when evaluating impacts on humans or as peak particle velocity when evaluating impacts on structures.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

NOISE SETTING

The project site is located in the South Hayward Bart Urban Neighborhood Priority Development Area (Hayward 2014d). The dominant source of noise in the project area is traffic and trains traveling on the BART tracks. The greatest sources of traffic noise are Mission Boulevard and Industrial Parkway. To quantify the existing noise environment, four long-term monitors continuously measured noise levels at the site from June 27 through June 29, 2017 (see Appendix NOI). In addition, a short-term measurement was conducted along Industrial Parkway and compared with corresponding time periods of the long-term monitors. Table 3.12-1 summarizes measured existing noise levels. The calculated noise level at 50 feet exceeds the L_{dn} 70 dB "normally acceptable" level for the Mission Boulevard and the Industrial Parkway measurement locations.[1]

TABLE 3.12-1
EXISTING NOISE MEASUREMENTS

Location	Measurement Length	Measured L_{dn} (dBA)	Measured L_{dn} Normalized to 50 feet (dBA)
Mission Boulevard: approximately 60′ from roadway centerline, 12′ above grade	Long-term	73	74
Industrial Parkway: approximately 55′ from roadway centerline, 12′ above grade	Short-term	74	74
Dixon Street: approximately 25′ from roadway centerline, 12′ above grade	Long-term	71	68
Valle Vista Avenue: approximately 45′ from roadway centerline, 12′ above grade [a]	Long-term	60	60

[1] L_{dn} (also written as DNL) equals the day-night average level and is a 24-hour average, with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime.

Location	Measurement Length	Measured L_{dn} (dBA)	Measured L_{dn} Normalized to 50 feet (dBA)
BART: approximately 85′ from centerline of tracks, 12′ above grade	Long-term	65	68

*Source: Charles Salter Associates 2017, see **Appendix NOI***

Notes:

a. *The dominant source of noise for this location was traffic on Mission Boulevard; the listed measurement is the estimated noise contribution from traffic on Valle Vista Avenue.*

Noise-Sensitive Receptors

Noise-sensitive land uses are those that may be subject to stress and/or interference from excessive noise. Noise-sensitive land uses include residences, schools, hospitals, and institutional uses such as churches and museums. Industrial and commercial land uses are generally not considered sensitive to noise. Because the proposed project includes residential development, the project itself is considered a future sensitive receptor. The closest existing sensitive receptors to the project site are residences adjacent to the project property boundaries in multiple locations. The closest school to the project site is Cesar Chavez Middle School, approximately 2,680 feet (0.51 mile) to the northwest of PA 2-4.

REGULATORY FRAMEWORK

STATE

California Code of Regulations

The 2015 California Building Standards Code (California Code of Regulations, Title 24), Part 2: Chapter 12, Section 1207: Sound Transmission, requires that the indoor noise level in residential units of multi-family dwellings not exceed an L_{dn} of 45 dB.

LOCAL

City of Hayward Municipal Code

The City of Hayward Municipal Code includes the following regulations regarding noise produced on a residential property and construction noise:

Section 4-1.03.1 – Noise Restriction by Decibel.

(a) Residential Property Noise Limits.

1. No person shall produce or allow to be produced by human voice, machine, device, or any combination of same, on residential property, a noise level at any point outside of the property plane that exceeds seventy (70) dBA between the hours of 7:00 a.m. and 9:00 p.m. or sixty (60) dBA between the hours of 9:00 p.m. and 7:00 a.m.

Section 4-1.03.4 – Construction and Alteration of Structures.

Unless otherwise provided pursuant to a duly-issued permit or a condition of approval of a land use entitlement, the construction, alteration, or repair of structures and any landscaping

activities, occurring 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, shall be subject to the following:

(a) No individual device or piece 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.

(b) The noise level at any point outside of the property plane shall not exceed eighty-six (86) dBA.

(c) During all other times, the decibel levels set forth in Section 4-1.03.1 shall control.

City of Hayward General Plan

The City's General Plan Hazards Element identifies sources of noise in the city and defines standards for acceptable noise levels and policies to reduce the impacts of noise to the community. The following policies from the Noise Element are relevant to the proposed project (Hayward 2014a):

HAZ-8.3 Incremental Noise Impacts of Commercial and Industrial Development. The City shall consider the potential noise impacts of commercial and industrial developments that are located near residences and shall require noise mitigation measures as a condition of project approval.

HAZ-8.4 Noise Mitigation and Urban Design. 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.

HAZ-8.5 Residential Noise Standards. The City shall require the design of new residential development to comply with the following noise standards:

- The maximum acceptable exterior noise level for the primary open space area of urban residential infill and mixed-use projects (private rear yards for townhomes; and common courtyards, roof gardens, or gathering spaces for multi-family or mixed-use projects) shall be an L_{dn} of 70 dB. Urban residential infill would include all types of residential development within existing or planned urban areas (such as Downtown, The Cannery Neighborhood, and the South Hayward BART Urban Neighborhood) and along major corridors (such as Mission Boulevard). This standard shall be measured at the approximate center of the primary open space area. This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.

CHECKLIST DISCUSSION

a, c) ***Less Than Significant Impact with Mitigation Incorporated.***

Operational Traffic Noise

Operation of the project would increase traffic levels on area roadways and could increase traffic noise levels, impacting existing sensitive receptors. The predicted changes in traffic noise levels were estimated using the Federal Highway Administration (FHWA)

traffic noise prediction model (see **Appendix NOI**). The resulting projected noise increases from project-generated traffic are summarized in **Table 3.12-2**.

TABLE 3.12-2
PREDICTED INCREASES IN TRAFFIC NOISE LEVELS
EXISTING PLUS PROJECT CONDITIONS

Roadway Segment	L_{dn} at 50 Feet from Near-Travel-Lane Centerline (dBA) [a]		Increase (dBA)	Threshold	Impact
	Without Project	With Project			
Mission Boulevard					
Industrial Pkwy to Valle Vista Ave	75	75	**<1**	>3.0 dB increase	**No**
Valle Vista Ave to Tennyson Rd	75	75	**<1**	>3.0 dB increase	**No**
Dixon Street					
Industrial Pkwy to Valle Vista Ave	68	68	**<1**	>3.0 dB increase	**No**
Valle Vista Ave to Bart Station	68	68	**<1**	>3.0 dB increase	**No**
Bart Station to Tennyson Rd	68	68	**<1**	>3.0 dB increase	**No**
Industrial Parkway					
Industrial Pkwy SW to Huntwood Ave	74	74	**<1**	>3.0 dB increase	**No**
Huntwood Ave to Dixon St	74	74	**<1**	>3.0 dB increase	**No**
Dixon St to Mission Blvd	72	72	**<1**	>3.0 dB increase	**No**
Valle Vista Avenue					
Dixon St to Mission Blvd	60	62	**2**	>3.0 dB increase	**No**
Tennyson Road					
Huntwood Ave to Dixon St	73	73	**<1**	>3.0 dB increase	**No**
Dixon St to Mission Blvd	71	71	**<1**	>3.0 dB increase	**No**

*Source: Charles M. Salter 2018 (see **Appendix NOI**)*

Notes:

a. *L_{dn} equals the day-night average level and is a 24-hour average, with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime.*

A traffic noise increase would be considered significant when the effect exceeds the perception level (i.e., auditory level increase) threshold. Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans, and outside of the laboratory, a 3 dBA change is considered a just-perceivable difference. As shown in **Table 3.12-2**, increases in traffic noise levels would be less than 3 dB. Therefore, the impact of increases in traffic noise resulting from operation of the project would be less than significant.

Operational Stationary Noise

Valle Vista Park would be a potential source of stationary noise. Noise generated by recreational activities and voices generally would not exceed the City's General Plan Noise Element compatibility guideline of 70 dB (normally acceptable) at the existing

residential neighbors. Any sanctioned park activities that could generate substantial noise would be required to comply with the policies of the Hayward Area Recreation and Park District (HARD). For example, picnic site reservations do not allow live and amplified music, bounce houses (generator noise) are not allowed, and special event live music is addressed on a case-by-case basis to limit noise. Therefore, the impact of noise resulting from recreational uses in Valle Vista Park would be less than significant.

Mechanical equipment for project buildings, such as heating, ventilating, and air-conditioning (HVAC) systems, could be located near existing sensitive receptors and produce noise levels above City standards. An accurate estimate for noise levels of project mechanical equipment cannot be made because the equipment locations and model selections have not yet been determined. However, typical residential outdoor HVAC systems could generate noise levels between 65 dB and 75 dB at a distance of 3 feet. Typical commercial HVAC systems and exhaust fans could generate noise levels between 70 dB and 90 dB at a distance of 3 feet (Charles M. Salter 2018). These noise levels could exceed City standards, and this would be a potentially significant impact.

To reduce the impact of HVAC system noise for each specific site, the HVAC system, location, and noise-reducing barriers would be selected such that noise levels produced would be below the noise standards in the Hayward Noise Ordinance. Per Municipal Code Section 4-1.03.1, the limit of equipment noise at neighboring residential properties is 70 dB during daytime hours and 60 dB during nighttime hours. The minimum setbacks listed in **Table 3.12-3** would ensure the City noise standards are met for typical HVAC systems. An acoustical analysis for specific systems and locations could demonstrate that lower setback distances would meet City noise standards. These setback distances would also ensure that project HVAC system would not result in the ambient noise level exceeding the General Plan standard of 70 dB or increasing ambient noise levels by more than 3 dB in areas already exceeding the 70 dB standard.

TABLE 3.12-3
HVAC SYSTEM MINIMUM SETBACK DISTANCES

System Noise Level at 3 Feet (dBA)	City Noise Standard (dBA)	Minimum Setback Required to Meet Noise Standard without Noise Barrier (feet)	Minimum Setback Required to Meet Noise Standard with Noise Barrier (feet)
Residential HVAC Systems			
65	60 (nighttime)	6	3
70	60 (nighttime)	10	6
75	60 (nighttime)	20	10
Commercial HVAC Systems			
70	70 (daytime)	3	-
75	70 (daytime)	6	3
80	70 (daytime)	10	6
85	70 (daytime)	20	10
90	70 (daytime)	35	20

*Source: Charles M. Salter 2018 (see **Appendix NOI**)*

Mitigation measure **MM NOI-1** would require the project applicant to demonstrate that the building mechanical systems, locations, and noise shielding are selected and designed to result in noise levels below City standards measured at the receiving property line.

Therefore, with implementation of mitigation measure **MM NOI-1**, the project would not result in the exposure of persons to, or the generation of, noise levels in excess of standards, nor would it result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM NOI-1 The project applicant shall demonstrate to the City that any proposed HVAC systems for buildings in the project do not produce noise in excess of L_{max} 60 dB measured at a property line adjacent to off-site and new proposed project residential uses or noise in excess of L_{max} 70 dB measured at a property line adjacent to off-site and new proposed project commercial or industrial uses. Acceptable demonstration would be one or more of the following:

1. Provide manufacturers specifications for the proposed HVAC systems that indicate the systems would not produce noise in excess of L_{max} 60 dB measured at a distance of 3 feet for systems near residential property lines or noise in excess of L_{max} 70 dB measured at a distance of 3 feet for systems near commercial or industrial property lines.

2. If manufacturers specifications are not available, provide site plans that indicate the following minimum setback distance for HVAC systems from property lines (assuming that a residential system would produce a noise of L_{max} 75 dB measured at a distance of 3 feet and a commercial HVAC system would produce a noise of L_{max} 90 dB measured at a distance of 3 feet):

   - For residential HVAC systems operating during nighttime hours and located adjacent to residential uses, HVAC systems shall be set back a minimum of 20 feet from property lines or 10 feet with adequate noise shielding.

   - For commercial HVAC systems operating during daytime hours only and located adjacent to residential, commercial, or industrial property lines, equipment shall be set back a minimum of 35 feet from property lines or 20 feet with adequate noise shielding.

   Adequate shielding is a sound enclosure or solid barrier constructed of solid material with no gaps that, at a minimum, would block the line of sight between the HVAC system and potential sensitive receptor locations on adjacent property (e.g., a person standing at a window, a person standing outside, a person standing on a balcony or deck).

3. Provide a noise study prepared by a qualified acoustical professional for specific building sites and with specific equipment specifications that demonstrates the noise produced by building mechanical equipment

would not produce noise in excess of the standards specified in Municipal Code Section 4-1.03.1.

Timing/Implementation: *Prior to issuance building permits*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

b) ***Less Than Significant Impact with Mitigation Incorporated.***

Operational Groundborne Vibration

Project mechanical equipment (e.g., HVAC systems) located on grade near property lines could generate groundborne vibrations high enough to cause annoyance to adjacent sensitive receptors. Typical HVAC systems would not be expected to produce detectible vibrations in adjacent buildings. However, the size and location of HVAC systems within the project have not been determined, and systems mounted at grade level near sensitive receptors could result in potentially significant groundborne vibrations. Mitigation measure **MM NOI-2** would require vibration isolation mounts to be installed on mechanical equipment located at grade level near sensitive receptors. With implementation of mitigation measure **MM NOI-2**, impacts from operational groundborne vibration would be less than significant.

Construction Groundborne Vibrations

Construction activities would require the use of off-road equipment such as bulldozers, excavators, graders, pavers, vibratory compactors, and haul trucks. The use of major groundborne vibration–generating construction equipment, such as pile drivers, is not anticipated to be needed for the project. Nonetheless, during construction, the project may generate groundborne vibration as a result of heavy equipment operations. This impact would be temporary, and vibration would cease completely when construction ends.

High levels of groundborne vibration can cause architectural or structural damage to nearby buildings. The threshold at which there is a risk of architectural damage to normal dwelling structures (i.e., cracks in plastered walls and ceilings) is a peak particle velocity of 0.2 inches per seconds (Caltrans 2013). **Table 3.12-4** shows vibration levels for typical construction equipment, based on the application of the Caltrans-recommended standard.

TABLE 3.12-4
TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Equipment	Peak Particle Velocity at 25 Feet (inches per second)	Peak Particle Velocity at 25 Feet (inches per second)
Vibratory Roller	0.210	0.074
Large Bulldozer	0.089	0.031
Loaded Truck	0.076	0.027
Jackhammer	0.035	0.012
Small Bulldozer/Tractor	0.004	0.001

Source: FTA 2006; Caltrans 2013

As shown in **Table 3.12-4**, operation of some equipment could produce vibrations as high as 0.210 inches per seconds peak particle velocity and potentially cause architectural damage to structures at 25 feet. Mitigation measure **MM NOI-3** would restrict heavy equipment such as bulldozers and haul trucks from operating within 50 feet of existing structures to the extent feasible. Mitigation measure **MM NOI-3** would also restrict vibratory soil and pavement compaction methods from being used within 50 feet of existing structures.

With implementation of mitigation measures **MM NOI-2** and **MM NOI-3**, the project would not result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. The impact would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM NOI-2 Project plans shall include specifications for any building mechanical equipment mounted at grade level within 10 feet of a sensitive use property line (e.g., residences, schools, hospitals, elder-care facilities) to require vibration isolation per ASHRAE guidelines.

Timing/Implementation: *Prior to issuance of building permits*

Enforcement/Monitoring: *City of Hayward Planning Division*

MM NOI-3 Heavy equipment, including bulldozers and haul trucks, shall be restricted from operating within 25 feet of existing structures to the extent feasible. Within 50 feet of existing structures, only nonvibratory soil and pavement compaction methods shall be used.

A construction liaison shall be designated to ensure coordination between construction staff and neighbors to minimize disruptions due to construction vibration. Neighboring property owners within 200 feet of construction activity shall be notified in writing of the contact information for the construction liaison.

Timing/Implementation: *Prior to issuance of grading or demolition permits and during construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Public Works Department – Engineering Division*

d) ***Less Than Significant Impact with Mitigation Incorporated.***

Construction activities would include the use of heavy equipment for excavation, grading, erection, and other activities. Heavy trucks would travel to, from, and within the site hauling soil, equipment, and building materials. Smaller equipment, such as jackhammers, pneumatic tools, and saws, could be used during all construction phases.

Nearby existing sensitive receptors could be affected by construction noise. Potential construction noise impacts would vary with distance and shielding provided by existing buildings. **Table 3.12-5** summarizes the expected construction phases, equipment, and typical noise levels. It is not anticipated that the project would require extreme noise-generating construction activities such as pile driving or rock blasting.

TABLE 3.12-5
TYPICAL CONSTRUCTION NOISE LEVELS

Phase	Equipment	Noise Level (dBA at 50-feet)
Site Preparation and Grading	Scraper, compactor, water truck, grader, excavator, dump truck	85
Utilities	Excavator, rubber-tired loader, water truck, backhoe, dump truck	80
Foundations	Forklift, compressor, cement mixer/truck, concrete finisher, concrete boom pump	85
Building Construction Exterior	Crane, compressor, hand/power tools	85
Building Construction Interior	Compressor, paint sprayer, hand/power tools	80
Hardscaping and Landscaping	Backhoe, loader, dump truck, cement mixer/truck, paver, compactor	80

Source: FHWA 2006

As shown in **Table 3.12-5**, some equipment anticipated to be used in project construction could generate intermittent noise levels up 85 dB at a distance of 50 feet. When set back 50 feet, these construction activities would meet the City's noise limit of 86 dB at the property line. However, at a distance of 25 feet, these construction activities could exceed the City's noise limit of 83 dB. This would be a potentially significant impact. Mitigation measure **MM NOI-4** would limit construction hours in accordance with City Municipal Code Section 4-1.03.4 and require further feasible measures to reduce construction noise impacts. With implementation of mitigation measure **MM NOI-4**, the project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. The impact would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM NOI-4 The project applicant shall ensure through contract specifications that construction noise and vibration abatement practices are implemented by contractors to minimize construction noise and vibration levels. Contract specifications shall be included in the construction document, which shall be reviewed by the City of Hayward prior to issuance of a demolition or grading permit. The construction noise and vibration abatement practices shall include the following:

- In conformance with Section 4-1.03-4 of the City's Municipal Code, construction activities between 7:00 a.m. and 7:00 p.m. Monday through Saturday or between 10:00 a.m. and 6:00 p.m. on Sundays or holidays, unless other construction hours are permitted by the City Engineer or Chief Building Official, shall not include any individual equipment that produces a noise level exceeding 83 dB measured at 25 feet, nor shall activities produce a noise level outside the project property lines in excess of 86 dB. During all other hours, noise shall not exceed the limits defined in Municipal Code Section 4-1.03.1 (70 dB daytime or 60 dB nighttime, measured at residential property lines).

- If noise-generating construction activities must occur within 50 feet of a noise-sensitive property line (e.g., residences, schools, hospitals, elder-care facilities) and would generate a noise level greater than 86 dB, a noise barrier is to be installed between the source and the neighboring property to reduce noise. The barrier shall be minimum of 8 feet high and continuous, with no gaps or holes.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

- Stationary noise sources and staging areas shall be located as far away as is feasible from existing noise-sensitive receivers. Locating stationary noise sources near existing roadways away from adjacent properties is preferred. If located otherwise, stationary noise sources are to be enclosed or shielded from neighboring noise-sensitive properties with noise barriers to the extent feasible.

- Electric air compressors and similar power tools shall be used rather than diesel equipment, where feasible.

- Air compressors and pneumatic equipment shall be equipped with mufflers, and impact tools shall be equipped with shrouds or shields, where feasible.

- Construction vehicle routes shall be selected to avoid quieter residential streets where possible.

- A construction liaison shall be designated to ensure coordination between construction staff and neighbors to minimize disruptions due to construction noise. Neighboring property owners within 200 feet of construction activity shall be notified in writing of the contact information for the construction liaison.

Timing/Implementation: *Prior to issuance of grading or demolition permits and during construction*

Enforcement/Monitoring: *City Hayward Planning Division and Public Works Department Engineering Division*

e, f) ***No Impact.***

The closest airport to the proposed project is the Hayward Executive Airport approximately 3.7 miles northwest. Per the Hayward Executive Airport Land Use Compatibility Plan, the project site is not within the airport influence area (Alameda County ALUC 2010). There are no private landing strips within 10 miles of the project site (FAA 2017). Therefore, the project would not expose people residing or working in the project area to excessive noise from airports or airstrips, and there would be **no impact**.

