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MEMORANDUM

DATE: February 24, 2020

TO: Jennifer Ott, Deputy City Manager
Monica Davis, Manager

FROM: Theresa Wallace, AICP, Principal
Shanna Guiler, AICP, Associate/Environmental Planner

SUBJECT: California Environmental Quality Act (CEQA) Addendum for the Route 238 Development Project - Apple Avenue/Oak Street (Parcel Group 9)

This document, prepared pursuant to the California Environmental Quality Act (CEQA) and the regulations and policies of the City of Hayward, provides information and analysis concerning the Route 238 Development Project – Apple Avenue/Oak Street (Parcel Group 9) (proposed project). This document is an Addendum to the City of Hayward 2040 General Plan Environmental Impact Report[1] (GP EIR), which was certified by the City of Hayward in July 2014. This Addendum to the GP EIR evaluates whether changes to development assumptions included in the General Plan associated with the proposed project would result in new or substantially more adverse significant effects or require new mitigation measures not identified in the GP EIR. See Attachment A for a full description of the proposed project. The City of Hayward is the Lead Agency under CEQA. In accordance with CEQA Section 21093(b) and CEQA Guidelines Section 15152(a), this Addendum tiers off the GP EIR, certified in July 2014, which is hereby incorporated by reference.

INTRODUCTION

Parcel Group 9 is located at the northern end of the City, immediately east of the Interstate 580/State Route 238 (I-580/SR-238) interchange, north of the Apple Avenue and Oak Street intersection. The central portion of the site is located within the City, and the northern portion of the site is located within Castro Valley.

The proposed project would result in the construction of a 150-room hotel and associated parking and landscaping on approximately 2.69 acres of land owned by the City of Hayward (City). The project would require a Zone Change, Site Plan Revie, Improvement Plans Review, Grading Permit and Building Permit.

This Addendum is prepared pursuant to CEQA Guidelines Section 15164 which states: “The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” Section 15162 specifies that “no subsequent EIR

[1] Hayward, City of, 2014. *Final Environmental Impact Report City of Hayward General Plan*. May.

shall be prepared for that project unless the lead agency determines … one or more of the following:"

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous EIR;

    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Pursuant to CEQA Guidelines Section 15164(e), the purpose of this Addendum is to describe and evaluate the proposed project (Route 238 Development Project – Apple Avenue/Oak Street), assess the proposed modifications to the project evaluated in the GP EIR, and identify the reasons for the City's conclusion that changes to the proposed project and associated environmental effects do not meet the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent or supplemental EIR.

Attachment A to this Addendum provides a complete description of the proposed project, its location, existing site characteristics, proposed development, and required approvals and entitlements.

Attachment B to this Addendum provides the Environmental Checklist prepared for the project. This checklist provides information to: (1) compare the environmental impacts of the proposed project with impacts expected to result from development approved in the City of Hayward 2040 General Plan and evaluated in the GP EIR; (2) demonstrate that the proposed project would not result in new or more severe significant environmental impacts; (3) provide new or revised mitigation measures

not identified in the GP EIR; and (4) conclude that no substantial changes with respect to the circumstances under which the project would be undertaken since the GP EIR was certified resulted in new or more severe significant environmental effects.

COMPARISON TO THE CONDITIONS LISTED IN CEQA GUIDELINES SECTIONS 15162 AND 15163

The following discussion summarizes the reasons that a subsequent or supplemental EIR, pursuant to CEQA Guidelines Sections 15162 and 15163, is not required and an Addendum to the GP EIR is the appropriate CEQA document.

Substantial Changes

Per the analysis included in Attachment B, Environmental Checklist, the proposed modifications to the project evaluated in the GP EIR would not result in new significant impacts beyond those identified in the GP EIR, would not substantially increase the severity of impacts identified in the GP EIR, and would not require major revisions to the GP EIR. Therefore, the proposed changes to the project would be minor modifications, not substantial changes, and an Addendum is the appropriate document to address these minor modifications rather than a subsequent or supplemental EIR.

Substantial Changes in Circumstances

As described in the Environmental Checklist for each topic, environmental conditions in and around the project site have not changed such that implementation of the proposed minor modifications to the GP EIR would result in new significant environmental effects or a substantial increase in the severity of environmental effects identified in the GP EIR, and thus would not require major revisions to the GP EIR.

New Information

No new information of substantial importance, which was not known or could not have been known when the GP EIR was certified, has been identified which shows that the proposed modifications to the GP EIR associated with the proposed project would be expected to result in: (1) new significant environmental effects not identified in the GP EIR; (2) substantially more severe environmental effects than shown in the GP EIR; (3) mitigation measures or alternatives previously determined to be infeasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the City declines to adopt the mitigation measure or alternative; or (4) mitigation measures or alternatives which are considerably different from those analyzed in the GP EIR would substantially reduce one or more significant effects on the environment, but the City declines to adopt the mitigation measure or alternative. As described through the Environmental Checklist, no new or substantially more severe impacts are expected beyond those identified in the GP EIR.

STANDARD CONDITIONS OF APPROVAL

Standard Conditions of Approval (SCAs) have been identified that incorporate development policies and standards from various plans, policies, and ordinances (e.g., Hayward Municipal Code, California Building Code, Uniform Fire Code, the Regional Water Quality Control Board's Municipal Regional Permit, etc.), which have been found to substantially mitigate environmental effects. The City of

Hayward applies SCAs for all projects and amends these conditions as needed. As applicable, the SCAs are adopted as requirements of an individual project when it is approved by the City, and are designed to, and will, avoid or substantially reduce a project's environmental effects.

In reviewing project applications, the City determines which SCAs apply based upon the zoning district, community plan, and the type of permits/approvals required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which SCAs apply to a specific project. Because these SCAs are mandatory requirements imposed on a citywide basis, environmental analyses assume that these SCAs will be imposed and implemented by the project, and are not imposed as mitigation measures under CEQA.

CONCLUSION

The proposed modifications to the GP EIR described in this Addendum would not require major revisions to the GP EIR due to new or substantially increased significant environmental effects. The analysis contained in the Environmental Checklist confirms that the modified project is within the scope of the GP EIR and will have no new or more severe significant effects and no new mitigation measures are required. Therefore, no subsequent or supplemental EIR or further CEQA review is required prior to approval of the proposed project, as described in this Addendum.

Attachments: A – Project Description
B – Environmental Checklist

ATTACHMENT A
PROJECT DESCRIPTION

The following describes the proposed Route 238 Property Development – Apple Avenue/Oak Street (Parcel Group 9) project (proposed project) that includes a 150-room hotel and associated parking and landscaping on approximately 2.69 acres of land owned by the City of Hayward (City). In addition to the description of the proposed project itself, this section includes a summary description of the project's location and existing site characteristics. This project description is part of the preparation of an Addendum to the City of Hayward 2040 General Plan Environmental Impact Report[1] (GP EIR), certified by the City of Hayward in July 2014. The City is the CEQA lead agency for the proposed project.

PROJECT BACKGROUND

In the 1960s, the California Department of Transportation (Caltrans) purchased over 400 parcels in the Hayward foothills, east of Foothill and Mission Boulevards, for the construction of the Route 238 Bypass Freeway project. However, in 1971 the community filed a lawsuit to stop the project and it was eventually abandoned. Caltrans has been selling the State-owned properties within the right-of-way because they are no longer required for the freeway project.

In January 2016, the City negotiated a purchase and sale agreement with Caltrans to acquire several remaining parcel groups along the former freeway alignment. The City's goal is to develop these properties with uses that would be consistent with the comprehensive vision of the City's General Plan and to integrate these properties with the rest of the community. The acquisition and development of each of these parcel groups is independent from one another, and no part of any one development is related to or dependent on the development of any other group of parcels.

PROJECT SITE

The following section describes the location and site characteristics for the proposed project area and provides a brief overview of the existing land uses within and in the vicinity of the site.

Location and Surrounding Land Uses

The City of Hayward occupies approximately 64 square miles in southwestern Alameda County, approximately 14 miles south of Downtown Oakland, 20 miles southeast of Downtown San Francisco, and 25 miles north of Downtown San Jose. The City's planning area (Sphere of Influence) encompasses approximately 72 square miles and includes all land within the Hayward City limits and adjacent unincorporated county land, including Garin Regional Park, open space areas east of the City, portions of San Lorenzo and Castro Valley, and the communities of Hayward Acres, Cherryland, and Fairview.

Parcel Group 9 is located at the northern end of the City, immediately east of the Interstate 580/State Route 238 (I-580/SR-238) interchange, north of the Apple Avenue and Oak Street

[1] Hayward, City of, 2014. *Final Environmental Impact Report City of Hayward General Plan*. May.

intersection. The central portion of the site is located within the City, and the northern portion of the site is located within Castro Valley.

Regional vehicular access to Parcel Group 9 is provided by I-580 located adjacent to the project site and SR-238 that traverses the City. Figures 1 through 3 (attached) show the regional and local context of the proposed project site.

The on-ramp to I-580 East forms the western boundary of Parcel Group 9. Apple Avenue bounds the site to the south. Multifamily housing borders the eastern edge of the site. Foothill Boulevard runs parallel to the site, west of the I-580 on-ramp. A church and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used appliance store are located along Foothill Boulevard, to the west and southwest of the site. Strobridge Elementary School is located approximately 800 feet to the east.

Site Characteristics and Current Site Conditions

The proposed project site is relatively flat and primarily consists of vacant grassland with a few scattered trees. A vacant lot used as a construction materials storage yard is located at the corner of Apple Avenue and the I-580 East on-ramp. An apartment building, located at the corner of Oak Street and Apple Avenue, is within unincorporated Castro Valley. The existing apartment building would be demolished prior to commencement of the development project described herein.

General Plan

The City's General Plan Land Use Map designates the portion of Parcel Group 9 within the City as Commercial/High Density Residential (up to 34.8 dwelling units per net acre) and Public/Quasi-Public. The site is zoned for Commercial Office, Public Facilities, and High Density Residential (minimum lot size 1,250 square feet). The purpose of the Commercial Office District is to provide for and protect administrative, professional, business, and financial organizations that are compatible with residential use of adjacent properties. The City of Hayward Zoning Ordinance outlines specific development standards and design guidelines for development within the Commercial Office, Public Facilities, and High Density Residential districts.