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

ENVIRONMENTAL SETTING

Hayward Municipal Code Chapter 10, Article 24, referred to as the South Hayward BART/Mission Boulevard Form-Based Code, applies to the project site and was the subject of an EIR that has been referenced throughout this IS/MND; it became effective on October 11, 2011. The South Hayward BART/Mission Boulevard Form-Based Code EIR noted that an amendment to the Hayward General Plan that was in effect at the time was required to accommodate the higher residential densities planned for the subject area. That EIR identified a potentially significant impact due to a population increase above regional population projections prepared by ABAG. To mitigate the impact, the EIR included a mitigation measure requiring the City of Hayward to consult with ABAG to ensure buildout populations for the subject area are included in future regional projections (South Hayward BART/Mission Boulevard Form-Based Code EIR mitigation measures Pop-1 and Pop-2). Subsequently, the Hayward General Plan was adopted in 2014, incorporating the South Hayward BART/Mission Boulevard Form-Based Code. Therefore, the mitigation identified in the prior environmental review documents was carried out as part of the General Plan update process.

As detailed in Land Use 10.b) above, the proposed project includes a General Plan amendment and rezoning to develop the scattered sites as one cohesive neighborhood with a variety of land uses. Specifically, the proposed project would involve a General Plan amendment to convert a small portion of the site from the *Medium Density Residential* General Plan land use designation (approximately 1.8 acres) to *Sustainable Mixed Use* General Plan land use designation; and to convert approximately 7.6 acres of the existing 10.2 acres of land with *Parks and Recreation* General Plan land use designation to *Sustainable Mixed Use* General Plan land use designation. The amendments would result in approximately 22.4 acres of land with a *Sustainable Mixed Use* designation and approximately 2.6 acres with a *Park and Recreation* designation. The proposed project also involves rezoning from the current variety of zoning districts to PD (Planned Development) District to facilitate the proposed development.

While the density of the proposed project would vary by planning area, the overall density of the project would be 18 dwelling units per acre. According to the California Department of Finance (DOF) (2017), the average household size in Hayward is approximately 3.24 persons per household.

With the proposed residential units (472 units), the assumed residential population would be approximately 1,530 residents.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

The proposed average density across the project site of 18 dwelling units per acre is within the density currently permitted on the project site, per Hayward Municipal Code Section 10-24.300, Table 11, Form Based Code Summary. Specifically, 5.3 acres of the project site are located within the S-T4 District which allows a density range between 17.5 to 35 units per acre, and 7.6 acres of the project site are in the S-T5 District which allows a density range between 35 to 55 units per acre. Therefore, under the current zoning, residential densities could result in development of 358 units, if developed under the lowest density range, and up to 603 residential units, if developed under the highest density permitted. Further, the underlying *Sustainable Mixed Use* General Plan land use designation allows density ranges between four and 100 units per acre. Therefore, the proposed project which would result in development of 472 residential units at average density of 18 units per acre are well within the density permitted under current zoning and General Plan designations for the area.

The existing structures on the project site include a single-family home and a garage. The project proposes the demolition of the existing structures and construction of 472 new residential units and 20,000 square feet of retail space, resulting in a net gain of 471 residential units. Assuming an average household size of 3.24 persons, these units would generate a total population increase of approximately 1,526. The number of future employees was calculated to be 50 for the retail uses based on an assumption of 2.5 employees per 1,000 square feet for commercial/retail. Thus, the total service population defined as residents and workers was estimated at 1,560 (Illingworth and Rodkin 2017).

The California Department of Finance (2017) estimated that the total residential population of Hayward in 2017 was 161,040. The proposed project would increase the city's population by less than 1 percent. In addition, the Hayward General Plan estimates that the city would have an estimated population of 183,533 in 2040 (Hayward 2014a). The proposed project would represent about 0.8 percent of this future population. Therefore, the proposed project would not result in a significant increase in local or regional population. The project would also not be considered growth inducing since the increase in population would be within population projections for Hayward, and as anticipated in the General Plan. The project is located adjacent to existing development and would not require new services, roads, or utilities. Therefore, impacts to population growth in the area would be **less than significant**.

b, c) ***Less Than Significant Impact.***

The project site currently contains one dwelling unit. The project proposes to demolish this existing single-family residence and replace it with a mixed-use development, including 472 new residential units. Therefore, the project would result in a net increase in housing units in the city. Demolition of the existing residence would have a **less than significant** impact on the city's housing.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

FIRE PROTECTION

The Hayward Fire Department (HFD) provides fire protection services in Hayward and to the Fairview Fire Protection District on a contract basis. According to the Hayward 2040 General Plan Background Report (2014b), the HFD has 118 sworn personnel, with a total of approximately 136 staff members. The HFD has nine fire stations, seven in Hayward and two in the Fairview area. The nine stations house 11 fire companies, which include nine engine companies, two truck companies, an aircraft fighting apparatus, and a firefighting apparatus. In 2012, the HFD responded to over 20,962 alarms and 15,163 calls for service, with approximately 71 percent of the calls consisting of medical emergencies. Most of the project site parcels are covered by Fire District 3 (firehouse at 31982 Medinah Street), and a portion of PA 2.4 is in Fire District 7 (firehouse at 28270 Huntwood Avenue). If the alarm call is for multi company responses, Fire Station 2 (360 West Harder Road) and Fire Station 4 would also respond (27836 Loyola Avenue), along with Battalion 1 (22700 Main Street) and Battalion 2 (28270 Huntwood Avenue) (Massone 2018). Multi company responses included all fires, all hazardous materials, and all rescues. Fire Stations 3, 2, and 4 are single stations and are staffed with the following resources twenty-four hours a day: one captain, one apparatus operator, and one firefighter. Fire Station 7 is a double station and is staffed with the following resources twenty-four hours a day: two captains, two apparatus operators, two firefighters, and one battalion chief. HFD's goal is to arrive at the scene within 5 minutes of dispatch, 90 percent of the time, and within 8 minutes for all remaining units. Current response times meet the desired performance standards (ibid).

POLICE PROTECTION

Law enforcement services are provided by the Hayward Police Department (HPD). The department has four divisions: Office of the Chief, Field Operations, Investigations, and Support Services. According to information provided by the department, the HPD employs 198 sworn officers of an overall staff of over 300. The department's Southern District Office is located at 28200 Ruus Road, approximately 0.8 mile from PA 2-4, the closest portion of the project site. The project site is in police beat H, which is bounded by Sorenson Road and Tennyson Road to the north, the Hayward Hills to the east, Industrial Parkway/Industrial Parkway West to the south, and I-880 and

the Union Pacific Railroad tracks to the west. Police beat H generated 14,230 calls for service in 2017.

SCHOOLS

Schools in Hayward are in the Hayward Unified School District (HUSD), which operates 22 elementary, five middle, and four high schools in the Hayward Planning Area. The HUSD had a total student enrollment of 20,496 in 2011–2012. Students from the proposed project are expected to attend Treeview Elementary School, Bowman Elementary School, Cesar Chavez Middle School, Hayward High School, Tennyson High School, and Mount Eden High School (Gonzales 2018).

PARKS

Most park in the city are under the jurisdiction of the Hayward Area Recreation and Park District (HARD), which also serves the unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview. HARD currently owns, leases, maintains, or operates a system of 106 facilities, encompassing almost 2,000 acres. HARD operates 57 parks in the Hayward Planning Area 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 145.70 acres of open space, trails, and linear parkland. The East Bay Regional Park District (EBRPD) also provides parks and recreation services in Hayward.

OTHER PUBLIC FACILITIES

The Hayward Public Library system includes the Main Library, located at 835 C Street, and Weekes Branch Library, located at 27300 Patrick Avenue. A new Main Library is currently under construction and is expected to be completed in 2018, at the corner of Mission Boulevard and C Street. As of 2012, the City's two branches combined to contain over 169,697 books, magazines, newspapers, online databases, books on CD, music CDs, DVDs, government documents, and other materials (City of Hayward 2014d).

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

Development of the proposed project would result in the addition of approximately 1,526 residents and about 50 retail workers to the project site (assuming 2.5 workers per 1,000 square feet of retail space). The project area is currently served by the HFD for fire and emergency services. Planned growth under the City's General Plan is expected to increase calls for HFD service. As described for Checklist item 13.a), the project's increase in population would be well within population projections for Hayward, and as anticipated in the General Plan. The increase in development and population on the project site would likely result in additional calls to the HFD for service and HFD has stated that the project could result in the need for expansion of fire services (Massone 2018). The proposed project would contribute to the funding of HFD services through payment of property and sales taxes to the City of Hayward. Since the project site is served by existing fire service facilities, and the City of Hayward has planned for growth in this area, the need for new or expanded facilities is not expected. To avoid or reduce potential impacts the project would comply with all State mandated minimum code standards as well as any local ordinances, consistent with HFD recommendations. As a result, the impact related to the provision of fire services to the proposed project would be **less than significant.**

b) ***Less Than Significant Impact.***

Development of the proposed project would result in the addition of up to approximately 1,526 residents and about 50 retail workers to the project site. The project area is currently served by the HPD for police services. Planned growth under the City's General Plan is expected to increase calls for HPD service. As described for Checklist item 13.a), the project's increase in population would be within population projections for Hayward, and as anticipated in the General Plan.

The increase in the population on the project site may result in additional calls to the HPD for service, potentially increasing response times. As part of the development application process, the City (including HPD) evaluated the project's site plan. Additionally, HPD and the City reviewed the site plan for a Crime Prevention Through Environmental Design (CPTED) design features, which are used by police departments throughout the country to reduce crime through site plan features.

As described in Checklist section 16.d), a Traffic Impact Analysis (TIA) was prepared for the project, which examined the proposed project site plan in order to evaluate: access to the project; internal circulation for vehicles, pedestrians and bicycles; and the adequacy of on-site vehicle circulation, including delivery trucks and emergency vehicles. Service and emergency vehicles would have access to the proposed development via all proposed driveways, which are listed in **Table 3.16-11**. Based on this evaluation, the TIA concluded that the proposed on-site vehicle circulation is adequate and should not result in any significant traffic operations issues. The TIA analysis also determined that the project would not increase hazards due to a design feature or incompatible uses.

The proposed project would contribute to the funding of HPD services through payment of property and sales taxes to the City of Hayward. Since the project site is served by existing police service facilities, and the City of Hayward has planned for growth in this area, the need for new or expanded facilities is not expected. Therefore, there would be no potential for significant environmental impacts from the construction of new or expanded facilities. As a result, the impact of the proposed project related to the provision of law enforcement services would be **less than significant**.

c) ***Less Than Significant Impact.***

Development of the proposed project would increase the number of students attending schools operated by the HUSD. The proposed project would generate approximately 115 elementary school students, 30 middle school students, and 56 high school students.[2] According to the Hayward General Plan Background Report (2014b), HUSD schools are generally not overcrowded, as the school district has experienced a substantial decline in its student population since 2000. Schools in the district are operating with surplus capacity due to a decline in the number of students.

[2] Calculated assuming 0.243 elementary school, 0.063 middle school, and 0.119 high school students per occupied housing (HUSD 2007).

Nonetheless, the project applicant for the proposed project would be required to pay school development fees, as dictated by state law, prior to the issuance of building permits. Currently, these fees are $2.97 per square foot of residential habitable space and $0.47 per square foot of commercial/retail space (HUSD 2018). According to Government Code Section 65996, payment of such fees constitutes full mitigation of any school impacts under CEQA. Therefore, any impacts from the increase in school enrollment would be offset by the required payment of development fees. This impact is considered **less than significant**.

d) ***Less Than Significant Impact.***

Development of the project site with residential uses under the proposed project would result in about 1,526 additional people living in Hayward, thereby increasing demand for park services. HARD's parks in the vicinity of the project site include Valle Vista Park, Stony Brook Park, Tennyson Park, and Mission Hills of Hayward Golf Course. An EBRPD park, Garin/Dry Creek Pioneer Regional Park, is also proximate. In addition, the proposed project would relocate and enlarge Valle Vista Park, providing new recreational amenities.

As described in the Project Description and Land Use 10.b) above, the proposed project would result in the relocation and expansion of HARD's Valle Vista Park by 0.86 acres (from one to 1.86 acres). The project would also include a parkway trail (approximately 0.54 acre) and group and private open space throughout the planning areas. To address the additional park needs of the proposed project, avoid overuse of existing parks, and avoid a deficiency of parkland acreage in the city, the proposed project would be required to comply with Hayward Municipal Code Chapter 10, Article 16, Property Developers – Obligations for Parks and Recreation which requires dedication of land, payment of in lieu fees or a combination of both in accordance with the requirements set forth in the ordinance. Per the ordinance, the City's parkland dedication requirement is 748 square feet per single-family detached unit, 713 square feet per single-family attached unit, and 604 square feet per multi-family unit, and the park dedication fee requirement is $11,953 per single-family detached unit, $11,395 per single-family attached unit, and $9,653 per multi-family unit. The City considers compliance with this Ordinance as adequate mitigation of development impacts to nearby recreation facilities. Therefore, this impact is considered **less than significant.**

e) ***Less Than Significant Impact.***

Development of the project site with residential uses under the proposed project would result in about 1,526 additional people living in Hayward, thereby increasing demand for library services. The City's library requirements are based on a recommended standard of 0.46 to 0.5 square feet of public use space per capita. The two libraries in the City's library system together provide approximately 33,567 square feet of library space (Hayward 2014a). Upon completion of the new Main Library, the two libraries in the library system would provide about 66,567 square feet of library space. Based on a current population of 161,040 (DOF 2017), there is currently approximately 0.21 square feet of public use space per capita in the system, which is below the standard established in the City's General Plan. Upon completion of the new Main Library, there would be about 0.42 square feet of public use space per capita in the system, which is close to the City's standard. With the addition of the residents associated with the proposed project, the amount of library space per resident would decrease by just under one percent. The relative impact of the proposed development is not considered substantial; therefore, the project would not trigger the need for construction of new or expanded library facilities. Thus, there would

be no potential for significant environmental impacts from the construction of new or expanded facilities. The impact related to the provision of library services under the proposed project would be **less than significant**.

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

ENVIRONMENTAL SETTING

As noted for checklist item d) in subsection 14, Public Services, Hayward residents are served by HARD and EBRPD parks and recreation services. HARD operates 57 parks in the Hayward Planning Area 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 145.70 acres of open space, trails, and linear parkland.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact.***

The proposed project would result in the enlargement of HARD's Valle Vista Park by 0.86 acres (from 1 to 1.86 acres), and construction of a new public park with a range of amenities. The project would also include a parkway trail (approximately 0.54 acre) and group and private open space throughout the planning areas. To address the additional park needs of the proposed project, avoid overuse of existing parks, and avoid a deficiency of parkland acreage in the city, the proposed project would be required to comply with Hayward Municipal Code Chapter 10, Article 16, Property Developers – Obligations for Parks and Recreation which requires dedication of land, payment of in lieu fees or a combination of both in accordance with the requirements set forth in the ordinance. Per the ordinance, the City's parkland dedication requirement is 748 square feet per single-family detached unit, 713 square feet per single-family attached unit, and 604 square feet per multi-family unit, and the current park dedication fees are $11,953 per single-family detached unit, $11,395 per single-family attached unit, and $9,653 per multi-family unit. The City considers compliance with the Ordinance as adequate mitigation of development impacts to nearby recreation facilities. Therefore, this impact is considered **less than significant**.

b) ***Less Than Significant Impact.***

The proposed project would result in the relocation and enlargement of Valle Vista Park by 0.86 acres (from 1 to 1.86 acres). Since the park is a component of the project, the environmental consequences of construction and operation of the new Valle Vista Park are comprehensively assessed throughout this document. Where appropriate, measures

to mitigate the project's effects have been included, which would mitigate any impact associated with construction of the new park. Therefore, this impact is considered **less than significant**.

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

ENVIRONMENTAL SETTING

A Traffic Impact Analysis (TIA) report dated February 21, 2018, was prepared by TJKM. The report is included as **Appendix TIA** and is summarized throughout this subsection. The TIA was conducted by evaluating the operations at the study intersections in Hayward potentially impacted by the proposed project during the morning and evening commute periods, when traffic volumes on the surrounding streets are the highest. The TIA evaluated traffic conditions at 10 study intersections during the AM and PM peak hours on a typical weekday. The peak periods observed were between 7 and 9 AM and between 4 and 6 PM The highest single one-hour period recorded for each peak period was used in the analysis. The study intersections were selected in consultation with City of Hayward staff. The study intersections and associated traffic controls are as follows:

1. Mission Boulevard and Industrial Parkway (signalized)
2. Industrial Parkway and Dixon Street (signalized)
3. Industrial Parkway and Huntwood Avenue (signalized)
4. Industrial Parkway West and Industrial Parkway Southwest (signalized)
5. Mission Boulevard and Valle Vista Avenue (signalized)
6. Mission Boulevard and Tennyson Road (signalized)
7. Tennyson Road and Dixon Avenue (signalized)
8. Dixon Street and Valle Vista Avenue (all-way stop)
9. Dixon Street and South Hayward Signalized BART Access (signalized)
10. Tennyson Road and Huntwood Avenue (signalized)

The TIA evaluated traffic operational conditions during weekday AM and PM peak hours under the following six scenarios:

Scenario 1: Existing Conditions – This scenario evaluates the study intersections based on existing traffic controls, lane geometry, traffic counts, and field surveys.

Scenario 2: Existing plus Project Conditions – This scenario is identical to Existing Conditions, but with the addition of traffic generated by the proposed project to Existing Conditions.

Scenario 3: Background Conditions – This scenario evaluates operational conditions at the study intersections based on a projection of existing traffic volumes five years into the future, which includes traffic generated by pipeline projects. The volumes were interpolated by using the latest available version of the City of Hayward's General Plan update model, using methodology consistent with TRB NCHRP 255.

Scenario 4: Background plus Project Conditions – This scenario is identical to Background Conditions, but with the addition of traffic generated by the proposed project to Background Conditions.

Scenario 5: Cumulative Conditions – This scenario evaluates operational conditions at the study intersections based on a projection of existing traffic volumes 25 years into the future. Projections were derived from a growth factor developed from the latest City of Hayward General Plan update model. The growth factor includes both regional traffic growth and traffic generated by development buildout in Hayward.

Scenario 6: Cumulative plus Project Conditions – This scenario is identical to Cumulative Conditions, but with the addition of traffic generated by the proposed project to Cumulative Conditions.

The TIA identified potential traffic impacts from the proposed project based on the City's established traffic operational thresholds. The report also included evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles,

and pedestrians; evaluation of on-site vehicle parking supply and transportation demand management strategies; and queuing analysis at the driveways and at selected study intersections.

ANALYSIS METHODOLOGY

Intersection traffic operations were evaluated using the level of service (LOS) concept. Level of service is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. The operational LOS are given letter designations from A to F, with A representing the best operating conditions (free-flow) and F the worst (severely congested flow with high delays). Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets in urban areas.

Signalized Intersections

The study intersections under traffic signal control were analyzed using the 2000 Highway Capacity Manual (HCM) Operations Methodology for signalized intersections described in Chapter 16. This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak-hour intersection operating conditions. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections was calculated using Synchro 8.0 analysis software and was correlated to a LOS designation. **Table 3.16-1** summarizes the relationship between the control delay and LOS for signalized intersections.

TABLE 3.16-1
LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay

Source: Transportation Research Board 2000

Unsignalized Intersections

The study intersections under stop control (unsignalized) were analyzed using the 2000 HCM Operations Methodology for unsignalized intersections described in Chapter 17. LOS ratings for all-way stop-sign-controlled intersections are based on the average control delay expressed in seconds per vehicle. At side-street-controlled intersections or two-way stop sign intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for the entire intersections is presented for all-way stop-controlled intersections. The average control delay for unsignalized intersections was calculated using Synchro 8.0 analysis software and was correlated to a LOS designation. **Table 3.16-2** summarizes the relationship between delay and LOS for unsignalized intersections.