The proposed project is located solely on land that lies within the City of Hayward. The land adjacent to the project site is located within the unincorporated community of Castro Valley. This land is designated as Public/Institutional on the Castro Valley General Plan Land Use Map and is zoned for Retail Business, Suburban Residential (8 dwelling units per acre), General Business, and Industrial Park. However, the proposed project would be located solely within the portion of the project site that lies within the City of Hayward.

The GP EIR analyzed implementation and buildout of the General Plan over a 26-year planning period. Although no specific development projects were proposed in conjunction with the General Plan, the GP EIR analyzed a development potential of approximately 7,475 additional single-family dwelling units; 7,339 additional multi-family dwelling units; and 25,787 additional jobs. The jobs are generally categorized as follows: retail, service, manufacturing, wholesale, agricultural, and other.

As a largely built-out community, future development opportunities are limited to relatively small infill sites and the redevelopment of underutilized parcels. The development capacity assumptions are derived from already adopted plans and initiatives as well as housing, population, and employment projections issued by the Association of Bay Area Governments. Table A identifies the Hayward 2040 General Plan development capacity assumptions used in the GP EIR.

Table A: Existing and Proposed Development in the General Plan Planning Period

Land Use	Existing 2010	Proposed Through 2040	Net New Development
Single-Family Housing	30,989	38,461	7,472
Multi-Family Housing	20,395	27,794	7,399
Employment	76,067	101,854	25,787

Source: City of Hayward (July 2014).

PROPOSED PROJECT

The Parcel Group 9 Project would consist of a 150-room hotel and associated parking and roadway improvements, including curbs, gutters, sidewalks, utilities and lighting. The land use concept for the proposed project is shown in Figure 4 (attached).

The proposed project is consistent with the intent of the Commercial/High Density Residential (CHDR) designation, which supports lodging uses. No changes in General Plan land use designations would be required for the proposed project. The project site would need to be re-zoned from High Density Residential (RH) and Commercial Office (CO) to General Commercial (GC) to allow for hotel development.

Hotel

The proposed four-story, approximately 100,000-square-foot building would include 150 guest rooms. In addition to the guest rooms, the proposed building could include a meeting room, lounge area with a bar and seating space, office space, and fitness center. An outdoor pool could also be provided. The building frontage would be oriented towards the Oak Street to the east. A conceptual site plan for the proposed project is shown in Figure 4.

Parking

Parking would be provide pursuant to City requirements, which require one parking space for each room and one space for every two employees on the largest shift. An approximately 150-space parking area would be provided for hotel guests and employees.

On-Site Pedestrian and Vehicle Circulation

Inbound access to the project site would be via Apple Avenue, an existing one-way road from northbound Foothill Boulevard. In the vicinity of the project site, Foothill Boulevard is a two-way street with three to four 11- to 12-foot travel lanes in each direction and a median. Inbound and outbound access would be provided via Oak Street to Grove Way. Grove Way includes one travel lane and street parking in each direction.

Pedestrian facilities are provided along Foothill Boulevard, including sidewalks, continental crosswalks, and ADA-compliant curb ramps. Sidewalk gaps exist on Grove Way east of Foothill Boulevard (north and south side) leading to the Oak Street access point. The Oak Street crosswalk at Grove Way is also fading. No sidewalks are provided along Oak Street or Apple Valley Avenue. As part of the proposed project, sidewalks would be provided along the project frontage, as well as Oak Street and Apple Avenue.

Open Space and Landscaping

The proposed project would also include landscaping around the project site, particularly along I-580 to provide screening from the freeway. In addition, trees would be provided within the parking area. Signage would be installed that provides visibility from the surrounding streets, consistent with adjacent commercial development.

Infrastructure Requirements

Oak Street contains existing public utilities and would extend into the project site; therefore, the proposed project would have frontage on a public right-of-way containing public utilities. A description of utilities and infrastructure associated with the project is provided below.

Water

The Parcel Group 9 site is located within the EBMUD service area. An 8-inch steel main is located in Apple Avenue and Oak Street. In addition, a 36-inch EBMUD transmission line is located within Oak Street and Apple Avenue.

Sewer Service

Wastewater collection is provided by Oro Loma Sanitary District. A 6-inch vitrified clay pipe (VCP) main is located in Apple Avenue and Oak Street. In addition, a 6-inch VCP is located in the undeveloped Oak Street right-of-way within the site.

Stormwater/Drainage

No storm drain infrastructure is located in Oak Street. An 18-inch metal storm drain line is located in Apple Avenue adjacent to the site. Proposed development would be required to provide hydromodification of all proposed runoff, to ensure post-construction runoff levels are the same as existing runoff.

Gas and Electrical Improvements

Electric service is accessible to the site by overhead electric lines on joint utility poles in Oak Street, and by extending into the undeveloped Oak Street right-of-way on the site. Gas service is distributed to the site by underground mains. A 1.25-inch and a 2-inch gas main are located in Apple Avenue and Oak Street

Outdoor Lighting

Outdoor lighting would be in conformance with the City's Municipal Code. Limited safety and security lighting and indirect shielded lighting would be provided on the outside of the hotel and within the parking area as needed for public safety.

Grading

The western portion of the site is relatively level, and the eastern portion of the site is moderately to steeply sloping hillside. The proposed project would be located in the southeastern portion of the project site, where it is relatively flat. Grading would be in conformance with the City's Municipal Code (Chapter 10, Article 18, Grading and Clearing), which requires approval of a grading permit prior to commencement of grading activities and adherence to performance and design standards to prevent erosion, preserve existing slopes and vegetation, protect existing structures, and accommodate site drainage.

Construction

Construction is anticipated to occur over 12 to 24 months starting in spring 2021. For the purpose of this Addendum, it is assumed that project construction would not require pile driving, but would utilize a typical mix of construction equipment for projects of a similar type and size, including graders, bulldozers, jackhammers, and cement mixers.

RELATED PROJECTS

When evaluating cumulative impacts, CEQA requires the use of either a list of past, present, and probable future projects, including projects outside the control of the lead agency, or a summary of projections in an adopted planning document, or some reasonable combination of the two approaches.

The cumulative analysis of this Addendum is consistent with Section 15130(b)(1) of the CEQA Guidelines as it is based on both a list of past, present and probable future development projects in the area (short-term cumulative development) and a summary of development projections. Cumulative impacts would most likely result from short-term and long-term development in the immediate vicinity of the proposed project. Where appropriate, this Addendum assesses the short-term and long-term cumulative impacts that would result from the project plus other projected development in the project vicinity. The following sections discuss the anticipated short-term and long-term development in the project vicinity.

Short-Term Development

As described above, the proposed project is anticipated to start construction in spring 2021, extending approximately 12 to 24 months. Other projects anticipated to be under construction concurrent with the proposed project include other projects located within the Route 238 Study Area. These projects are located in the vicinity of the proposed project and could contribute to cumulative construction impacts. These projects are described below.

- **Parcel Group 2.** The Parcel Group 2 project site is composed of two parcels that total about 12.2 acres. The first parcel totals approximately 4.65 acres and is located at 29212 Mission Boulevard. The second parcels, approximately 7.6 acres, abuts the first parcel on the south and extends from Mission Boulevard on west to Tennyson Road on the north. The proposed project would result in the development of approximately 190 residential units, approximately 10,800 square feet of ground floor commercial uses, and related site improvements.

- **Parcel Group 3.** The Parcel Group 3 project site is located at the northeastern corner of Mission Boulevard and Tennyson Road. The proposed project will consist of 180 affordable rental apartments and a charter school serving approximately 400 elementary students.

- **Parcel Group 5 (Bunker Hill).** Parcel Group 5 is located northwest of Harder Road, approximately 1,000 feet east of Mission Boulevard and adjacent to and southwest of CSU East Bay. Proposed development at this site would include up to 74 single-family residential units and 8 accessory dwelling units (ADUs), approximately 10.5 acres of open space, and associated roadway and infrastructure connections.

- **Parcel Group 6 (Quarry Site).** Parcel Group 6 is located north of Carlos Bee Boulevard, south of Highland Boulevard, approximately 1,000 feet northeast of Mission Boulevard and approximately 2,000 feet northwest of California State University East Bay (CSU East Bay). Proposed development at this site would include a maximum of 500 townhomes/multi-family units and 500 student-housing units, up to 10,000 square feet of retail/commercial space, passive open space, a neighborhood park, and associated roadway and infrastructure connections.

- **Parcel Group 7 (Mission Boulevard/Carlos Bee Boulevard).** Parcel Group 7 is located at the southeastern corner of Mission Boulevard and Carlos Bee Boulevard. Proposed development at this site would include a new auto dealership. The new auto dealership would consist of an approximately 65,000-square-foot facility that will include sales, service, and display. The new dealership would be located on the lower five acres of the site towards Mission Boulevard.

- **Parcel Group 8 (Grove Way/Foothill Boulevard)**. Parcel Group 8 is located at the northern end of the City, south of Grove Way and east of Foothill Boulevard. Proposed development at this site would include a mix of townhomes, commercial, multifamily high density residential and a large open space parkland.

- **21339 Oak Street Development.** The 21339 Oak Street Development consists of a 40-unit townhome development on 1.66-acres on Oak Street between Apple Avenue and Grove Way. The proposed project would include 40 townhouse units, housed in six three-story buildings. Units would range in size from 1,327 to 1,441 square feet. The project would also include new landscaping, frontage and site improvements, and two common open space areas. This project was approved by the City Council on October 29, 2019.

Long-Term Development

The potential development outlined in the 2014 General Plan was considered in the cumulative analysis in this Addendum, along with the specific projects identified above. Because the 2014 General Plan and the GP EIR developed growth forecasts through 2040 to account for growth within the General Plan Planning Area, including the project site, use of the development projections from these two documents is inherently cumulative, in that the projection considers impacts of development generated by future planned uses. Since 2014, updated growth forecasts have projected slightly less growth within the City than was estimated in 2014, therefore use of the 2014 General Plan's assumptions is conservative, potentially overstating growth potential and intensity of environmental effects. Moreover, projects approved within the General Plan Planning Area have not exceeded the growth forecasts or developed in a way that would change the likely environmental impacts associated with future growth. Therefore, the cumulative effects of long-term development are fully reflected in the 2014 General Plan's growth forecasts and analyzed within this Addendum accordingly.