TABLE 3.16-2
LEVEL OF SERVICE FOR STOP-CONTROLLED INTERSECTIONS

Level of Service	Description
A	Very low control delay of less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: Transportation Research Board 2000

Traffic Signal Warrant Evaluation Methods

In order to determine whether traffic signals should be installed at currently unsignalized intersections, a supplemental traffic signal warrant analysis was also completed at the unsignalized intersection of Dixon Street and Valle Vista Avenue under Cumulative scenarios, both with and without project traffic. The California Manual on Uniform Traffic Control Devices (CA-MUTCD), dated November 2014, was used for this analysis. The term *signal warrants* refers to the list of established criteria used by the California Department of Transportation (Caltrans) and other public agencies to quantitatively justify or ascertain the need for installation of a traffic signal at an unsignalized intersection location. The CA-MUTCD signal warrant criteria are based on several factors including volume of vehicular and pedestrian traffic, location of school areas, frequency and type of collisions, etc. CA-MUTCD states, "The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." The TIA evaluated the CA-MUTCD Peak-Hour-Volume-based Warrant 3 (Urban Areas) as a representative type of warrant analysis.

Metropolitan Transportation System Freeway and Roadway Segment Analysis

Operations of the Metropolitan Transportation System (MTS) freeway and surface street segments were assessed based on volume-to-capacity (V/C) ratios. For freeway segments, a per-lane capacity of 2,200 vehicles per hour was used. For surface streets, a per-lane capacity of 1,200 vehicles per hour was used. This methodology is consistent with the approach used for other projects in Alameda County. These capacities do not reflect additional capacity provided at intersections through turn pockets. Roadway segments with a V/C ratio greater than 1.0 are assigned LOS F (see **Table 3.16-3**).

TABLE 3.16-3
LEVEL OF SERVICE CRITERIA FOR ROADWAY SEGMENTS

Level of Service	Volume to Capacity Ratio
A	≤ 0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 0.99
F	≥1.00

Source: Transportation Research Board 2000

SIGNIFICANT IMPACT CRITERIA/LEVEL OF SERVICE STANDARDS

City of Hayward

The City currently utilizes LOS E as the minimum acceptable level of service threshold for signalized intersections during the AM and PM peak periods. Therefore, the Traffic Impact Analysis used LOS E as the minimum acceptable threshold at all signalized study intersections for traffic impact purposes. Regarding acceptable levels of service during AM and PM peak periods, the Hayward General Plan Mobility Element (2014a) includes the following implementing policy:

> M-4.3 Level of Service: The City shall maintain a minimum vehicle Level of Service E at signalized intersections during the peak commute periods except when a LOS F may be acceptable due to costs of mitigation or when there would be other unacceptable impacts, such as right-of-way acquisition or degradation of the pedestrian environment due to increased crossing distances or unacceptable crossing delays.

For the purposes of the TIA, project impacts at signalized intersections were considered significant if the addition of project-generated traffic causes the AM or PM peak-hour level of service to degrade from an acceptable LOS E or better to an unacceptable LOS F.

In addition, for both signalized and unsignalized intersections, the project would result in a potentially significant impact if the intersection operates at LOS F without the project under Existing or Cumulative conditions and the addition of the project under Existing plus Project or Cumulative plus Project conditions results in an increase in the average control delay of 5.0 seconds or greater when compared to the associated no project condition.

MTS Arterial and Freeway Segments

For CEQA purposes, a roadway segment is considered to operate at an acceptable level if the segment operates at the level of service standard identified for that segment by the county congestion management agency. According to the Alameda County Transportation Commission (ACTC) 2011 Congestion Management Program (CMP), the ACTC has not adopted any policy for determining the threshold of significance for level of service for the Land Use Analysis Program of the CMP. Therefore, for purposes of this analysis, the level of service standard for MTS roadways, which include the CMP roadway network, has been set as any impact that:

- Results in any roadway segment currently meeting its CMP LOS E standard to degrade to an LOS F, or
- Results in more than a five percent increase in the volume-to-capacity (V/C) ratio for any roadway segment already exceeding its CMP level of service standard, or if already LOS F, under cumulative no project conditions.

EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including roadway facilities, bicycle and pedestrian facilities, and available transit service. In addition, existing traffic volumes and operations are presented for study intersections, including the results of level of service calculations.

Existing Setting and Roadway System

Regional roadway facilities providing access to the proposed project are Mission Boulevard, Tennyson Road, Industrial Parkway West, Industrial Parkway Southwest, Huntwood Avenue, Dixon Street, and Valle Vista Avenue.

Mission Boulevard is a four- to six-lane, north–south roadway with raised median that extends from I-238 in the north of Hayward to I-880 in South Fremont. This roadway provides local access to residential and commercial developments, but it also serves as a regional facility from Oakland (as International Boulevard/State Route [SR] 185) to Fremont. Mission Boulevard provides access to the project site via direct driveways, along with Valle Vista Avenue, Industrial Parkway, and Tennyson Road. Parking is allowed on certain sections of the roadway near the project site. The posted speed limit is 40 miles per hour (mph) in the project vicinity.

Tennyson Road is a four-lane, east–west roadway that extends from Mission Boulevard in the east to Industrial Boulevard in the west. This roadway provides local access to residential and commercial developments. It has an interchange connection with I-880. Tennyson Road provides access to the project site via Dixon Street. On-street parking is allowed on most sections of the roadway near the project area. The posted speed limit is 35 mph in the project vicinity.

Industrial Parkway is a four-lane, east–west roadway extending between Mission Boulevard to the east and Hesperian Road to the west. It continues west as Industrial Boulevard. Industrial Parkway provides access to the project site via Dixon Street and Mission Boulevard. It has a partial interchange with I-880 with ramps to and from the north. The posted speed limit is 45 mph in the study area. This roadway provides local access to commercial developments.

Industrial Parkway Southwest is a four-lane, north–south roadway that extends from Whipple Road on the south to Industrial Parkway on the west. The Whipple Road interchange at I-880 connects directly to Industrial Parkway Southwest. The posted speed limit is 35 mph to 45 mph in the study area. This roadway provides local access to residential and commercial developments.

Huntwood Avenue is a four-lane, north–south arterial street that extends from south of Harder Road to south of Whipple Road east of I-880. The posted speed limit is 25 mph to 30 mph in the study area. This roadway provides local access to commercial developments.

Dixon Street is a two-lane, north–south roadway extending from Tennyson Road to the north and terminating at Industrial Parkway to the south. Two of the project driveways are along Dixon Street. The posted speed limit is 25 mph in the study area. This roadway provides local access to residential developments and to the South Hayward BART station.

Valle Vista Avenue is a two-lane, east–west roadway extending from Mission Boulevard to Dixon Street. Three of the project driveways are along Valle Vista Avenue. The posted speed limit is 25 mph in the study area. This roadway provides local access to residential developments.

Existing Bicycle and Pedestrian Facilities

In the vicinity of the project site, Mission Boulevard has near-continuous sidewalks, and Industrial Parkway has discontinuous sidewalks on one side of the roadway. Valle Vista Avenue and Huntwood Avenue have discontinuous sidewalks on both sides. Dixon Street has continuous sidewalks on both sides of the roadway and crosswalks at all intersections.

Bike paths are provided on one side along Industrial Parkway between Pacific Street and Huntwood Avenue near the project area. Per the Hayward General Plan, bike paths are also proposed along Industrial Parkway east of Pacific Street. A buffered bike lane will be installed between Dixon Street and Mission Boulevard on eastbound Industrial Parkway as part of an upcoming development project.

Currently, bike lanes are provided in both directions along the following sections of roadway in the project vicinity:

- Tennyson Road between Huntwood Avenue and Dixon Street
- Dixon Street between Tennyson Road and Industrial Parkway
- Huntwood Avenue between Tennyson Road and Industrial Parkway

There are no bike lanes or bike routes provided along segments of Mission Boulevard or Valle Vista Avenue near the project site.

Existing Transit Facilities

Hayward is served by Alameda-Contra Costa Transit District (AC Transit) bus service, BART rail service, and Amtrak commuter rail service. The South Hayward BART station is located less than one mile northwest of the project site. Numerous local bus routes traverse the roadways in the immediate project vicinity and serve the South Hayward BART station.

Six local bus routes (Routes 22, 37, 83, 85, 86 and 99) and one all-nighter bus route (Route 801) serve the project site. The bus stops closest to the project site are located on Mission Boulevard near Valle Vista Avenue for the northbound and southbound directions.

The South Hayward BART Station is located within approximately one-half mile of the middle of the project site. BART offers northbound service to on the Richmond and Daly City trains between 4 a.m. and 12:10 a.m. at 15 to 20-minute headways. Southbound service on the Fremont and Warm Springs/South Fremont trains runs between 5:14 a.m. and 1:20 a.m. at 15 to 20-minute headways. Bikes are permitted on all of the BART trains that run through the South Hayward station.

Existing Traffic Volumes and Lane Configurations

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning and evening peak periods. Turning movement counts for vehicles, bicycles, and pedestrians were conducted during typical weekday AM and PM peak periods (7 to 9 AM and 4 to 6 PM, respectively) at the study intersections in May 2017. Field verification of existing intersection lane configurations and traffic controls was also conducted and provided the basis for the level of service analysis for Existing Conditions. **Appendix TIA** includes all data sheets for the collected signal timing sheets, vehicle, bicycle, and pedestrian counts. **Figure 3.16-1** illustrates the existing vehicle turning movement volumes, lane geometry, and traffic controls at the study intersections.

Intersection Level of Service – Existing Conditions

Existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour. The peak-hour factor based on the counts was used to all study intersections for the existing analysis and a two percent heavy vehicle composition was specified for each intersection movement under existing and future conditions peak-hour analysis. Synchro 8 operations analysis software was used to complete the HCM 2000 level of service analysis procedures for intersections.

Under this scenario, all study intersections operate within the City's LOS E or better standards during the AM and PM peak hours. LOS worksheets are provided in **Appendix TIA**.

CHECKLIST DISCUSSION

a) ***Less Than Significant Impact with Mitigation Incorporated.***

The project would generate traffic, which would contribute to area roadway congestion. In order to determine if the project would impact operations at the study intersections, the TIA evaluated the impacts of the proposed project on the surrounding roadway system under Existing with Project Conditions, Background Conditions, Background plus Project Conditions, Cumulative Conditions, and Cumulative plus Project Conditions. First, the method used to estimate the amount of traffic generated by the proposed development is described. Then the results of the LOS calculations for each scenario are presented. Impacts are identified for each project scenario by comparing the level of service results under project conditions to those under the baseline. Measures to mitigate identified impacts are presented at the end of this section.

To determine whether there any additional impacts resulting from the project, the TIA used a three-step process:

1. Trip Generation – Estimates the amount of traffic added to the roadway network.

2. Trip Distribution – Estimates the direction of travel to and from the project site.

3. Trip Assignment – The new trips are assigned to specific street segments and intersection turning movements.

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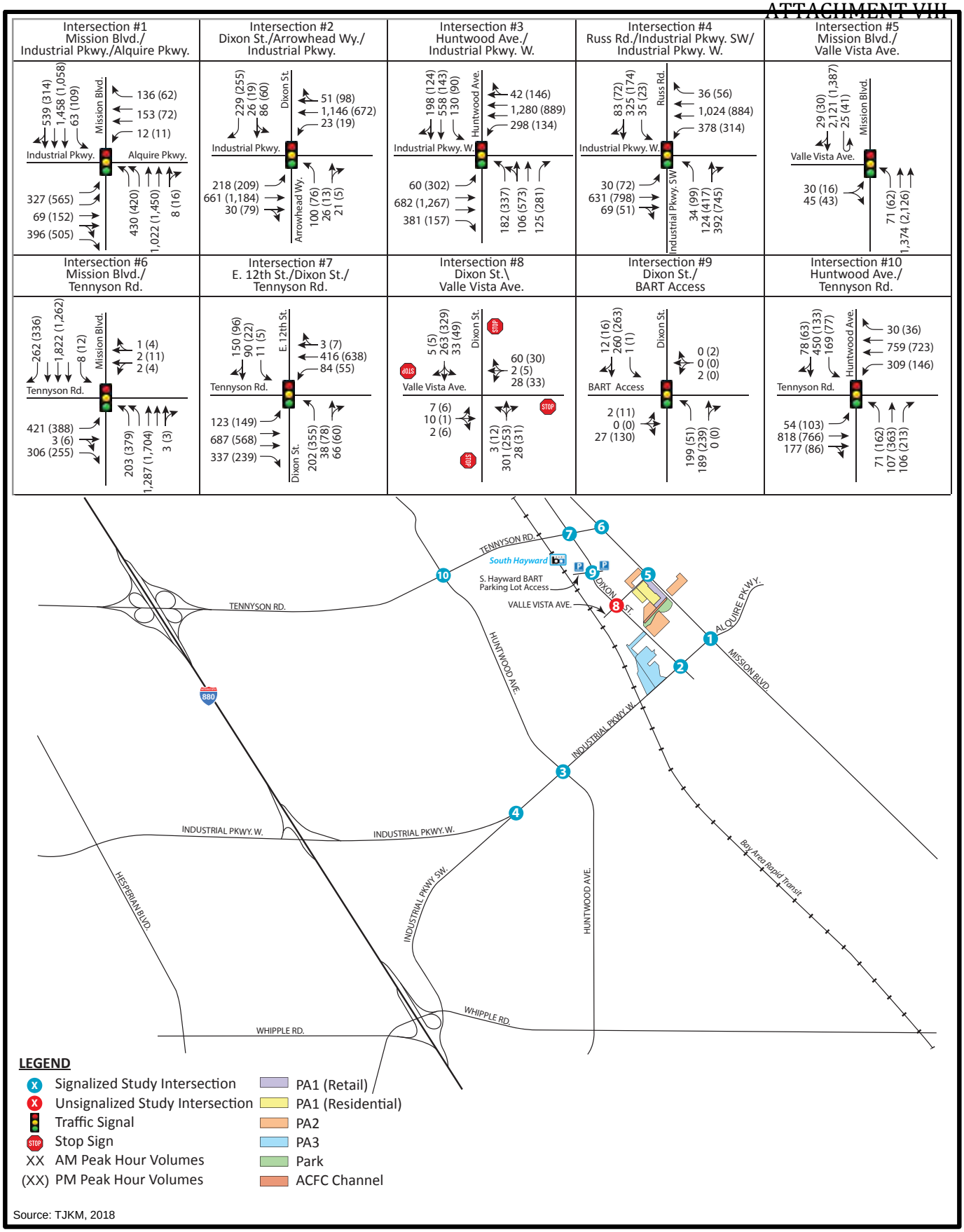

Source: TJKM, 2018

FIGURE 3.16-1

Existing Conditions Traffic Volumes, Lane Geometry and Traffic Controls

Michael Baker INTERNATIONAL

Project Trip Generation

Trip generation estimates were developed for the proposed project based on published rates from the Institute of Transportation Engineers' (2012) publication Trip Generation, 9th edition. Trip credits for existing land uses were not applied in order to provide conservative estimates of total trips. The project includes a Transportation Demand Management (TDM) program. Consistent with industry standards used in Bay Area cities with similar development patterns as Hayward and in consultation with City of Hayward staff, implementation of the TDM would reduce project trips by nine percent. Additionally, a 34 percent trip reduction was included for the retail component to account for peak-hour pass-by trips.

The analysis used published trip rates for the ITE land use Townhouse (Code 230), Apartment (Code 220), and Retail (Code 820). **Table 3.16-4** shows the trip generation under project conditions. The project is expected to generate approximately net 211 weekday AM peak-hour trips (45 inbound, 166 outbound) and 275 weekday PM peak-hour trips (175 inbound, 100 outbound).

TABLE 3.16-4
TRIP GENERATION FOR PROPOSED PROJECT CONDITIONS

Proposed Land Use (ITE Code)	Size	Daily		AM Peak						PM Peak					
		Rate	Trips	Rate	In%	Out%	In	Out	Total	Rate	In%	Out%	In	Out	Total
Residential Condo/ Townhouse (230)	402 DU	5.81	2,336	0.44	17	83	30	147	177	0.52	67	33	140	69	209
Apartment (220)	72 DU	6.65	479	0.51	20	80	7	29	37	0.62	65	35	29	16	45
Retail (820)	20 KSF	42.7	854	0.96	62	38	12	7	19	3.71	48	52	36	39	74
Total Trips Before Discounts			**3,668**				**49**	**183**	**233**				**205**	**124**	**328**
TDM Measure Discount, 9% [a]			-330				-4	-18	-22				-18	-11	-29
Retail Peak Hour Pass-by Trip Reduction (ITE), 34% [b]													-12	-13	-25
Total Net Trips After Discounts			**3,338**				**45**	**166**	**211**				**175**	**100**	**275**

Source: Institute of Transportation Engineers 2012
KSF = one thousand square feet, DU = dwelling unit

a. *TDM Measure Reduction, 9%, consistent with industry standards used in Bay Area cities with similar development patterns as Hayward and in consultation with City of Hayward staff. A separate TDM has been prepared and submitted.*

b. *A PM peak-hour pass-by reduction rate of 34% was applied for Retail land use consistent with ITE recommended average rates.*

Project Trip Distribution and Assignment

Trip distribution is a process that determines in what proportion vehicles would be expected to travel between the project site and various destinations outside the project study area. Assignment determines the various routes that vehicles would take from the project site to each destination using the calculated trip distribution.

Trip distribution assumptions for the proposed project were developed based on the City's General Plan update model, existing travel patterns, and consultation with City staff.

The distribution assumptions are as follows:

- 20 percent to/from Mission Boulevard North
- 2 percent to/from Huntwood Avenue North
- 20 percent to/from Tennyson Road
- 10 percent to/from Industrial Parkway West
- 18 percent to/from Mission Boulevard South
- 7 percent to/from Huntwood Avenue South
- 23 percent to/from Industrial Parkway Southwest

Figure 3.16-2 illustrates the trip distribution percentage developed for the proposed project. **Figure 3.16-3** illustrates the net new project trips assigned to each intersection turning movement by the proposed project. For a conservative approach, the TIA analyzed the project with one limited-access project driveway on both Mission Boulevard and Industrial Parkway and one full-access driveway on both Dixon Street and Valle Vista Avenue. Existing through volumes were estimated at the project driveway locations (Intersections #11 through #14) based on existing volumes at the nearest study intersections. The assigned project trips estimated for the project conditions were added to existing traffic volumes to generate Existing plus Project traffic volumes to represent Existing plus Project Conditions as shown on **Figure 3.16-4**.

Existing plus Project Conditions

The intersection LOS analysis results for Existing plus Project Conditions are summarized in **Table 3.16-5.** Detailed calculation sheets for Existing plus Project Conditions are included in **Appendix TIA**.

Under this scenario, all study intersections operate within the City's standards of LOS E or better during the AM and PM peak hours. Based on the City's impact criteria, the project is expected to have a less than significant impact at all the study intersections. **Figure 3.16-4** shows projected turning movement volumes at all the study intersections for Existing plus Project Conditions. The results for Existing Conditions are included for comparison purposes, along with the projected increases in control delay. It should be noted that some of the study intersections are estimated to show a negative net increase in intersection delay due to the addition of project trips to noncritical turn movements.