AMENDMENTS AND PERMITS

As part of the proposed project evaluated in this Addendum, the following approvals and permits would be required:

- Zone Change from RH (High Density Residential) and CO (Commercial Office) to CG (General Commercial) to allow for hotel development
- Site Plan Review
- Improvement Plans review
- Grading Permit
- Building Permit

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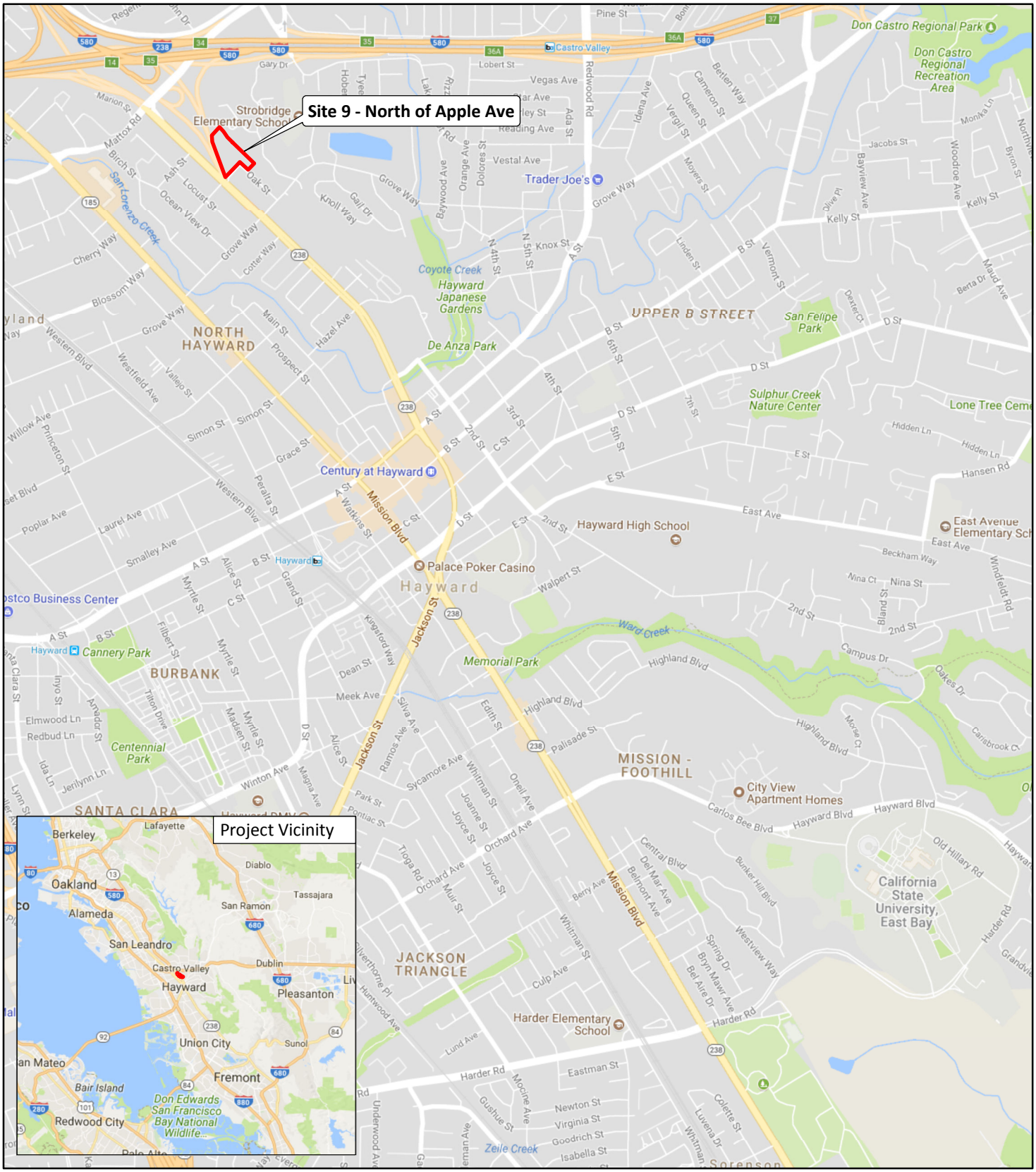

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Parcel Group

FIGURE 1

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Hayward Route 238 Properties - Parcel Group 9
Hayward, Alameda County, California

Regional Location and Overview Map

SOURCE: Google Streets Map (2018); StreetMap NA (2012).