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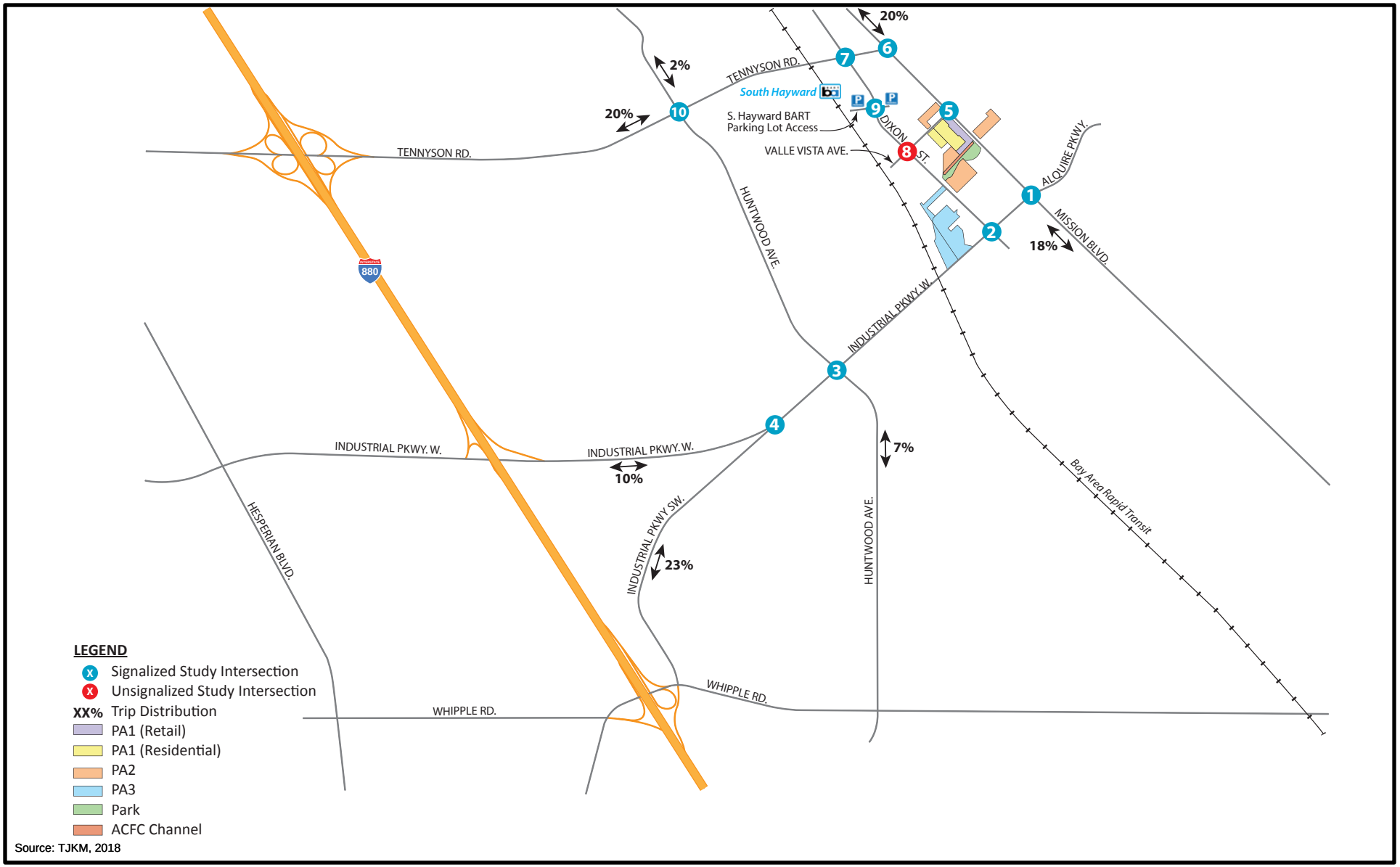

FIGURE 3.16-2
Project Trip Distribution

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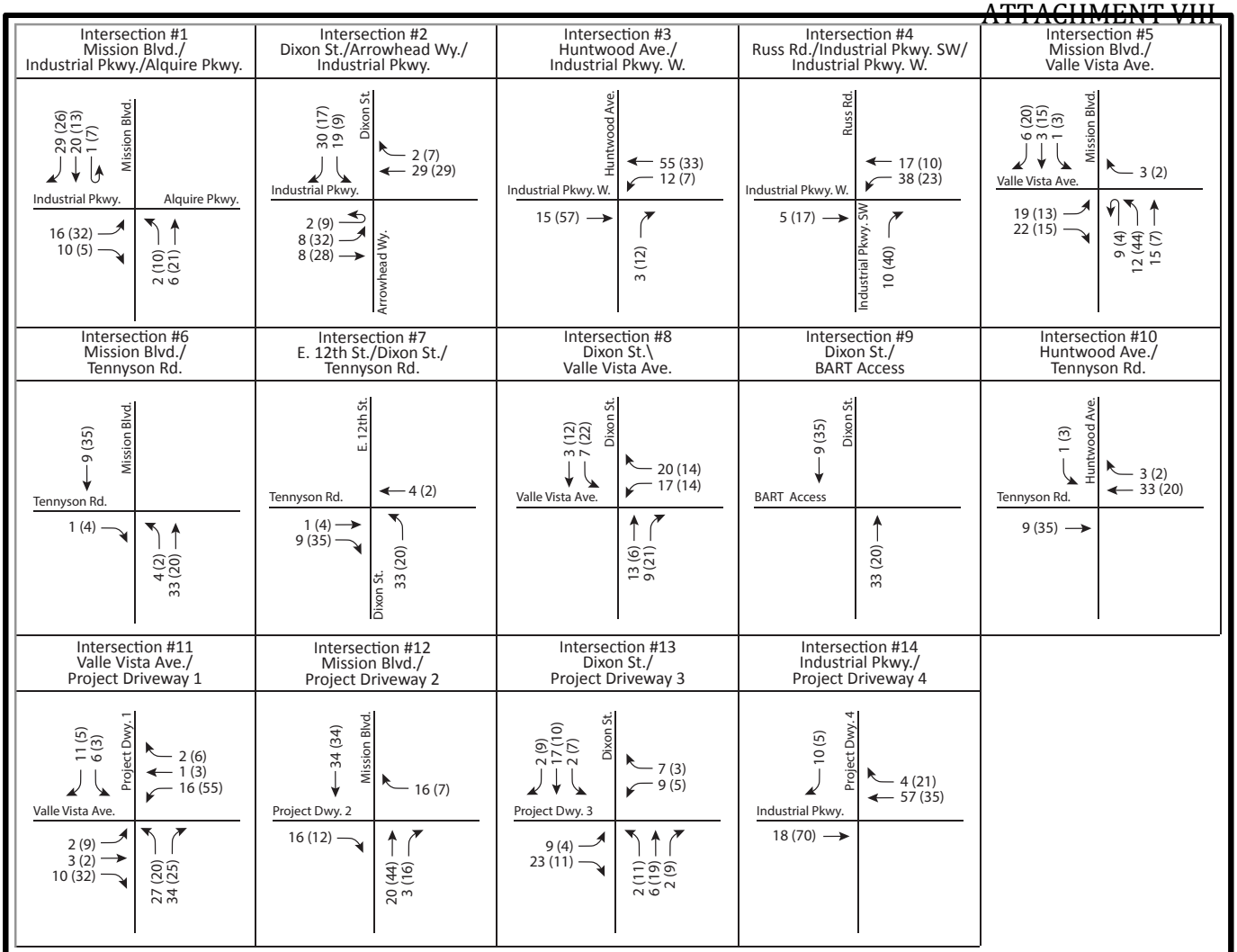

LEGEND

- Study Intersection
- XX AM Peak Hour Trips
- (XX) PM Peak Hour Trips
- PA1 (Retail)
- PA1 (Residential)
- PA2
- PA3
- Park
- ACFC Channel

Source: TJKM, 2018

FIGURE 3.16-3
Project Trip Assignment

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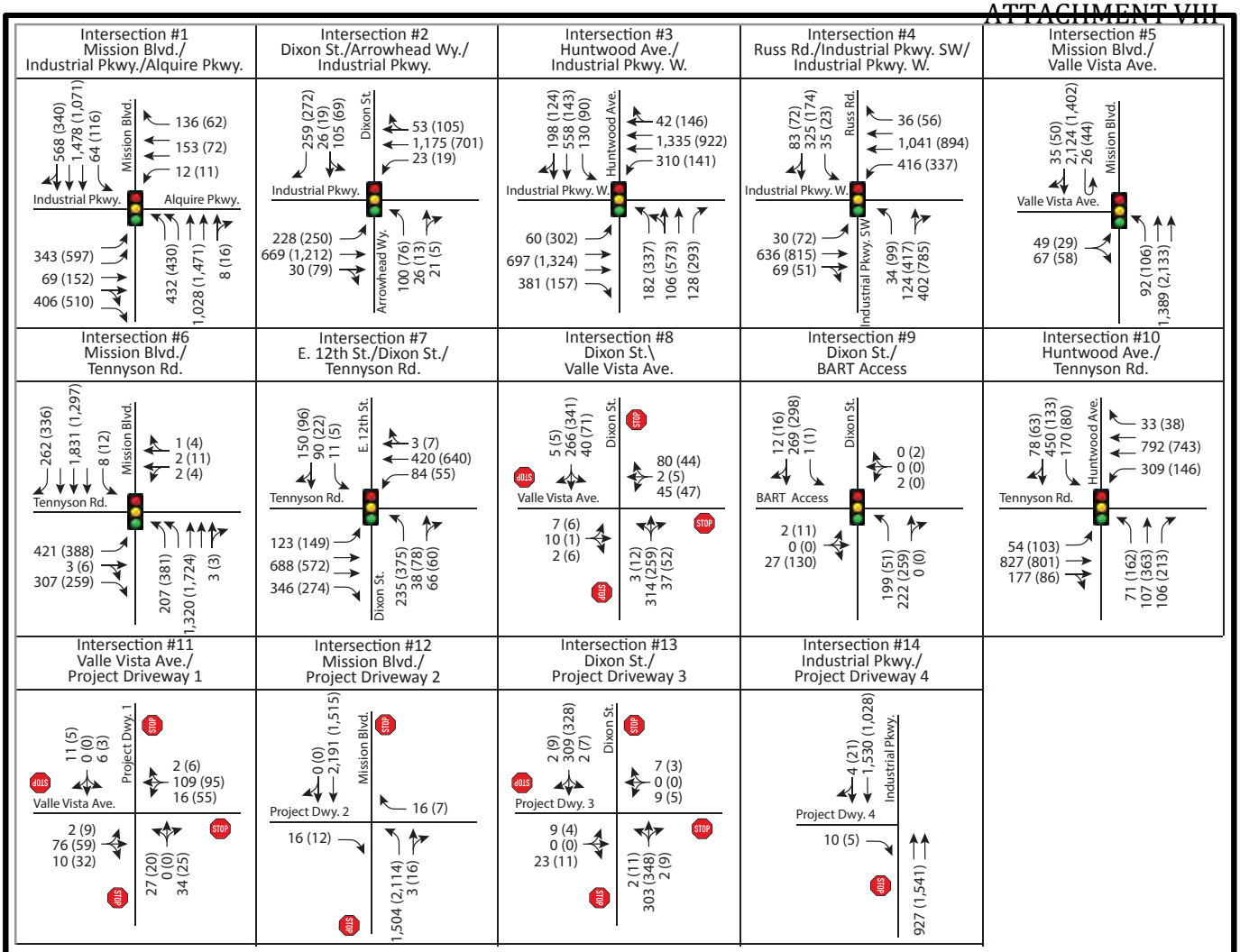

LEGEND

- Traffic Signal
- STOP Stop Sign
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

Source: TJKM, 2018

FIGURE 3.16-4

Existing plus Project Conditions Traffic Volumes, Lane Geometry and Traffic Controls

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TABLE 3.16-5
INTERSECTION LEVEL OF SERVICE ANALYSIS – EXISTING PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Peak Hour [a]	Existing Conditions		Existing plus Project Conditions		Difference in Delay (sec) [d]
				Average Delay [b]	LOS [c]	Average Delay [b]	LOS [c]	
1	Mission Boulevard and Industrial Parkway	Signalized	AM	48.5	D	52.7	D	4.20
			PM	42.2	D	45.8	D	3.60
2	Industrial Parkway and Dixon Street	Signalized	AM	27.6	C	31.9	C	4.30
			PM	18.0	B	24.1	C	6.10
3	Industrial Parkway and Huntwood Avenue	Signalized	AM	52.9	D	55.2	E	2.30
			PM	68.4	E	73.5	E	5.10
4	Industrial Parkway West and Industrial Parkway Southwest	Signalized	AM	31.7	C	35.9	D	4.20
			PM	29.1	C	30.4	C	1.30
5	Mission Boulevard and Valle Vista Avenue	Signalized	AM	14.7	B	20.9	C	6.20
			PM	11.8	B	15.0	B	3.20
6	Mission Boulevard and Tennyson Road	Signalized	AM	32.4	C	32.4	C	0.00
			PM	30.5	C	30.6	C	0.10
7	Tennyson Road and Dixon Street	Signalized	AM	31.1	C	31.1	C	0.00
			PM	35.3	D	35.8	D	0.50
8	Dixon Street and Valle Vista Avenue	All-Way Stop	AM	11.6	B	12.7	B	1.10
			PM	11.7	B	13.3	B	1.60
9	Dixon Street and South Hayward Signalized BART Access	Signalized	AM	13.0	B	12.6	B	-0.40
			PM	11.4	B	11.3	B	-0.10
10	Tennyson Road and Huntwood Avenue	Signalized	AM	61.0	E	61.2	E	0.20
			PM	27.8	C	28.2	C	0.40

Source: TJKM 2018
Notes:
a. *AM = morning peak hour, PM = evening peak hour*
b. *Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections and all-way stop-controlled intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.*
c. *LOS = level of service. LOS calculations conducted using the Synchro 8 level of service analysis software package, which applies the method described in the 2000 Highway Capacity Manual.*
d. *Change in average control delay between Existing and Existing plus Project Conditions.*

Queuing Analysis at Study Intersections

A vehicle queuing and storage analysis was conducted for all exclusive left and right turn pockets at selected study intersections and driveways where project traffic is added under Existing plus Project Conditions. The 95th percentile (maximum) queues were analyzed using the HCM 2000 queue methodology contained in the Synchro 8.0 software for the exclusive left turn/right turn pockets at the study intersections where project traffic is added. Detailed calculations are included in **Appendix TIA** corresponding to the Existing

and Existing plus Project Conditions. Under Existing plus Project Conditions, the project would not contribute any additional queuing to Intersections #9 and #10. Intersections #1 through #7 would experience only minor changes to queuing, and impacts would be less than significant.

Level of Service Analysis at Project Driveways

LOS analysis was conducted at the proposed project driveways on Valle Vista Avenue, Mission Boulevard, Dixon Street, and Industrial Parkway. Existing through volumes were estimated at the project driveway locations based on existing volumes at the nearest study intersections. There are three driveways on Mission Boulevard: two on the west side of Mission Boulevard serving PA 1 (mixed use) and PA 2-4 and one on the east side of Mission Boulevard serving PA 2-3; three driveways on Valle Vista Avenue serving PA 1 (mixed use), PA 2-4, and between PA 1-1 and PA 1-2; two on Dixon Street serving PA 2-3 and PA 3 and one on Industrial Parkway serving PA 3. For a conservative approach, the assessment combined multiple driveways on the same street and analyzed the combined volumes as though they were occurring at a single location. This approach results in one limited-access project driveway (right-in/right-out only) on both Mission Boulevard and Industrial Parkway and one full-access driveway on both Dixon Street and Valle Vista Avenue. Detailed LOS calculations are included in **Appendix TIA**. **Table 3.16-6** summarizes the LOS at the project driveways under Existing plus Project scenario. As shown in the table, under Existing plus Project Conditions, all project driveways are expected to operate at an acceptable level of service, even when considering this conservative approach.

TABLE 3.16-6
LOS AT PROJECT DRIVEWAYS – EXISTING PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Existing Plus Project Conditions			
			AM		PM	
			Delay [a]	LOS [b]	Delay [a]	LOS [b]
11	Valle Vista Avenue & Driveway 1	All-Way Stop	7.8	A	7.9	A
12	Mission Boulevard & Driveway 2	Two-Way Stop	16.6	C	12.7	B
13	Dixon Street & Driveway 3	All-Way Stop	10.4	B	11.2	B
14	Industrial Pkwy & Driveway 4	One-Way Stop	9.9	A	10.1	B

Source: TJKM 2018
Notes:
a. Delay = Average control delay in seconds per vehicle
b. LOS = Level of service

Background Conditions

The intersection LOS analysis results for Background Conditions are summarized in **Table 3.16-7**. This scenario details expected traffic conditions under Background Conditions, based on a projection of existing traffic volumes five years into the future. The volumes were interpolated by using the City's General Plan update model, using methodology consistent with TRB NCHRP 255. The model includes several potential future and approved projects in the project area. Additional trips were added to the intersection of Mission Boulevard and Tennyson Road to account for the future La Vista Park on Tennyson Road, which is not included in the model land use data. **Figure 3.16-5** shows projected turning

movement volumes at all the study intersections for Background Conditions for both the AM and PM peak hours. Lane geometries, signal timings, and traffic controls are assumed to be identical to those under Existing Conditions.

Under this scenario, all the intersections operate within the City's LOS E standards or better during the AM and PM peak hours except for the intersection at Industrial Parkway and Huntwood Avenue (#3) during the PM peak hour (LOS F). Detailed calculation sheets for Background Conditions are included in **Appendix TIA**.

Background plus Project Conditions

This scenario is identical to Background Conditions, but with the addition of projected traffic from the proposed project. **Figure 3.16-6** shows the turning movement volumes, lane geometry, and traffic controls under Background plus Project Conditions for all study intersections. Trip generation, distribution, and assignment for the proposed project are identical to that assumed under Existing plus Project Conditions.

Intersection Level of Service

The intersection LOS analysis results for Background plus Project Conditions are summarized in **Table 3.16-7**. Under this scenario, all the study intersections are expected to continue operating within the City's LOS E standards except for the intersection at Industrial Parkway and Huntwood Avenue (#3), which operates at LOS F with average vehicle control delay of 92.9 seconds in the PM peak hour.

The results for Background Conditions are included for comparison purposes, along with the projected increases in critical delay. The changes in delay between Background and Background plus Project Conditions are used to identify significant impacts. Detailed calculation sheets for Background plus Project Conditions are included in **Appendix TIA**. Based on the City's impact criteria, the proposed project under the Background plus Project scenario would have a significant impact at the study intersection of Industrial Parkway and Huntwood Avenue (#3) during the PM peak hour. Implementation of mitigation measure **MM TRA-1** would reduce this impact to a **less than significant** level.

TABLE 3.16-7
INTERSECTION LEVEL OF SERVICE ANALYSIS – BACKGROUND PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Peak Hour [a]	Background Conditions		Background Plus Project Conditions		Difference in Delay (sec) [d]
				Average Delay [b]	LOS [c]	Average Delay [b]	Average Delay [b]	
1	Mission Boulevard and Industrial Parkway	Signalized	AM	67.1	E	74.1	E	7.00
			PM	46.3	D	52.0	D	5.70
2	Industrial Parkway and Dixon Street	Signalized	AM	34.3	C	39.2	D	4.90
			PM	22.5	C	30.3	C	7.80
3	Industrial Parkway and Huntwood Avenue	Signalized	AM	60.5	E	62.9	E	2.40
			PM	**86.2**	**F**	**92.9**	**F**	6.70
	Mitigation: Signal Re-timing		PM	***81.3***	***F***	***86.1***	***F***	*4.80*
4	Industrial Parkway West and Industrial parkway Southwest	Signalized	AM	41.4	D	47.9	D	6.50
			PM	35.2	D	37.7	D	2.50
5	Mission Boulevard and Valle Vista Avenue	Signalized	AM	18.4	B	28.5	C	10.10
			PM	12.3	B	16.1	B	3.80
6	Mission Boulevard and Tennyson Road	Signalized	AM	36.7	D	36.8	D	0.10
			PM	33.2	C	33.3	C	0.10
7	Tennyson Road and Dixon Street	Signalized	AM	31.4	C	32.0	C	0.60
			PM	35.0	C	36.3	D	1.30
8	Dixon Street and Valle Vista Avenue	All Way Stop	AM	15.9	C	18.3	C	2.40
			PM	16.1	C	19.9	C	3.80
9	Dixon Street and South Hayward Signalized BART Access	Signalized	AM	13.8	B	13.4	B	-0.40
			PM	11.7	B	11.8	B	0.10
10	Tennyson Road and Huntwood Avenue	Signalized	AM	73.6	E	72.9	E	-0.70
			PM	29.8	C	29.5	C	-0.30

Source: TJKM 2018

Notes:

a. AM = morning peak hour, PM = evening peak hour

b. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections and all-way stop-controlled intersections. Total control delay for the worst movement is presented for side-street stop controlled intersections.

c. LOS = level of service. LOS calculations conducted using the Synchro 8 level of service analysis software package, which applies the method described in the 2000 Highway Capacity Manual.

d. Change in average control delay between Background and Background plus Project Conditions.