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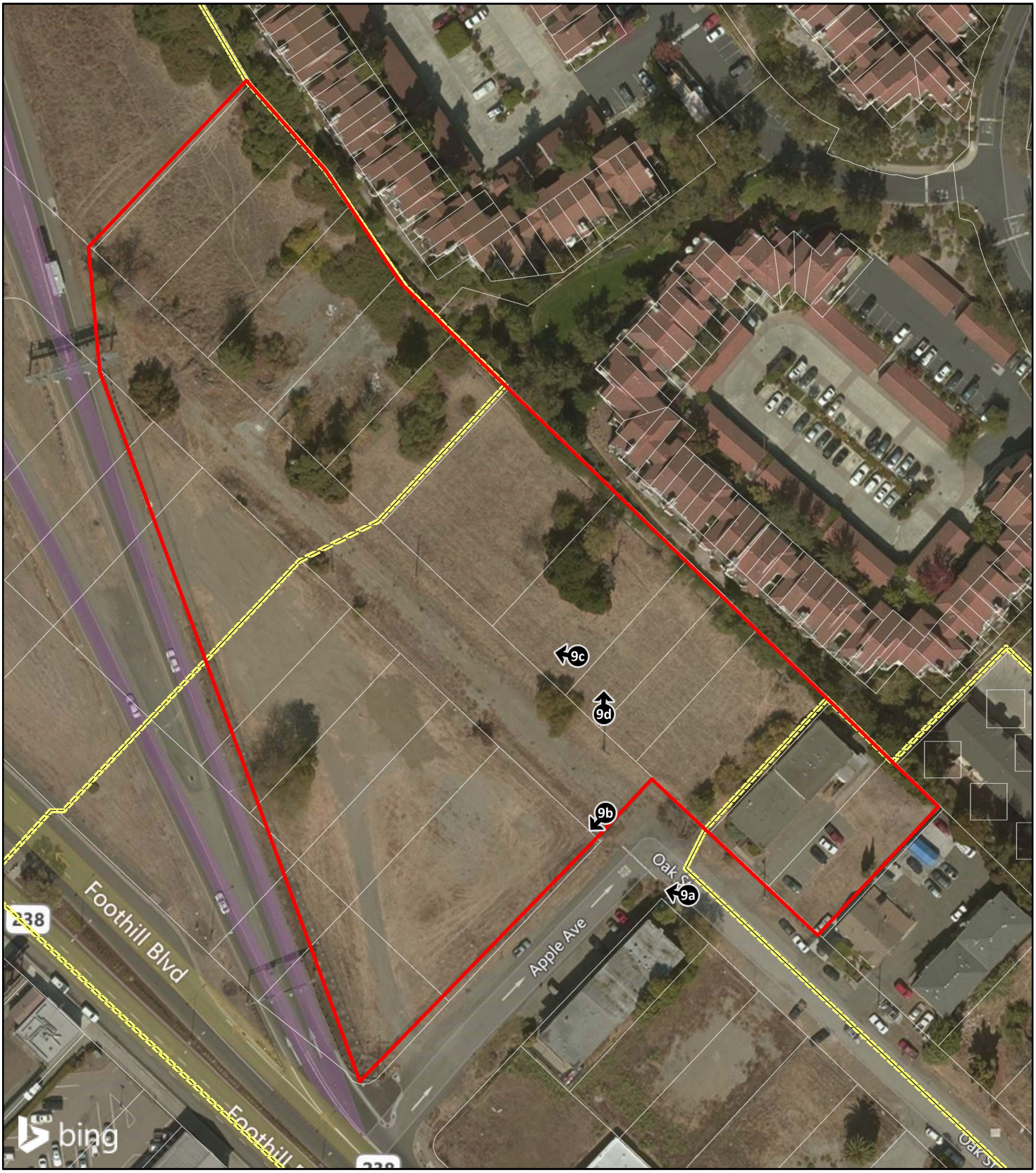

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Parcel

City Limits

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SOURCE: Microsoft Bing Basemap.

FIGURE 2

Hayward Route 238 Properties - Parcel Group 9
Hayward, Alameda County, California

Parcel Group 9 – Aerial and Photo Points

I:\DEW1701\GIS\Maps\Environmental Constraints\Figure 6a_Parcel Group 9 - Apple Ave Oak St Aerial and Photo Points.mxd (2/8/2018)

9a. View from intersection of Oak Street and Apple Street, looking northwest towards site

9b. View from site looking southwest towards SR-238 interchange

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FIGURE 3a

Hayward Route 238 Properties - Parcel Group 9
Hayward, Alameda County, California

Parcel Group 9 – Site Photos

9c. View from site looking northwest towards on-ramp to I-580 East

9d. View from site looking northeast towards adjacent residential uses

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FIGURE 3b

Hayward Route 238 Properties - Parcel Group 9
Hayward, Alameda County, California

Parcel Group 9 – Site Photos

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FIGURE 4

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Hayward Route 238 Properties - Parcel Group 9
Hayward, Alameda County, California
Conceptual Site Plan

SOURCE: xxx

P:\HAY1901 Parcel Group 9\PRODUCTS\Graphics\Figures\Figure_4.ai (2/3/2020)

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ATTACHMENT B
ENVIRONMENTAL CHECKLIST
PURSUANT TO CEQA GUIDELINES SECTION 15168

CEQA Guidelines 15168(c)(4) recommends using a written checklist or similar device to confirm whether the environmental effects of a subsequent activity were adequately covered in a program EIR. This checklist confirms that the Route 238 Property Development Project – Apple Avenue/Oak Street (Parcel Group 9) (proposed project) described in Attachment A is within the scope of the City of Hayward 2040 General Plan EIR[1] (GP EIR), certified by the City of Hayward in July 2014. The proposed project would not result in new or substantially more severe significant effects, and no new mitigation measures are required for the proposed project.

In accordance with CEQA Section 21093(b) and CEQA Guidelines Section 15152(a), this Addendum tiers off the GP EIR, which is hereby incorporated by reference.

This environmental checklist is used to: (1) compare the environmental impacts of the proposed project with impacts expected to result from the development approved in the City of Hayward 2040 General Plan and evaluated in the GP EIR; (2) identify whether the proposed project would result in new or more severe significant environmental impacts; (3) identify if new or revised mitigation measures would be required by the project sponsor; and (4) identity if substantial changes with respect to the circumstances under which the project would be undertaken since the GP EIR was certified would result in new or more severe significant environmental effects.

In summary, no new or more severe significant impacts were identified for the proposed project that were not identified and mitigated in the GP EIR, and no new mitigation measures would be required for the proposed project. In some cases, Standard Conditions of Approval have been identified to ensure compliance with development policies and standards from various plans, policies, and ordinances, which have been found to substantially mitigate environmental effects. For all environmental topics addressed in the following checklist, there have been no substantial changes in environmental circumstances that would result in new or more severe significant environmental effects than were identified and evaluated in the GP EIR. Therefore, no subsequent EIR or CEQA evaluation is required for the Route 238 Development Project – Apple Avenue/Oak Street (Parcel Group 9).

[1] Hayward, City of, 2014a. *Final Environmental Impact Report City of Hayward General Plan*. May.

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1. AESTHETICS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Except as provided in Public Resources Code Section 21099, 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 outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Discussion

Scenic Vistas

The project area is within the heavily developed central portion of the City. However, approximately half of the land within the City of Hayward consists of water, baylands, and open space. Marshland along the shoreline creates the western boundary of the City, and rolling hills form the eastern boundary of the City. The higher elevation hillside areas and portions of the shoreline provide scenic vistas of San Francisco Bay. The developed areas of the City can block scenic views, including views of the East Bay Hills. The hillside areas of the City are generally characterized as having a rural character with larger lots and fewer tract-home developments.

Parcel Group 9 is located along the abandoned highway alignment, along Foothill Boulevard. Foothill Boulevard carries high volumes of commuter traffic and is dominated by commercial and residential uses. Parcel Group 9 is located at the City of Hayward/Castro Valley line, adjacent to the I-580/SR-238 interchange, and is surrounded by a mix of residential and commercial uses. The site does not have any scenic vistas of the San Francisco Bay. The site is visible from Foothill Boulevard and the on-ramp to I-580 and SR-238.

The project site is not located in an area considered to be within view of a scenic vista. In addition, development of the proposed project would not obscure any views of scenic vistas from surrounding public vantage points. Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista, and impacts associated with the proposed project would not result in new impacts to scenic vistas or substantially increase the severity of impacts identified in the GP EIR.

Scenic Resources

County designated-scenic highways within the City include I-580, I-880, and SR-92.[2] In addition, I-580, located just north of Hayward, is a designated State Scenic Highway.[3] As described above, the project site is located adjacent to the I-580/SR-238 interchange, just south of I-580. However, the proposed project does not include the removal of any trees, rock outcroppings, or historic buildings. Therefore, impacts associated with the proposed project would not result in new impacts to scenic resources or substantially increase the severity of impacts identified in the GP EIR.

Visual Character

The project site is located within an urbanized area. As noted in Attachment A, Project Description, as part of the proposed project, the project site would be rezoned to the CG (General Commercial) zoning district, in which hotel uses are permitted. Consistent with the City's Zoning Ordinance, the proposed project would be required to comply with the Minimum Design and Performance Standards for the CG District as outlined in Section 10-1.1045 of the City of Hayward Municipal Code.

As noted in Section 2.0, Project Description, Site Plan Review would be required for the proposed project, which would provide for the review of the physical improvements to the project site, including the overall building scale, massing, and design to ensure compatibility and compliance with City requirements governing scenic quality.

Because site-specific review of the proposed building would be required as part of the project entitlement process and would be subject to the design and performance standards identified in the City's Municipal Code, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality, and this impact would be less than significant. Therefore, the proposed project would not result in new impacts to visual character beyond those less-than-significant impacts identified in the GP EIR.

Light and Glare

The site is vacant with the exception of the apartment building at the corner of Apple Avenue and Oak Street, which will be demolished prior to commencement of the proposed project. The apartment building is currently the only existing source of illumination at the project site. Foothill Boulevard and the I-580 on-ramp carry high volumes of vehicle traffic. Taillights and headlights from vehicles traveling along these roadways contribute to existing sources of light and glare in the area.