***Bold** text indicates intersection operates at a deficient level of service.*

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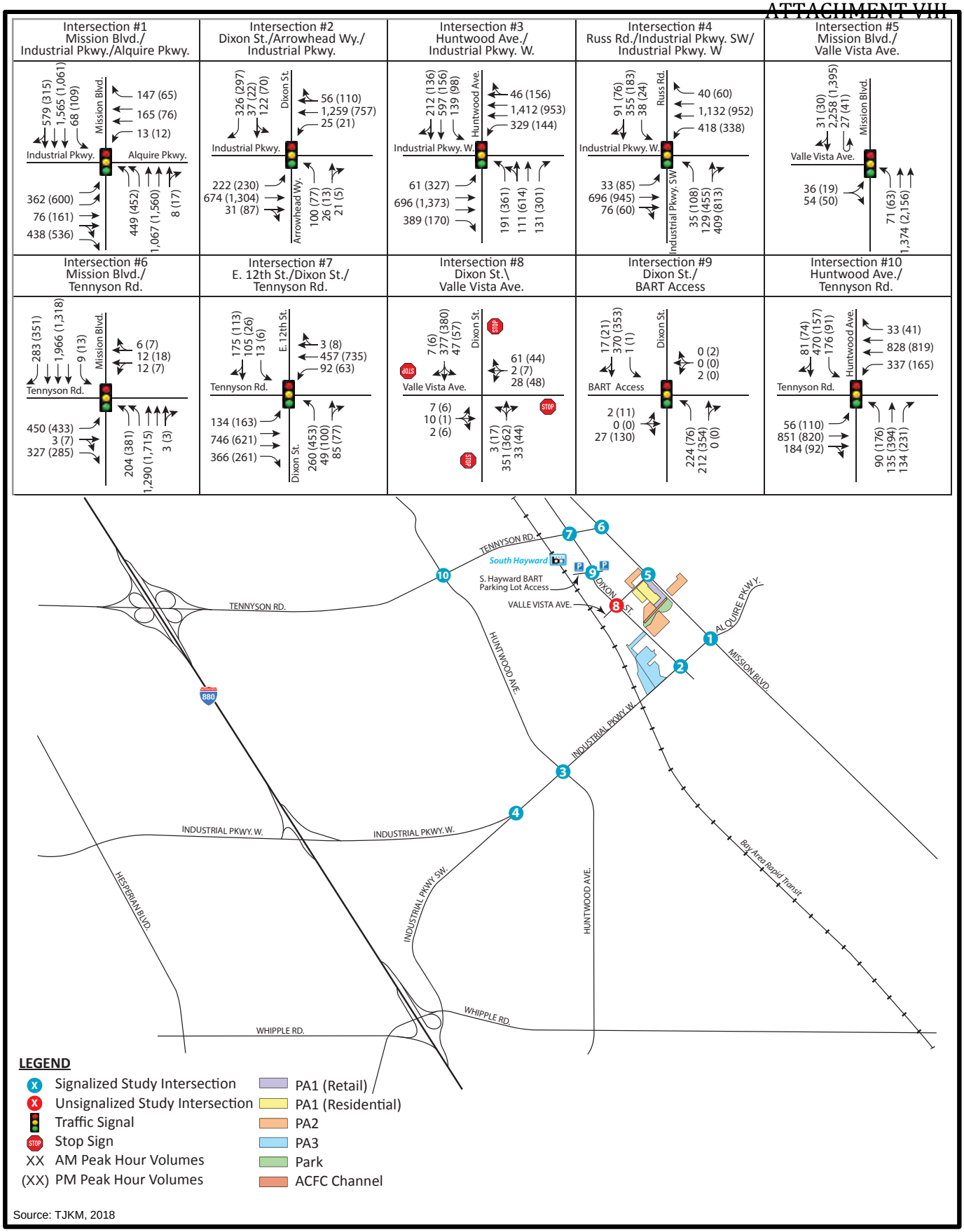

Source: TJKM, 2018

FIGURE 3.16-5

Background Conditions Traffic Volumes, Lane Geometry and Traffic Controls

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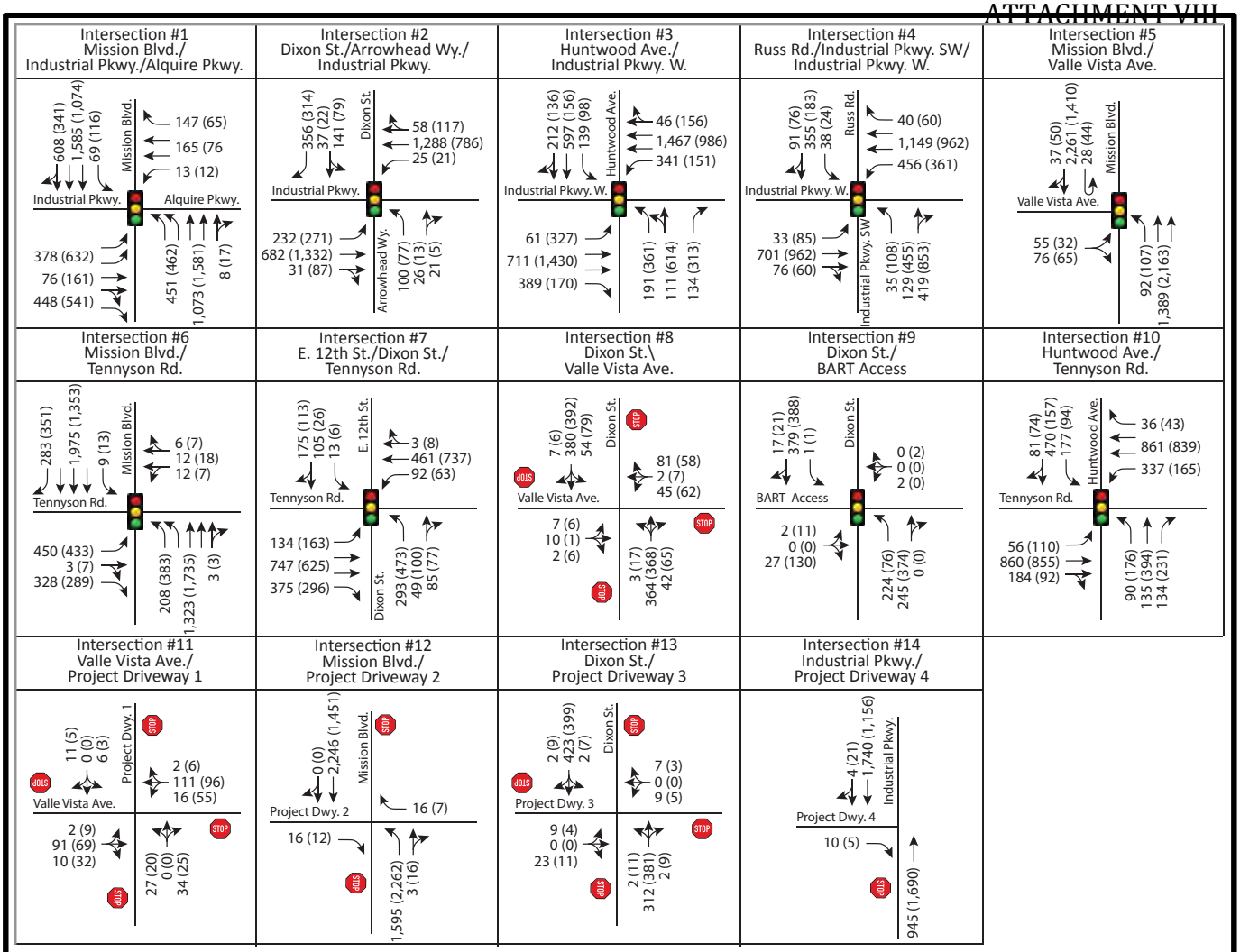

LEGEND

- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

Source: TJKM, 2018

FIGURE 3.16-6

Background plus Project Conditions Traffic Volumes, Lane Geometry and Traffic Controls

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Queuing Analysis at Study Intersections

A vehicle queuing and storage analysis was conducted for all exclusive left and right turn pockets at selected study intersections and driveways where project traffic is added under Background plus Project Conditions. The 95th percentile (maximum) queues were analyzed using the HCM 2000 queue methodology in the Synchro 8.0 software for the exclusive left turn/right turn pockets at the study intersections where project traffic is added. Detailed calculations are included in the LOS appendices of **Appendix TIA** corresponding to the Background and Background plus Project analysis scenarios. Under Background plus Project Conditions, the project would not contribute any additional queuing to Intersections #5, #6, #9, and #10. Intersections #1 through #4 and #7 would experience only minor changes to queuing, and impacts would be less than significant.

Level of Service Analysis at Project Driveways

A LOS analysis was conducted at the proposed project driveways on Valle Vista, Mission Boulevard, Dixon Street, and Industrial Parkway West. Background through volumes were estimated at the project driveway locations based on background volumes at the nearest study intersections. As explained above in the discussion of Existing plus Project Conditions, volumes using driveways on the same street were combined and analyzed for a worst-case analysis. Detailed LOS calculations are included in **Appendix TIA**. **Table 3.16-8** summarizes the level of service at the project driveways under Background plus Project scenario. As shown in the table, under Background plus Project Conditions, all project driveways are expected to operate at an acceptable level of service.

TABLE 3.16-8
LOS AT PROJECT DRIVEWAYS – BACKGROUND PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Background Plus Project Conditions			
			AM		PM	
			Delay [a]	LOS [b]	Delay [a]	LOS [b]
11	Valle Vista Avenue & Driveway 1	All-Way Stop	7.9	A	8.0	A
12	Mission Boulevard & Driveway 2	Two-Way Stop	16.2	C	12.7	B
13	Dixon Street & Driveway 3	All-Way Stop	15.1	C	16.5	C
14	Industrial Pkwy & Driveway 4	One-Way Stop	10.4	B	10.1	B

Source: TJKM 2018
Notes:
a. Delay = Average control delay in seconds per vehicle
b. LOS = Level of service

Cumulative Conditions

This section details expected traffic conditions under Cumulative Conditions. Turning movement volumes in 2040 were developed for all study intersections based on the City's General Plan update travel demand model, which is based on the regional traffic demand model but incorporates General Plan 2040 assumptions. The model includes several potential future and approved projects in the project area. Additional trips were added to the intersection of Mission Boulevard and Tennyson Road to account for the future La Vista Park on Tennyson Road, which is not included in the model land use data. The TIA determined the difference in 2005 base year and 2035 buildout year volumes for study area

model links and factored the difference to account for 20 years of traffic growth. This result was then applied proportionately to Existing Conditions turning movement volumes to generate year 2035 turning movement volumes. At the direction of City staff, an additional factor of 1 percent annual growth over 5 years was applied to develop 2040 traffic volumes. **Figure 3.16-7** shows the resulting turning movement volumes under Cumulative Conditions for all study intersections, along with lane geometries and traffic controls. Lane geometries, signal timings, and traffic controls are assumed to be identical to those under Existing Conditions.

Intersection Level of Service

The intersection level of service analysis results for Cumulative Conditions are summarized in **Table 3.16-9**. Detailed calculation sheets for Cumulative Conditions are included in **Appendix TIA**. Under this scenario, only the intersections of Dixon Street and South Hayward BART access and Mission Boulevard and Valle Vista Avenue operate within the City's LOS E standards or better during the AM and PM peak hours. The remaining nine intersections are projected to operate at LOS F during at least one of the peak hours:

- Mission Boulevard and Industrial Parkway (#1) during the AM and PM peak hours (LOS F)
- Industrial Parkway and Dixon Street (#2) during the AM and PM peak hours (LOS F)
- Industrial Parkway and Huntwood Avenue (#3) during the AM and PM peak hours (LOS F)
- Industrial Parkway West and Industrial parkway Southwest (#4) during the AM and PM peak hours (LOS F)
- Mission Boulevard and Valle Vista Avenue during the AM peak hour (LOS F)
- Mission Boulevard and Tennyson Road (#6) during the AM peak hour (LOS F)
- Tennyson Road and Dixon Street (#7) during the PM peak hour (LOS F)
- Dixon Street and Valle Vista Avenue (#8) during the AM and PM peak hours (LOS F)
- Tennyson Road and Huntwood Avenue (#10) during the AM peak hour (LOS F)

The peak-hour signal warrant from the CA-MUTCD was evaluated for the unsignalized intersection that operates unacceptably under Cumulative Conditions to determine whether a traffic signal is warranted. The unsignalized intersection at Dixon Street and Valle Vista Avenue (#8) meets CA-MUTCD peak-hour signal warrants in both the AM and PM peak hours. CA-MUTCD peak-hour signal warrants sheets for Cumulative Conditions are included in **Appendix TIA.**

Cumulative plus Project Conditions

This scenario is similar to Cumulative Conditions, but with the addition of traffic expected to be generated by the proposed project. **Figure 3.16-8** shows the turning movement volumes, lane geometry, and traffic controls under Cumulative plus Project Conditions for all study intersections. The results for Cumulative Conditions are included for comparison purposes, along with the projected increases in control delay.

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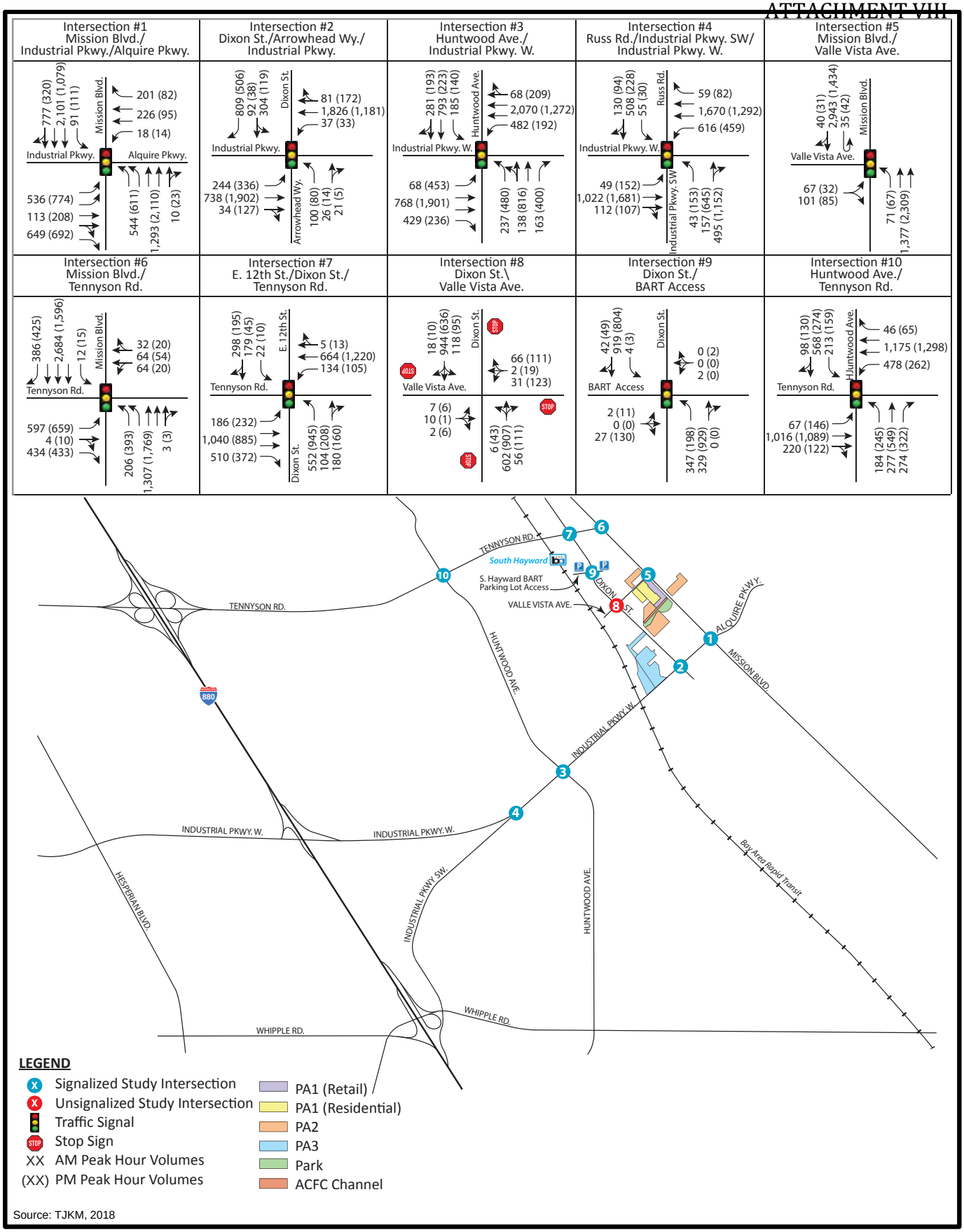

Source: TJKM, 2018

FIGURE 3.16-7

Cumulative Conditions Traffic Volumes, Lane Geometry and Traffic Controls

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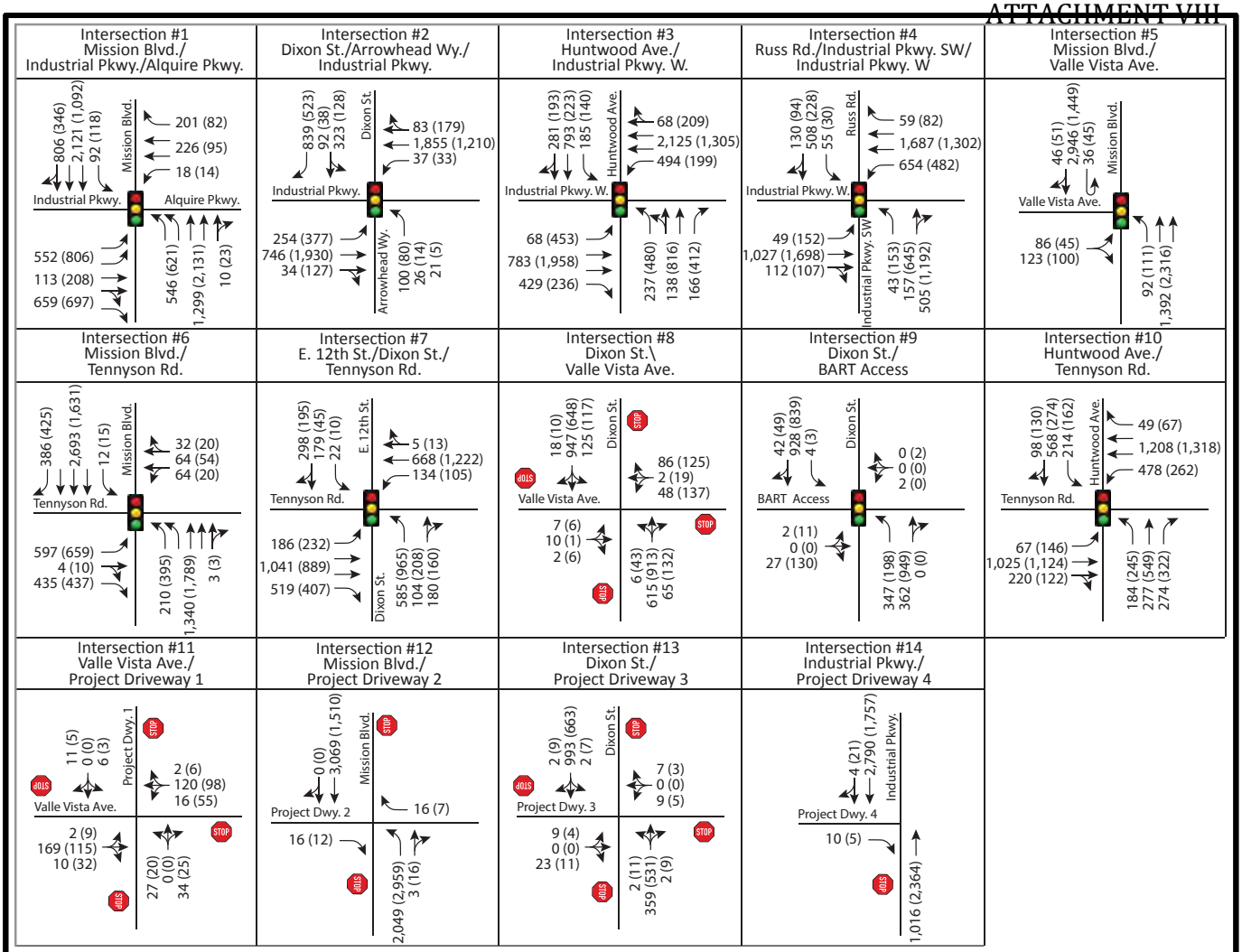

LEGEND

- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

Source: TJKM, 2018

FIGURE 3.16-8

Cumulative plus Project Conditions Traffic Volumes, Lane Geometry and Traffic Controls

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Intersection Level of Service Analysis – Cumulative plus Project Conditions

The intersection level of service analysis results for Cumulative plus Project Conditions are summarized in **Table 3.16-9**. Detailed calculation sheets for Cumulative plus Project Conditions are included in **Appendix TIA**. Under this scenario, only the intersection of Dixon Street and South Hayward BART access operates within the City's LOS E standards or better during the AM and PM peak hours. The remaining nine intersections are projected to operate at LOS F during at least one of the peak hours:

1. Mission Boulevard and Industrial Parkway (#1) during the AM and PM peak hours (LOS F)

2. Industrial Parkway and Dixon Street (#2) during the AM and PM peak hours (LOS F)

3. Industrial Parkway and Huntwood Avenue (#3) during the AM and PM peak hours (LOS F)

4. Industrial Parkway West and Industrial parkway Southwest (#4) during the AM and PM peak hours (LOS F)

5. Mission Boulevard and Valle Vista Avenue (#5) during the AM peak hour (LOS F)

6. Mission Boulevard and Tennyson Road (#6) during the AM peak hour (LOS F)

7. Tennyson Road and Dixon Street (#7) during the PM peak hour (LOS F)

8. Dixon Street and Valle Vista Avenue (#8) during the AM and PM peak hours (LOS F)

9. Tennyson Road and Huntwood Avenue (#10) during the AM peak hour (LOS F)

Based on the impact criteria and as shown in **Table 3.16-9**, the proposed project would have **significant** impacts under Cumulative plus Project Conditions for Intersections #1 through 8.

According to the City's impact criteria, an impact would occur if an intersection operates at LOS F without the project and the addition of the project results in an increase in the average control delay of 5.0 seconds or greater. Intersection #10 is already at LOS F for Cumulative Conditions. Under Cumulative plus Project Conditions, the difference in delay is -0.90 seconds. Since the increase in delay at Intersection #10 under Cumulative Conditions plus Project Conditions would be less than 5 seconds, the impact does not meet the stated criteria for significance. Therefore, no mitigation is required for this intersection.

Implementation of mitigation measures **MM TRA-2** through **MM TRA-9** would reduce these impacts to a **less than significant** level.

TABLE 3.16-9
INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Peak Hour [a]	Cumulative Conditions		Cumulative Plus Project Conditions		Difference in Delay (sec) [d]
				Average Delay [b]	LOS [c]	Average Delay [b]	LOS [c]	
1	Mission Boulevard and Industrial Parkway	Signalized	AM	**147.3**	**F**	**154.7**	**F**	**7.40**
			PM	**88.3**	**F**	**96.7**	**F**	**8.40**
	Mitigation: Signal Re-timing		AM	***120.9***	***F***	***124.5***	***F***	*3.60*
			PM	***58.4***	***E***	***63.4***	***E***	*5.00*
2	Industrial Parkway and Dixon Street	Signalized	AM	**147.9**	**F**	**162.2**	**F**	**14.30**
			PM	**83.4**	**F**	**101.6**	**F**	**18.20**
	Mitigation: Signal Re-timing		AM	***117.5***	***F***	***120.5***	***F***	*3.00*
			PM	***37.6***	***D***	***43.6***	***D***	*6.00*
3	Industrial Parkway and Huntwood Avenue	Signalized	AM	**142.4**	**F**	**150.4**	**F**	**8.00**
			PM	**165.7**	**F**	**174.1**	**F**	**8.40**
	Mitigation: Signal Re-timing		AM	***123.6***	***F***	***127.9***	***F***	*4.30*
			PM	***165.7***	***F***	***168.5***	***F***	*2.80*
4	Industrial Parkway West and Industrial parkway Southwest	Signalized	AM	**109.2**	**F**	**119.6**	**F**	**10.40**
			PM	**151.2**	**F**	**156.9**	**F**	**5.70**
	Mitigation: Signal Re-timing		AM	***92.3***	***F***	***96.7***	***F***	*4.40*
			PM	***151.2***	***F***	***152.5***	***F***	*1.30*
5	Mission Boulevard and Valle Vista Avenue	Signalized	AM	**92.6**	**F**	**116.4**	**F**	**23.80**
			PM	14.7	B	19.2	B	4.50
	Mitigation: Intersection Improvement		AM	*57.9*	*E*	*66.1*	*E*	*8.20*
			PM	*12.4*	*B*	*15.8*	*B*	*3.40*
6	Mission Boulevard and Tennyson Road	Signalized	AM	**85.0**	**F**	**86.4**	**F**	1.40
			PM	42.2	D	42.4	D	0.20
7	Tennyson Road and Dixon Street	Signalized	AM	71.6	E	80.0	E	8.40
			PM	**153.5**	**F**	**158.8**	**F**	**5.30**
	Mitigation: Signal Re-timing		PM	***135.2***	***E***	***139.2***	***F***	*4.00*
8	Dixon Street and Valle Vista Avenue	All-Way Stop	AM	**208.3**	**F**	**229.6**	**F**	**21.30**
			PM	**266.3**	**F**	**296.0**	**F**	**29.70**
	Mitigation: Signalized Intersection	*Signalized*	AM	*10.5*	*B*	*15.9*	*B*	*5.40*
			PM	*22.0*	*C*	*29.8*	*C*	*7.80*

ID	Study Intersections	Control	Peak Hour [a]	Cumulative Conditions		Cumulative Plus Project Conditions		Difference in Delay (sec) [d]
				Average Delay [b]	LOS [c]	Average Delay [b]	LOS [c]	
9	Dixon Street and South Hayward Signalized BART Access	Signalized	AM	60.3	E	61.9	E	1.60
			PM	28.2	C	33.6	C	5.40
10	Tennyson Road and Huntwood Avenue	Signalized	AM	**128.0**	**F**	**127.1**	**F**	-0.90
			PM	78.2	E	79.0	E	0.80

Source: TJKM 2018

Notes:

a. *AM = morning peak hour, PM = evening peak hour*

b. *Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections and all-way stop-controlled intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.*

c. *LOS = level of service. LOS calculations conducted using the Synchro 8 level of service analysis software package, which applies the method described in the 2000 Highway Capacity Manual.*

d. *Change in average control delay between Cumulative and Cumulative plus Project Conditions.*

***Bold** text indicates intersection operates at a deficient level of service.*

Queuing Analysis at Study Intersections

A vehicle queuing and storage analysis was conducted for all exclusive left and right turn pockets at selected study intersections and driveways where project traffic is added under Cumulative plus Project Conditions. The 95th percentile (maximum) queues were analyzed using the HCM 2000 Queue methodology in the Synchro 8.0 software for the exclusive left turn/right turn pockets at the study intersections where project traffic is added. Detailed calculations are included in the LOS appendices of **Appendix TIA** corresponding to the Cumulative and Cumulative plus Project analysis scenarios. Under Cumulative and Cumulative plus Project Conditions, the project would not contribute any additional queuing to Intersections #5, #6, #9, and #10. Intersections #1 through #4 and #7 would experience only minor changes to queuing, and impacts would be less than significant.

Level of Service Analysis at Project Driveways

A level of service analysis was conducted at the proposed project driveways on Valle Vista, Mission Boulevard, Dixon Street, and Industrial Parkway. Cumulative through volumes were estimated at the project driveway locations based on cumulative volumes at the nearest study intersections. As explained above in the discussion of Existing plus Project Conditions, volumes on driveways on the same street were combined and analyzed for a worst-case analysis. Detailed calculations are included in **Appendix TIA**. T**able 3.16-10** summarizes the levels of service at the project driveways under the Cumulative plus Project scenario. As shown in the table, under Cumulative plus Project Conditions, all project driveways are expected to operate at an acceptable level of service.

TABLE 3.16-10
LOS AT PROJECT DRIVEWAYS – CUMULATIVE PLUS PROJECT CONDITIONS

ID	Study Intersections	Control	Cumulative Plus Project Conditions			
			AM		PM	
			Delay [a]	LOS [b]	Delay [a]	LOS [b]
11	Valle Vista Avenue & Driveway 1	All-Way Stop	8.3	A	8.1	A
12	Mission Boulevard & Driveway 2	Two-Way Stop	17.3	C	15.4	C
13	Dixon Street & Driveway 3	All-Way Stop	30.9	D	26.0	D
14	Industrial Pkwy & Driveway 4	One-Way Stop	13.0	B	10.5	B

Source: TJKM 2018

Notes:

a. Delay = Average control delay in seconds per vehicle

b. LOS = Level of service

Vehicles Miles Traveled

In accordance with Senate Bill (SB) 743, daily vehicle miles traveled (VMT) for projects in Hayward versus the average of the San Francisco Bay Area are presented based on the Metropolitan Transportation Commission (MTC) travel demand forecast model. The Year 2020 Plan Bay Area model forecast daily VMT of 27.22 miles per worker employed in this area of Hayward and 20.08 per residence (Traffic Analysis Zone 820). The Alameda County Transportation Commission's countywide travel demand model has a higher level of detail than the regional model, but it also predicts a per capita VMT of 20.01–30.00 for households in the project area in 2010. The ACTC model predicts this VMT remaining consistent in both the 2020 and 2040 model years. Given that no standard approach or guidelines have been finalized under SB 743, the VMT presented in this subsection is for informational purposes only and is not used to determine whether the project's impacts are significant for purposes of CEQA. VMT guidelines are currently being developed at the statewide level.

Compliance with SB 743 will include replacement of level of service with vehicle miles traveled for purposes of assessing traffic impacts under CEQA. Regulatory details have not yet been finalized, and most jurisdictions, including the City of Hayward, do not yet have an adopted VMT threshold. This is reflected on the Caltrans website (http://www.dot.ca.gov/hq/tpp/sb743.html), which notes, "It is anticipated that regulatory language changes to CEQA will be adopted in 2018 by the Natural Resources Agency and that statewide implementation will occur in 2020." It is anticipated that VMT impacts for residential projects will be based on VMT per capita (based on residential population), while VMT impacts for commercial projects will be based on VMT per employee. It is anticipated that VMT impacts would be considered less than significant if a project were to generate VMT per capita (or VMT per employee) at a rate 15 percent below the regional average. While each city will be responsible for adopting its own regional threshold, it is anticipated that Bay Area cities will likely base their VMT thresholds on nine-county averages.

The proposed project is likely to generate VMT at a rate that exceeds 15 percent below the nine-county Bay Area average because the proposed project consists of infill housing within less than half-mile from the South Hayward BART station and would include a

Transportation Demand Management program. The mixed-use nature of the development would also reduce potential VMT in that the commercial portion of the development would most likely serve local customers as well as serving pass-by trips on Mission Boulevard. Pass-by trips would not generate additional VMT, while local customers would have relatively short trip lengths.

The proposed project would also provide housing in an area of the greater Bay Area that has a surplus of jobs relative to the supply of housing. The large supply of jobs in Hayward, Fremont, and neighboring cities results in relatively long commute lengths for many employees, particularly those commuting from homes in the East Bay and San Francisco. By contrast, the provision of both for-sale and rental housing in Hayward would help to reduce VMT at a regional level by providing homes closer to job locations.

Mitigation Measures

MM TRA-1 Under **Background plus Project Conditions**, there would be a significant impact at the intersection of Industrial Parkway and Huntwood Avenue (#3), which would continue to operate at LOS F during the PM peak hour with an increased delay of 6.7 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve the intersection operations with an increase in delay of less than 5.0 seconds during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-2 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Mission Boulevard and Industrial Parkway (#1), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 7.4–8.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour and to LOS E during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-3 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Industrial Parkway and Dixon Street (#2), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 14.3–18.2 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour and to LOS D during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-4 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Industrial Parkway and Huntwood Avenue (#3), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 8.0–8.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM and PM peak hours.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-5 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Industrial Parkway and Industrial Parkway Southwest (#4), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 5.7–10.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM and PM peak hours.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-6 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Mission Boulevard and Valle Vista Avenue (#5), which would continue to operate at LOS F during the AM peak hour with an increased delay of 23.8 seconds, which is above the 5.0-second threshold for intersections already operating at a deficient level of service. Widening and restriping the eastbound approach to one left-only lane and one right turn lane would improve the operations at the Mission Boulevard/Valle Vista Avenue intersection to LOS E in the AM peak hour and LOS B in the PM peak hour. The developer's fair share of the improvement cost is 17 percent for Cumulative plus Project conditions and 51 percent for Background plus Project conditions. **Appendix TIA** illustrates the fair-share calculations.

Timing/Implementation: *Applicant to provide funding to address intersection improvement prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-7 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Mission Boulevard and Tennyson Road (#6) during the AM peak hour. An adjustment in traffic signal cycle and green time allocation (splits) would improve the intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-8 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Tennyson Road and Dixon Street (#7), which would continue to operate at LOS F during the PM peak hour with an increased delay of 5.3 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-9 Under **Cumulative plus Project Conditions**, there would be a significant impact at the intersection of Dixon Street and Valle Vista Avenue (#8), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 21.3–29.7 seconds. The installation of a traffic signal would improve operations to an acceptable level of service during both peak hours. As a result of the mitigation measure, intersection conditions would improve to LOS B with 15.4 seconds of delay in the AM peak hour and LOS C with 29.8 seconds of delay in the PM peak hour. The developer's fair share of the improvement cost is 5 percent for Cumulative plus Project Conditions and 28 percent for Background plus Project conditions. **Appendix TIA** illustrates the fair-share calculations.

Timing/Implementation: *Applicant to provide funding to address intersection improvement prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

b) ***Less Than Significant Impact.***

An analysis of regional roadways is required to comply with requirements of the Alameda County Transportation Commission. The ACTC requires the analysis of project impacts to Metropolitan Transportation System roadways identified in the Congestion Management Plan for development projects that would generate more than 100 PM peak-hour trips.

Existing freeway and roadway segment peak-hour volumes were obtained from the Alameda Countywide Travel Demand Model for the MTS roadway system.

Operations of the MTS freeway and surface street segments were assessed based on volume-to-capacity (V/C) ratios. For freeway segments, a per-lane capacity of 2,100 vehicles per hour was used. For surface streets, a per-lane capacity of 1,200 vehicles per hour was used. These capacities do not reflect additional capacity provided at intersections through turn pockets. The analysis methodology used to analyze roadway facilities is described in **Appendix TIA**. Volumes for 2020 and 2040 were obtained from the Alameda County Transportation Commission's Countywide Travel Demand Model. Level of service was determined by calculating the V/C ratio of each roadway segment under all scenarios.

The LOS analysis for the 2020 analysis scenarios both with and without the proposed project found that all the study segments on Mission Boulevard and Tennyson Road operate at LOS E or better during both the AM and PM peak hours under 2020 baseline conditions (see **Appendix TIA**). The I-880 freeway segments operate at LOS E or better during the AM and PM peak hours except Tennyson Road to Industrial Parkway West in the northbound direction with LOS F in the AM peak hour and Industrial Parkway West to Whipple Road in the southbound direction with LOS F in the PM peak hour.

The project is expected to have a **less than significant** impact at all the roadway and freeway segments under 2020 with project conditions.

The LOS analysis for the 2040 analysis scenarios both with and without the proposed project determined that the study segments on Mission Boulevard and Tennyson Road operate at LOS E or better during both the AM and PM peak hours under 2040 baseline conditions. All the freeway segments operate at LOS F in the northbound direction in the AM peak hour and at LOS F in the southbound direction in the PM peak hour (see **Appendix TIA**).

The project is expected to have a **less than significant** impact at all the roadway and freeway segments under 2040 with Project Conditions.

c) ***No Impact.***

The closest airport to the project site, Hayward Executive Airport, is approximately 3.5 miles away from PA 2-4. The project site is not located within an airport influence area and would not affect the physical operations of an airport. The project does not have an aviation component and is not sufficiently large to noticeably affect the demand for air traffic. Therefore, there would be **no impact**.

d) ***Less Than Significant Impact.***

The TIA examined the proposed project site plan in order to evaluate access to the project; internal circulation for vehicles, pedestrians and bicycles; and the adequacy of on-site vehicle circulation, including delivery trucks and emergency vehicles.

The proposed project's access would be via a total of nine driveways on Valle Vista Avenue, Mission Boulevard, Industrial Parkway, and Dixon Street. The project includes multiple development areas, which are not all adjacent to one another. These areas are accessed by the driveways listed in **Table 3.16-11**.

TABLE 3.16-11
PROPOSED DRIVEWAY LOCATIONS

Planning Area	Description
PA 1-1	One full-access driveway on Valle Vista Avenue and one limited-access (right-in/right-out) driveway on Mission Boulevard
PA 1-2	One full-access driveway on Valle Vista Avenue
PA 1 (mixed use)	One full-access driveway on Valle Vista Avenue and one limited-access (right-in/right-out) driveway on Mission Boulevard
PA 2-1	One full-access driveway on Valle Vista Avenue and one limited-access (right-in/right out) driveway on Mission Boulevard
PA 2-2	One full-access driveway via Dixon Street
PA 2-3	One limited-access (right-in/right-out) driveway on Mission Boulevard
PA 2-4	One full-access driveway on Valle Vista Avenue and one limited-access (right-in/right-out) driveway on Mission Boulevard
PA 3-1	One full-access driveway on Dixon Street and one limited-access (right-in/right-out) driveway on Industrial Parkway
PA 3-2	One full-access driveway via Dixon Street and one limited-access (right-in/right-out) driveway on Industrial Parkway

Source: TJKM 2018

The internal circulation for the proposed project was reviewed in the TIA for issues related to queuing, safety, dead- end aisles, and parking spaces that may be difficult to maneuver in and out of the project site. All circulation aisles accommodate two-way travel, with a mix of perpendicular spaces, parallel spaces, and private garages. Service and emergency vehicles have access to the proposed development via all proposed driveways.

Sight Distance Analysis

Sight distance is evaluated to determine whether a driver would have adequate visibility to enter a roadway safely without resulting in a conflict with traffic already on the roadway. The project access points should be free and clear of any obstructions that would materially and adversely affect sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with the City's standards. According to the Highway Design Manual, Chapter 200, the required minimum stopping sight distance for design speed of 15 mph (project driveways) is 100 feet.

The proposed access to the site would be via nine driveways on Valle Vista Avenue, Mission Boulevard, Industrial Parkway, and Dixon Street. All roadways where the driveways have been proposed are flat and straight with no curves. The proposed driveways on Mission Boulevard and Industrial Parkway are right-in/right-out driveways, with full-access driveways on Dixon Street and Valle Vista Avenue. Lines of sight for vehicles exiting all driveways are clear and visible for the required minimum sight distances on the adjacent roadways. Vehicles exiting the driveways would be sufficiently visible to approaching vehicles in both directions. The project would keep landscaping to a maximum height of 30 inches near the driveways. In addition, sections of red-painted curbs may be added,

at the discretion of the City Engineer, to prevent parked vehicles from obstructing sight triangles.

Traffic Calming

Dixon Street has previously been developed between Valle Vista Avenue and the BART station with appropriate traffic calming measures, including pedestrian bulb-outs and high-visibility crosswalk striping. The roadway also features bicycle lanes and parking on both sides of the street between Industrial Parkway and Tennyson Road. Valle Vista Avenue is a relatively narrow residential street that would have a finished width of approximately 30 feet after construction of the project. The block that would experience project traffic is approximately 800 feet long. The project would include the addition of midblock, high-visibility crosswalks on Mission Boulevard and Dixon Street to connect the outer development areas with the planned retail development. These crosswalks would include bulb-outs and speed tables and would discourage speeding in the neighborhood immediately surrounding the proposed project. A long driveway would connect Dixon Street with PA 3-1. The project may include traffic calming measures such as signage, speed bumps or other devices to control speeding, at the discretion of the City Engineer.

The project would not increase hazards due to a design feature or incompatible uses; therefore, impacts would be **less than significant**.

e) ***Less Than Significant Impact.***

As described above for checklist item d), the TIA examined the proposed project site plan in order to evaluate access to the project; internal circulation for vehicles, pedestrians, and bicycles; and the adequacy of on-site vehicle circulation, including delivery trucks and emergency vehicles. Service and emergency vehicles would have access to the proposed development via all proposed driveways, which are listed in **Table 3.16-11**. Based on this evaluation, the TIA concluded that the proposed on-site vehicle circulation is adequate and should not result in any significant traffic operations issues. Therefore, impacts would be **less than significant**.

f) ***Less Than Significant Impact.***

The proposed project does not conflict with existing and planned pedestrian, bicycle facilities, or public transit facilities, as described below.

Pedestrian Access

Pedestrian access to the project site would be facilitated by existing sidewalks on Mission Boulevard, Valle Vista Avenue, Dixon Street, and Industrial Parkway. Industrial Parkway has continuous sidewalks along the project (north) side of the street. With the exception of the existing sections of missing sidewalk on Valle Vista Avenue, the pedestrian network in the vicinity of the project site is adequate and should be able to accommodate additional pedestrian trips generated by the project.

A new pedestrian-bicycle path is planned to run north–south through site PA 2-3 on the east side of Mission Boulevard from the adjacent Mission Seniors complex southerly through the site. The pedestrian path would follow the location of a planned thoroughfare that was envisioned in the South Hayward BART/Mission Boulevard Form-Based Code.

Mission Boulevard Crossing

To better connect the residents on the east side of Mission Boulevard (in PA 2-3), to the proposed park on the west side of the boulevard, the TIA examined the possibility of adding a new east–west crossing from PA 2-3 to the new park on the west side of Mission Boulevard. City staff requested that the TIA study the applicability of either a pedestrian barrier, an unprotected crosswalk, a Pedestrian Hybrid Beacon (PHB, formerly HAWK Beacon), or a fully signalized pedestrian crossing of Mission Boulevard to connect the PA 2-3 with the proposed park and other features on the west side of Mission Boulevard. The estimated future demand to cross Mission Boulevard may ultimately be 20 to 40 pedestrians in the peak hour, some destined for the remainder of the proposed project (park site or retail) and others destined for BART.

The TIA determined that a pedestrian barrier would result in crossing time of about 7.5 minutes for pedestrians on the east side of Mission Boulevard to reach the proposed park. The TIA also noted that a marked crosswalk at this location would not be appropriate, as it would not meet CA-MUTCD recommendations.

High Intensity Activated Crosswalks (HAWK) are designed to control traffic at midblock pedestrian crossings. They are typically placed at desire paths where pedestrians want to use uncontrolled midblock crossings. HAWKs can be used at locations that do not meet traffic signal warrants, and can also serve on an interim basis at a location that meets traffic signal warrants while a decision is made whether to install a traffic control signal.

The TIA concluded that the ideal crossing location in the vicinity of the project site would be close to the planned park/greenway, either aligned with or placed at least 100 feet away from project driveways in accordance with CA-MUTCD guidance.

Other Locations

Dixon Street is approximately 48 feet wide in the project vicinity. The proposed project would include the addition of a high-visibility pedestrian crossing aligned with the project driveways on opposite sides of Dixon Street where PA 3-1 and PA 2-1 meet. The crossing would include curb bulb-outs and striping similar to other crossings on Dixon Street, as well as a raised crosswalk/speed table and flashing signage (sign W11-2) alerting drivers to crossing pedestrians. Since this would be a midblock crossing, there would be flashing signage or pavement lights to increase driver awareness when pedestrians are present.

The addition of the pedestrian path across PA 2-3, the mid-block crossing from PA 2-3 across Mission Boulevard to PA MU and the park and the mid-block crossing at Dixon Street are intended to improve pedestrian access and safety, as well as to encourage residents to walk rather than drive. A significant impact occurs if the proposed project conflicts with applicable or adopted policies, plans, or programs related to pedestrian facilities or otherwise decreases the performance or safety of pedestrian facilities. The proposed project would not result in any significant impacts to existing or planned pedestrian facilities in the immediate vicinity of the project site because of the absence of such conflicts. Therefore, the impact to pedestrian facilities is **less than significant**.

Bicycle Access

An impact to bicyclists would occur if the proposed project disrupts existing bicycle facilities or if it conflicts or creates inconsistencies with adopted bicycle system plans,

guidelines, and policies. A significant impact would occur if the proposed project conflicts with applicable or adopted policies, plans, or programs related to bicycle facilities or otherwise decreases the performance or safety of bicycle facilities. Bicycle access to the project would be via existing Class II bike lanes on Dixon Street and Tennyson Road. A Class I bike path runs parallel to Industrial Parkway south of the project. The Holiday Bowl project located south of Industrial Parkway will be adding a Class II buffered bike lane in the eastbound direction on Industrial Parkway between Mission Boulevard and Dixon Street. Also, a Phase II corridor improvement on Mission Boulevard will be adding a Class IV bike lane between Industrial Parkway and the south city limits.

The City of Hayward Bicycle Master Plan outlines expansions to the existing bicycle network in the project vicinity, including a new Class I bikeway parallel to the existing BART tracks, connecting Industrial Parkway in the south to Harder Road in the north. The proposed project provides a Class I bicycle and pedestrian pathway from the proposed park through PA 3 to Industrial Boulevard and would connect with this future extension.

Overall, existing bicycle facilities provide adequate connectivity between the proposed project site and the adjacent neighborhoods, and connectivity is expected to improve as new bicycle facilities are built. The proposed project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities would be **less than significant**.

Transit

The project is served by two AC Transit bus lines along Mission Boulevard and is within 0.5 mile of the South Hayward BART station, which is served by numerous AC Transit lines. The proposed project would generate transit trips that can be accommodated by the existing transit capacity. Hence, the project is anticipated to have a **less than significant** impact on transit facilities.

Consistent with a request from AC Transit, the project would make provisions for the relocation of the existing southbound Mission Boulevard bus stop from a point just north of Valle Vista Avenue to a far-side stop on the south side of the Valle Vista intersection. From a safety standpoint, the proposed relocation would improve conditions by eliminating conflict and visibility obstructions that could occur if the existing near-side stop were retained.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRIBAL CULTURAL RESOURCES. Consultation with a California Native American tribe that has requested such consultation may assist a lead agency in determining whether the project may adversely affect tribal cultural resources, and if so, how such effects may be avoided or mitigated. Whether or not consultation has been requested, would the project cause a substantial adverse change in a site, feature, place, cultural landscape, sacred place, or object, with cultural value to a California Native American tribe, which is any of the following:				
a) Included or determined to be eligible for inclusion in the California Register of Historical Resources?	☐	☒	☐	☐
b) Included in a local register of historical resources?	☐	☒	☐	☐
c) Determined by the lead agency, in its discretion and supported by substantial evidence, to be a tribal cultural resource, after applying the criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

SETTING

Assembly Bill 52 Native American Consultation

Assembly Bill (AB) 52 requires the a lead agency (in this case, the City of Hayward) to begin consultation with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification and requests the consultation (Public Resources Code Section 21080.3.1[d]).

The City is conducting Native American consultation pursuant to AB 52. The City sent a project notification and invitation to begin AB 52 consultation on September 26, 2017, to Randy Yonemura, Cultural Committee Chair of the Ione Band of Miwok Indians (IBMI). No response was received within 30 days. On February 6, 2018, the City received an emailed request to initiate AB 52 from the IBMI. The City replied in a letter and email on February 15, 2018, inviting the IBMI to provide informal comments, outside the AB 52 process, because AB 52 consultation with the IBMI timed out. The cultural resources study prepared for the project by Michael Baker International (2018), was also provided in the City's response.

CHECKLIST DISCUSSION

a, c) ***Less Than Significant Impact with Mitigation Incorporated.***

Standard, late-discovery mitigation measures are recommended here because no tribal cultural resources were identified in the project area.

In the event that tribal cultural resources are observed during project construction-related activities, mitigation measure **MM TCR-1** is in place to reduce impacts to a less than significant level.

Mitigation Measures

MM TCR-1 If tribal cultural resources are discovered during project construction activities, all work within 25 feet of the discovery shall be redirected and the tribal monitor shall assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Impacts to tribal cultural resources should be avoided by project activities, but if such impacts cannot be avoided, the resources shall be evaluated for their California Register eligibility. If the tribal cultural resource is not California Register–eligible, no further protection of the find is necessary. If the tribal cultural resource is California Register–eligible, it shall be protected from project-related impacts or such impacts mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis, recording the resource, preparation of a report of findings, and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Timing/Implementation: *During project construction.*

Enforcement/Monitoring: *City of Hayward Planning Division and Public Works Department.*

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The project site is in an urbanized area that is served by existing water, sanitary sewer, storm drainage, and solid waste services.

WATER

The City of Hayward owns and operates its own water distribution system and purchases all of its water from the San Francisco Public Utility Commission (SFPUC). The Hayward water system serves approximately 147,000 residents within the city limits. Surface water originating from the Sierra Nevada mountain range is the predominant source of potable water in Hayward. Treated water is also supplied by the SFPUC from its local watershed and facilities in Alameda County (Hayward 2014a).

WASTEWATER

Wastewater generated on the project site is presently collected by the City's sanitary sewer system and transported via underground sewer lines to the Hayward Water Pollution Control Facility (WPCF). The East Bay Dischargers Authority disposes of the treated wastewater. The WPCF has a design and permit capacity of 18.5 million gallons per day (mgd). The WPCF currently treats approximately 12 mgd (Hayward 2014d).

STORMWATER

Storm drains in Hayward are owned and maintained by the Alameda County Flood Control and Water Conservation District (ACFCD). Storm drain pipes smaller than 30 inches are typically owned by the City and are generally provided within local streets and easements. Stormwater on the project site is currently discharged into the City's municipal storm drain system in the adjacent streets and conveyed to the ACFCD stormwater collection system. Eventually, stormwater flows drain into San Francisco Bay via Mount Eden and Old Alameda creeks (Hayward 2014a).

SOLID WASTE

Waste Management, Inc. (WMI) has a franchise agreement with the City to provide solid waste disposal services. Solid waste currently generated on the project site is collected by WMI and is disposed of at the Altamont Landfill, which is owned and operated by WMI. In 2001, the 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 2014d).

CHECKLIST DISCUSSION

a, e) ***Less Than Significant Impact.***

Wastewater generated by the proposed project would be conveyed through the City's sanitary sewer system to the Water Pollution Control Facility. The San Francisco Bay Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's WPCF. The facility has a design and permit capacity of 18.5 mgd and currently treats approximately 12 mgd (Hayward 2014d). Therefore, based on current sewage flows, the City has approximately 6.5 mgd of excess treatment capacity. The volume of wastewater generated by the proposed project is estimated to be approximately 98,760 gallons per day, which would be accommodated by the excess treatment capacity at the WPCF[3]. The South Hayward BART/Mission Boulevard Form-Based Code EIR notes that a previous CEQA review for an area containing the project site documented a maximum wastewater generation of 713,065 gpd and that the Form-Based Code proposal would add 154,459 gpd to that amount. Therefore, the 88,631 gpd that would be generated by the proposed project is within the amount previously analyzed. Since the WPCF has excess capacity and the wastewater generated by the proposed project is within the amount previously analyzed, the project's impact would be less than significant.

[3] Assumes 205 gallons per day per dwelling unit and 0.1 gallons per day per square foot of nonresidential use (Lai 2018).

In addition, the City would review individual development proposals to ensure that an adequate localized wastewater conveyance capacity is provided by future individual developments (Hayward 2011). Development proposals, including the project, may be required to provide replacement or upgraded local wastewater systems, as determined by the City, prior to construction and occupancy as standard conditions of approval of development. Consequently, the proposed project would not contribute to an exceedance of the wastewater treatment requirements of the WPCF. The impact would be **less than significant**.

b, d) ***Less Than Significant Impact.***

As discussed above in the response to checklist item a), the proposed project would be served by the City's WPCF. The facility has a treatment capacity of approximately 18.5 mgd which, based on current sewage flows, leaves approximately 6.5 mgd of excess treatment capacity. The proposed project is estimated to generate about 98,760 gallons per day of wastewater. As described above for checklist item a), there is enough excess capacity at the WPCF to serve the proposed project, and no expansion of the facility would be required.

The City owns and operates its own water distribution system and purchases all of its water from the SFPUC. 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 (Hayward 2014b). The proposed project has incorporated measures to reduce water demand, including installation of water-efficient fixtures, rainwater harvesting barrels to capture rainwater during storms for irrigation use at a later date, and use of native plants and drought-tolerant landscaping.

Hayward's 2005 Urban Water Management Plan assumes water capacity to serve up to 5,000 dwelling units in the area covered by the South Hayward BART/Mission Boulevard Form-Based Code, which includes the project site (Hayward 2011). The City reviews individual development proposals to ensure that an adequate localized water conveyance, both quantity and pressure, is provided to future individual developments. If warranted, development proposals including the project may be required to provide replacement or upgraded local water systems, as determined by the City, prior to construction and occupancy. Since the proposed project would generate demand for water within the amount previously analyzed, such improvements are not necessary and this impact would be **less than significant**.

c) ***Less Than Significant Impact.***

All site runoff would be directed from on-site drainage pipes to the City's existing municipal storm drainage system and ultimately to the Countywide drainage system, including run-off in the existing ACFCD channel on the project site. All project related drainage improvements would be constructed as part of the project per the City's standard conditions for new development. In addition, the proposed project is subject to NPDES requirements per the Municipal Regional Permit and the Alameda County Clean Water Programs. The project would include bioretention areas and stormwater Best Management Practices for pollution prevention, treatment and detention on the project site. With these standard development requirements and measures in place, the impact would be **less than significant** (Sharma 2018).

f) ***Less Than Significant Impact.***

In February 2012, the Hayward City Council approved mandatory recycling for all businesses and multi-family developments producing four cubic yards or more of weekly garbage. Recyclables required to be collected include a variety of types of paper, recyclable food and beverage containers made of glass and metal, and plastic bottles. In addition, Hayward Municipal Code Chapter 5, Article 10, Construction and Demolition Debris Waste Reduction and Recycling Requirements, requires that applicants for all construction and demolition projects which generate significant debris recycle 100 percent of all asphalt and concrete and 50 percent of remaining materials. Applicants are required to report on these actions as part of the building permit process. Through these measures, the City plans to meet the statewide diversion goal of 75 percent by 2020.

In the project area, solid waste collection services are provided by Waste Management, Inc. Solid waste is transferred first to the Davis Street Transfer Center in San Leandro and then to the Altamont Landfill in eastern Alameda County. The landfill is permitted to accept a maximum of 11,150 tons of waste per day (Hayward 2011). In 2001, the landfill received County approval to increase capacity, adding 25 years to the life of the landfill and extending the anticipated closure date to the year 2040.

As described for Checklist item 13.a), the project's increase in population would be within population projections for Hayward, and as anticipated in the General Plan. The project would generate an estimated 6,299 pounds of solid waste per day.[4] The Altamont Landfill processes approximately 1,500,000 tons of solid waste per year and has a remaining permitted capacity of 42.4 million tons (Waste Management 2014). Therefore, this landfill has sufficient capacity to serve the proposed project. Since the Altamont landfill has sufficient capacity, and the City of Hayward has planned for growth in this area, the need for new or expanded solid waste disposal facilities is not expected. In addition, implementation of the City's recycling programs would further reduce solid waste generation and would ensure there is sufficient capacity to accommodate project-generated solid waste at the Altamont Landfill. As such, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs, and impacts associated with the disposal of solid waste would be **less than significant**.

g) ***Less Than Significant Impact.***

The proposed project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during construction and operation. Therefore, the proposed project is anticipated to result in **less than significant** impacts related to potential conflicts with federal, state, and local statutes and regulations related to solid waste.

[4] Assumes 12.23 pounds per residential unit per day and 10.53 pounds per commercial employee per day (CalRecycle).

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

DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) ***Less Than Significant Impact with Mitigation Incorporated.***

Based on the findings provided in this Initial Study, the proposed project would not substantially degrade the quality of the environment. See subsections 4, Biological Resources, and 5, Cultural Resources, for further discussion of the proposed project's potential impacts on these environmental issue areas. As described in the Biological Resources subsection, the proposed project may affect several special-status species as a result of construction-related activities. However, implementation of mitigation measures **MM BIO-1** though **MM BIO-3** would reduce impacts to a less than significant level. Unidentified cultural resources may be impacted during construction activities. However, implementation of mitigation measures **MM CUL-1** and **MM CUL-2** would reduce potential impacts to a less than significant level.

b) ***Less Than Significant Impact with Mitigation Incorporated.***

The impacts of the proposed project are individually limited and not considered cumulatively considerable. Although incremental changes in certain areas can be expected as a result of the proposed project, all environmental impacts that could occur as a result of the project would be considered less than significant or would be reduced

to a less than significant level through implementation of the mitigation measures in this Initial Study for the following resource areas: air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, tribal cultural resources, and traffic/transportation.

For the topic of air quality, potentially significant impacts to air quality standards associated with project construction would be reduced to less-than-significant levels with the implementation of MM AQ-1 and MM-AQ-2.

For the topic of biological resources, implementation of MM BIO-1, MM BIO-2, and MM BIO-3 would ensure that impacts to special status species are reduced to a less-than-significant level.

For the topic of cultural resources, potentially significant impacts to archaeological resources would be reduced to less-than-significant levels with implementation of MM CUL-1 and MM CUL-2, and CUL-3

For the topic of hydrology and water quality, implementation of MM HYD-1 would ensure that any potential flooding impacts associated with the proposed project would be reduced to a level that is less than significant.

For the topic of noise, implementation of MM NOI-1, MM NOI-2, MM NOI-3, and MM NOI-4 would reduce potential construction period noise impacts for sensitive receptors to less-than-significant levels.

For the topic of transportation and traffic, implementation of MM TRA-1, MM TRA-2, MM TRA-3, MM TRA-4, MM TRA-5, MM TRA-6, MM TRA-7, MM TRA-8, and MM TRA-9 would reduce potential impacts on roadway levels of service to less-than-significant levels.

For the topic of tribal cultural resources, MM TCR-1 would reduce impacts to a less-than-significant level, in the event that tribal cultural resources are observed during project construction-related activities.

For the topics of aesthetics, agriculture and forestry resources, greenhouse gas emissions, land use and planning, mineral resources, population and housing, public services, recreation, and utilities and service systems, the project would have no impacts or less-than-significant impacts. Therefore, the proposed project would not significantly contribute to potential cumulative impacts for these environmental topics. Overall, this impact would be less than significant with mitigation incorporated.

c) ***Less Than Significant Impact with Mitigation Incorporated.***

The proposed project would be required to comply with numerous required measures related to human safety and the quality of the environment, as described throughout this document. These mitigation measures are listed below by topic:

- Air Quality: MM AQ-1 and MM AQ-2.
- Biological Resources: MM BIO-1, MM BIO-2, and MM BIO-3.
- Cultural Resources; MM CUL-1 and MM CUL-2.

- Hydrology and Water Quality: MM HYD-1.
- Noise: MM NOI-1, MM NOI-2, MM NOI-3, and MM NOI-4.
- Transportation/Traffic: MM TRA-1, MM TRA-2, MM TRA-3, MM TRA-4, MM TRA-5, MM TRA-6, MM TRA-7, MM TRA-8, and MM TRA-9.
- Tribal Resources: MM TCR-1

These requirements and the specific mitigation measures identified in this Initial Study would reduce all potential impacts to a less than significant level. Therefore, implementation of the proposed project would result in no environmental effects that would cause substantial direct or indirect adverse effects on human beings with incorporation of the mitigation measures listed above and identified in this Initial Study.

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4.0 List of Mitigation measures

AIR QUALITY (SUBSECTION 3.3)

MM AQ-1 Prior to the issuance of grading or building permits, the City of Hayward shall ensure that the BAAQMD Basic Construction Mitigation Measures are noted on the construction documents. These Basic Construction Mitigation Measures include the following:

- 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 miles per hour (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 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 manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Timing/Implementation: *Prior to issuance of Building Permits and during grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, Inspections, and Building Division*

MM AQ-2 Prior to the issuance of grading or building permits, the project applicant or the applicant's designated contractor shall provide to the City of Hayward a plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet average of at least 71 percent reduction in diesel

PM emissions compared to the current statewide construction fleet emissions target, by one or more of the following methods:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, the EPA particulate matter emissions standards for Tier 4 engines or equivalent; and/or
- The use of equipment that includes CARB-certified Level 3 diesel particulate filters or alternatively fueled equipment (i.e., non-diesel); and/or
- Other added exhaust devices, or a combination of measures, provided that these measures are approved by the City and are demonstrated to achieve the fleet average minimum 71 percent reduction in diesel PM emissions.

Timing/Implementation: *Prior to issuance of Building Permits and during grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, Inspections, and Building Division*

BIOLOGICAL RESOURCES (SUBSECTION 3.4)

MM BIO-1 Preconstruction roost assessment survey: A qualified biologist shall conduct a roost assessment survey of the existing buildings on the project site. The survey shall assess use of the structure for roosting as well as for the potential presence of bats. If the biologist finds no evidence of or potential to support bat roosting, no further measures are required. If evidence of bat roosting is present, the additional measures described below shall be implemented:

1. Work activities outside the maternity roosting season: If evidence of bat roosting is discovered during the preconstruction roost assessment and demolition is planned during the period from August 1 through February 28 (outside the bat maternity roosting season), a qualified biologist shall implement passive exclusion measures to prevent bats from re-entering the structures. After sufficient time to allow bats to escape and a follow-up survey to determine if bats have vacated the roost, demolition may continue and impacts to special-status bat species will be avoided.
2. Work activities during the maternity roosting season: If the preconstruction roost assessment discovers evidence of bat roosting in buildings during the maternity roosting season (March 1 through July 31) and determines maternity roosting bats are present, demolition of maternity roost structures shall be avoided during the maternity roosting season or until a qualified biologist determines the roost has been vacated.

Timing/Implementation: *No more than 14 days prior to construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

MM BIO-2 Preconstruction nesting bird survey: If ground disturbance or removal of vegetation occurs during the breeding bird season (February 1 through August 15), preconstruction surveys shall be performed by a qualified biologist no more than 14 days prior to commencement of such activities to determine the presence and location of nesting bird species. If active nests are present, establishment of temporary no-work buffers around active nests will prevent adverse impacts to nesting birds. The appropriate buffer distance shall be determined by a qualified biologist, depending on species, surrounding vegetation, and topography. Once active nests become inactive, such as when young fledge the nest or the nest is subject to predation, work may continue in the buffer area and no adverse impact to birds will result.

Timing/Implementation: *No more than 14 days prior to grading and/or construction activities*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

MM BIO-3 In order to satisfy the requirements of the Hayward Tree Protection Ordinance, a tree removal and cutting permit application shall be submitted to the City of Hayward. The findings, information, and tree appraisals of the arborist's report dated June 20, 2017 (see Appendix D of Appendix BIO) shall be included with the permit application. All protected trees identified in the arborist's report that would be removed as a result of the project shall be replaced at a one-to-one ratio with like-size, like-kind trees or an equal value tree or trees, or other acceptable mitigation per the determination of the City's Landscape Architect. All required measures and conditions of approval included in the permit, including replacement of like-size, like-kind trees or an equal value tree or trees or acceptable mitigation, shall be implemented.

Timing/Implementation: *Prior to issuance of grading permits and during construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division; Public Works – Engineering Division, Inspections*

CULTURAL RESOURCES (SUBSECTION 3.5)

MM CUL-1 If prehistoric or historic-period archaeological deposits or paleontological resources are discovered during project construction activities, all work within 25 feet of the discovery shall be redirected and the archaeologist/ paleontologist shall assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Impacts to archaeological deposits and paleontological resources should be avoided by project activities, but if such impacts cannot be avoided, the deposits shall be evaluated for their California Register eligibility. If the deposits are not California Register–eligible, no further protection of the finds is necessary. If the deposits are California Register–eligible, they shall be protected from project-related impacts or such impacts mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of paleontological resources and archaeological deposits, recording the

resource, preparing a report of findings, and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Timing/Implementation: *During grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

MM CUL-2 Any human remains encountered during project ground-disturbing activities shall be treated in accordance with California Health and Safety Code Section 7050.5. The project applicant shall inform its contractor(s) of the project area's sensitivity for human remains and verify that the following directive has been included in the appropriate contract documents:

If human remains are encountered during project activities, the project applicant or its contractor shall comply with the requirements of California Health and Safety Code Section 7050.5. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Alameda County coroner has determined the manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel/construction workers shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American most likely descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods within 48 hours of being allowed access to the site.

Timing/Implementation: *During grading and construction*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

HAZARDOUS AND MATERIALS (SUBSECTION 3.8)

MM HAZ-1 Prior to demolition of existing structures on the project site, asbestos-containing materials and lead-based paint surveys shall be conducted to determine the presence of hazardous building materials and results of those surveys shall be provided prior to the issuance of demolition or building permits. Should asbestos-containing materials, lead-based paint, or other hazardous substance–containing building materials be identified, these materials would be removed using proper techniques in compliance with all applicable state and federal regulations, including the BAAQMD rule related to asbestos.

Timing/Implementation: *Prior to issuance of building permits*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

HYDROLOGY AND WATER QUALITY (SUBSECTION 3.9)

MM HYD-1 Flooding Impacts. Prior to construction in a 100-year floodplain area, project developers shall do one of the following:

1. Submit a hydrology and hydraulic study prepared by a California-registered civil engineer proposing to remove the site from the 100-year flood hazard area by increasing the topographic elevation of the site or similar steps to minimize flood hazards. The study shall demonstrate that floodwaters would not be increased on any surrounding sites, to the satisfaction of City staff.

2. Comply with Hayward Municipal Code Section 9-4.110, General Construction Standards, which establishes minimum health and safety standards for construction in a flood hazard area.

3. Apply to the City for a Conditional Letter of Map Revision (CLOMR) to remove the site from the FEMA Flood Insurance Rate Map 100-year flood hazard area (South Hayward BART/Mission Boulevard Form-Based Code EIR mitigation measure Hyd-3; Concept Design Plan EIR mitigation measure 4.4-2).

Timing/Implementation: *Prior to issuance of grading and building permits*

Enforcement/Monitoring: *City of Hayward Planning Division, Public Works Department – Engineering Division, and Building Division*

NOISE (SUBSECTION 3.12)

MM NOI-1 The project applicant shall demonstrate to the City that any proposed HVAC systems for buildings in the project do not produce noise in excess of L_{max} 60 dB measured at a property line adjacent to off-site and new proposed project residential uses or noise in excess of L_{max} 70 dB measured at a property line adjacent to off-site and new proposed project commercial or industrial uses. Acceptable demonstration would be one or more of the following:

1. Provide manufacturers specifications for the proposed HVAC systems that indicate the systems would not produce noise in excess of L_{max} 60 dB measured at a distance of 3 feet for systems near residential property lines or noise in excess of L_{max} 70 dB measured at a distance of 3 feet for systems near commercial or industrial property lines.

2. If manufacturers specifications are not available, provide site plans that indicate the following minimum setback distance for HVAC systems from property lines (assuming that a residential system would produce a noise of L_{max} 75 dB measured at a distance of 3 feet and a commercial HVAC system would produce a noise of L_{max} 90 dB measured at a distance of 3 feet):

- For residential HVAC systems operating during nighttime hours and located adjacent to residential uses, HVAC systems shall be set back a minimum of 20 feet from property lines or 10 feet with adequate noise shielding.

- For commercial HVAC systems operating during daytime hours only and located adjacent to residential, commercial, or industrial property lines, equipment shall be set back a minimum of 35 feet from property lines or 20 feet with adequate noise shielding.

Adequate shielding is a sound enclosure or solid barrier constructed of solid material with no gaps that, at a minimum, would block the line of sight between the HVAC system and potential sensitive receptor locations on adjacent property (e.g., a person standing at a window, a person standing outside, a person standing on a balcony or deck).

3. Provide a noise study prepared by a qualified acoustical professional for specific building sites and with specific equipment specifications that demonstrates the noise produced by building mechanical equipment would not produce noise in excess of the standards specified in Municipal Code Section 4-1.03.1.

Timing/Implementation: *Prior to issuance of building permits*

Enforcement/Monitoring: *City of Hayward Planning Division and Building Division*

MM NOI-2 Project plans shall include specifications for any building mechanical equipment mounted at grade level within 10 feet of a sensitive use property line (e.g., residences, schools, hospitals, elder-care facilities) to require vibration isolation per ASHRAE guidelines.

Timing/Implementation: *Prior to issuance of building permits*

Enforcement/Monitoring: *City of Hayward Planning Division*

MM NOI-3 Heavy equipment, including bulldozers and haul trucks, shall be restricted from operating within 25 feet of existing structures to the extent feasible. Within 50 feet of existing structures, only nonvibratory soil and pavement compaction methods shall be used.

A construction liaison shall be designated to ensure coordination between construction staff and neighbors to minimize disruptions due to construction vibration. Neighboring property owners within 200 feet of construction activity shall be notified in writing of the contact information for the construction liaison.

Timing/Implementation: *Prior to issuance of grading or demolition permits and during construction*

Enforcement/Monitoring: *City of Hayward Planning Division and Public Works Department – Engineering Division*

MM NOI-4 The project applicant shall ensure through contract specifications that construction noise and vibration abatement practices are implemented by contractors to minimize construction noise and vibration levels. Contract specifications shall be included in the construction document, which shall be reviewed by the City of Hayward prior to issuance of a demolition or grading permit. The construction noise and vibration abatement practices shall include the following:

- In conformance with Section 4-1.03-4 of the City's Municipal Code, construction activities between 7:00 a.m. and 7:00 p.m. Monday through Saturday or between 10:00 a.m. and 6:00 p.m. on Sundays or holidays, unless other construction hours are permitted by the City Engineer or Chief Building Official, shall not include any individual equipment that produces a noise level exceeding 83 dB measured at 25 feet, nor shall activities produce a noise level outside the project property lines in excess of 86 dB. During all other hours, noise shall not exceed the limits defined in Municipal Code Section 4-1.03.1 (70 dB daytime or 60 dB nighttime, measured at residential property lines).

- If noise-generating construction activities must occur within 50 feet of a noise-sensitive property line (e.g., residences, schools, hospitals, elder-care facilities) and would generate a noise level greater than 86 dB, a noise barrier is to be installed between the source and the neighboring property to reduce noise. The barrier shall be minimum of 8 feet high and continuous, with no gaps or holes.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

- Stationary noise sources and staging areas shall be located as far away as is feasible from existing noise-sensitive receivers. Locating stationary noise sources near existing roadways away from adjacent properties is preferred. If located otherwise, stationary noise sources are to be enclosed or shielded from neighboring noise-sensitive properties with noise barriers to the extent feasible.

- Electric air compressors and similar power tools shall be used rather than diesel equipment, where feasible.

- Air compressors and pneumatic equipment shall be equipped with mufflers, and impact tools shall be equipped with shrouds or shields, where feasible.

- Construction vehicle routes shall be selected to avoid quieter residential streets where possible.

- A construction liaison shall be designated to ensure coordination between construction staff and neighbors to minimize disruptions due to construction noise. Neighboring property owners within 200 feet of construction activity shall be notified in writing of the contact information for the construction liaison.

Timing/Implementation: *Prior to issuance of grading or demolition permits and during construction*

Enforcement/Monitoring: *City Hayward Planning Division and Public Works Department Engineering Division*

TRANSPORTATION/TRAFFIC (SUBSECTION 3.16)

MM TRA-1 Under Background plus Project Conditions, there would be a significant impact at the intersection of Industrial Parkway and Huntwood Avenue (#3), which would continue to operate at LOS F during the PM peak hour with an increased delay of 6.7 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve the intersection operations with an increase in delay of less than 5.0 seconds during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-2 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Mission Boulevard and Industrial Parkway (#1), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 7.4–8.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour and to LOS E during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-3 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Industrial Parkway and Dixon Street (#2), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 14.3–18.2 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour and to LOS D during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-4 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Industrial Parkway and Huntwood Avenue (#3), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 8.0–8.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM and PM peak hours.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-5 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Industrial Parkway and Industrial Parkway Southwest (#4), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 5.7–10.4 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the AM and PM peak hours.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-6 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Mission Boulevard and Valle Vista Avenue (#5), which would continue to operate at LOS F during the AM peak hour with an increased delay of 23.8 seconds, which is above the 5.0-second threshold for intersections already operating at a deficient level of service. Widening and restriping the eastbound approach to one left-only lane and one right turn lane would improve the operations at the Mission Boulevard/Valle Vista Avenue intersection to LOS E in the AM peak hour and LOS B in the PM peak hour. The developer's fair share of the improvement cost is 17 percent for Cumulative plus Project conditions and 51 percent for Background plus Project conditions. **Appendix TIA** illustrates the fair-share calculations.

Timing/Implementation: *Applicant to provide funding to address intersection improvement prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-7 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Mission Boulevard and Tennyson Road (#6) during the AM peak hour. An adjustment in traffic signal cycle and green time allocation (splits) would improve the intersection operations, with an increase in delay of less than 5.0 seconds during the AM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-8 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Tennyson Road and Dixon Street (#7), which would continue to operate at LOS F during the PM peak hour with an increased delay of 5.3 seconds. This impact would be mitigated by an adjustment in traffic signal cycle and green time allocation (splits), which would improve intersection operations, with an increase in delay of less than 5.0 seconds during the PM peak hour.

Timing/Implementation: *Applicant to provide funding to address signal timing prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

MM TRA-9 Under Cumulative plus Project Conditions, there would be a significant impact at the intersection of Dixon Street and Valle Vista Avenue (#8), which would continue to operate at LOS F during the AM and PM peak hours with an increased delay of 21.3–29.7 seconds. The installation of a traffic signal would improve operations to an acceptable level of service during both peak hours. As a result of the mitigation measure, intersection conditions would improve to LOS B with 15.4 seconds of delay in the AM peak hour and LOS C with 29.8 seconds of delay in the PM peak hour. The developer's fair share of the improvement cost is 5 percent for Cumulative plus Project Conditions and 28 percent for Background plus Project conditions. **Appendix TIA** illustrates the fair-share calculations.

Timing/Implementation: *Applicant to provide funding to address intersection improvement prior to issuance of building permits*

Enforcement/Monitoring: *Building Division and Public Works Department, Engineering and Transportation Division*

TRIBAL CULTURAL RESOURCES (SUBSECTION 3.17)

MM TCR-1 If tribal cultural resources are discovered during project construction activities, all work within 25 feet of the discovery shall be redirected and the tribal monitor shall assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Impacts to tribal cultural resources should be avoided by project activities, but if such impacts cannot be avoided, the resources shall be evaluated for their California Register eligibility. If the tribal cultural resource is not California Register–eligible, no further protection of the find is necessary. If the tribal cultural resource is California Register–eligible, it shall be protected from project-related impacts or such impacts mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis, recording the resource,

preparation of a report of findings, and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Timing/Implementation: *During project construction.*

Enforcement/Monitoring: *City of Hayward Planning Division and Public Works Department.*

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5.0 LIST OF PREPARERS

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6.0 List of Abbreviations

6.0 LIST OF ABBREVIATIONS

The following abbreviations have been or may have been used in the preparation of this IS/MND.

Abbreviation	Definition	Abbreviation	Definition
AB	Assembly Bill	**LOS**	level of service
ABAG	Association of Bay Area Governments	**LUST**	leaking underground storage tank
ACFCD	Alameda County Flood Control and Water Conservation District	**MBTA**	Migratory Bird Treaty Act
ACTC	Alameda County Transportation Commission	**mgd**	million gallons per day
AC Transit	Alameda-Contra Costa Transit District	**mph**	miles per hour
APN	Assessor's Parcel Number	**MT**	metric ton
BAAQMD	Bay Area Air Quality Management District	**MTC**	Metropolitan Transportation Commission
BART	Bay Area Rapid Transit	**MTS**	Metropolitan Transportation System
BMP	best management practice	**NO_2**	nitrogen dioxide
CalEEMod	California Emissions Estimator Model	**NOx**	nitrogen oxides
Caltrans	California Department of Transportation	**NPDES**	National Pollutant Discharge Elimination System
CA-MUTCD	California Manual on Uniform Traffic Control Devices	**N_2O**	nitrous oxide
CARB	California Air Resources Board	**NWIC**	Northwest Information Center
CDFW	California Department of Fish and Wildlife	**O_3**	ozone
CEQA	California Environmental Quality Act	**PA**	planning area
CFR	Code of Federal Regulations	**PM**	particulate matter
CH_4	methane	**PM_{10}**	particulate matter of 10 micrometers in diameter or less
CMP	Congestion Management Program	**$PM_{2.5}$**	particulate matter of 2.5 micrometers in diameter or less
CO	carbon monoxide	**ppm**	parts per million
CO_2	carbon dioxide	**PSA**	Purchase and Sale Agreement
CO_2e	carbon dioxide equivalent	**REC**	Recognized Environmental Condition
CRRP	Community Risk Reduction Plan	**ROG**	reactive organic gas
CWA	Clean Water Act	**RWQCB**	Regional Water Quality Control Board
dB	decibel	**SB**	Senate Bill
dBA	A-weighted decibel	**SFBAAB**	San Francisco Bay Area Air Basin
EIR	environmental impact report	**SFPUC**	San Francisco Public Utilities Commission
EPA	US Environmental Protection Agency	**SIP**	State Implementation Plan
ESA	environmental site assessment	**SO_2**	sulfur dioxide

6.0 LIST OF ABBREVIATIONS

Abbreviation	Definition	Abbreviation	Definition
FEMA	Federal Emergency Management Agency	**SR**	State Route
FGC	California Fish and Game Code	**SWPPP**	stormwater pollution prevention plan
FHWA	Federal Highway Administration	**TAC**	toxic air contaminant
GHG	greenhouse gas	**TDM**	Transportation Demand Management
HARD	Hayward Area Recreation and Park District	**TIA**	Traffic Impact Analysis
HCM	Highway Capacity Manual	**USACE**	US Army Corps of Engineers
HFD	Hayward Fire Department	**USFWS**	US Fish and Wildlife Service
HPD	Hayward Police Department	**V/C**	volume-to-capacity (ratio)
HUSD	Hayward Unified School District	**VdB**	vibration decibels
HVAC	heating, ventilating, and air-conditioning	**VMT**	vehicle miles traveled
IS/MND	Initial Study/Mitigated Negative Declaration	**WMI**	Waste Management, Inc.
lbs/day	pounds per day	**WPCF**	Water Pollution Control Facility
L_{dn}	day-night average noise level		
L_{max}	maximum noise level		

7.0 REFERENCES

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