Development of the proposed project would incrementally increase the amount of nighttime lighting in the surrounding area due to new interior and exterior lighting at the hotel, safety lighting in the parking lot, and lighting associated with additional vehicular traffic to and from the project site. At night these new sources of light would be visible from a distance; however, the addition of

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2 Hayward, City of, 2014. *Hayward 2040 General Plan Background Report.*

3 California Department of Transportation, 2020. Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed January 23, 2020).

new light sources associated with the proposed project would generally blend in with surrounding development and would represent a continuation of existing commercial development within this area of the City. Design Review of the proposed project would ensure that lighting within the project site is sufficient to protect public safety but does not excessively illuminate the surrounding area. Therefore, the proposed project would not create impacts related to light and glare that would be more severe than those identified in the GP EIR.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan, impacts on aesthetics and visual resources were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred related to visual resources. In addition, no revisions to the project or new information that could not have been known at the time the GP EIR was certified would lead to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy LU-1.7 Design Guidelines. The City shall maintain and implement commercial, residential, industrial, and hillside design guidelines to ensure that future development complies with General Plan goals and policies.*

- *Policy LU-3.6 Residential Design Strategies. The City shall encourage residential developments to incorporate design features that encourage walking within neighborhoods by:*

    - *Creating a highly connected block and street network.*

    - *Designing new streets with wide sidewalks, planting strips, street trees, and pedestrian-scaled lighting.*

    - *Orienting homes, townhomes, and apartment and condominium buildings toward streets or public spaces.*

    - *Locating garages for homes and townhomes along rear alleys (if available) or behind or to the side of the front façade of the home.*

    - *Locating parking facilities below or behind apartment and condominium buildings.*

    - *Enhancing the front façade of homes, townhomes, and apartment and condominium buildings with porches, stoops, balconies, and/or front patios.*

    - *Ensuring that windows are provided on facades that front streets or public spaces.*

- *Policy LU-7.2 Ridgelines. The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot*

be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend development with the natural features of the hillside.

- *Policy LU-7.3 Hillside Street Layouts. The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.*

- *Policy LU-7.4 Hillside Street Design. The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curb and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.*

- *Policy LU-7.5 Clustered Developments. The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.*

- *Policy NR-1.7 Native Tree Protection. The City shall encourage protection of mature, native tree species to the maximum extent practicable, to support the local ecosystem, provide shade, create windbreaks, and enhance the aesthetics of new and existing development.*

- *Policy NR-8.1 Hillside Residential Design Standards. The City shall regulate the design of streets, sidewalks, cluster home development, architecture, site design, grading, landscaping, utilities, and signage in hillside areas to protect aesthetics, natural topography, and views of surrounding open space through the continued Hillside Design and Urban/Wildland Interface Guidelines.*

- *Policy NR-8.2 Hillside Site Preparation Techniques. The City shall require low-impact site grading, soils, repair, foundation design, and other construction methods to be used on new residential structures and roadways above 250 feet in elevation to protect aesthetics, natural topography, and views of hillsides and surrounding open space.*

- *Policy M-3.6 Context Sensitive. The City shall consider the land use and urban design context of adjacent properties in both residential and business districts as well as urban, suburban, and rural areas when designing complete streets.*

- *Policy M-3.11 Adequate Street Canopy. The City shall ensure that all new roadway projects and major reconstruction projects provide for the development of an adequate street tree canopy.*

- *Policy M-5.5 Streetscape Design. The City shall require the pedestrian-oriented streets be designed and maintained to provide a pleasant environment for walking including shade trees; plantings; well-designed benches, trach receptacles, and other furniture; pedestrian-scaled lighting fixtures; wayfinding signage; integrated transit shelters; public art; and other amenities.*

- *Policy HQL-8.3 Trees of Significance. The City shall require the retention of trees of significance (such as heritage trees) by promoting stewardship and ensuring that project design provides for*

the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or suitable mitigation.

- *Policy ED-5.5 Quality Development. The City shall require new development to include quality site, architectural, and landscape design features to improve and protect the appearance and reputation of Hayward.*

- *Policy CS-1.10 Lighting. The City shall encourage property owners to use appropriate levels of exterior lighting to discourage criminal activity, enhance natural surveillance opportunities and reduce fear.*

Conclusion

The GP EIR adequately evaluated the aesthetic impacts of the proposed project. Therefore, potential impacts of the proposed project would be less than significant and additional mitigation is not required.

2. AGRICULTURE AND FORESTRY RESOURCES

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

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

Discussion

The City of Hayward and surrounding areas primarily consist of developed, urban land, with pockets of vacant properties; undeveloped bayshore and open space exists on the western and eastern margins of the City. No farmland designated by the California Department of Conservation Farmland Mapping and Monitoring Program (FMPP) is located within the City limits. Grazing land is located east of the City limits.[4] No forest lands or timberlands are located on or adjacent to the site.

[4] California Department of Conservation, Division of Land Resource Protection, 2014. *Alameda County Important Farmland 2014.* Available online at: www.conservation.ca.gov/dlrp/fmmp/Pages/Alameda.aspx (accessed June 19, 2019).

The project site is not used for agricultural production or forestry use nor is it located on a parcel under a Williamson Act contract. Additionally, the project site is not zoned for agricultural use. Therefore, the proposed project would have no impacts on agriculture or forestry resources.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The GP EIR adequately evaluated the agriculture and forestry impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

3. AIR QUALITY

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

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

Discussion

Parcel Group 9 is located with the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin. The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these Acts, the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), particulate matter (PM_{10}), sulfur dioxide (SO_2), and lead (Pb). Secondary criteria pollutants include ozone (O_3), and fine particulate matter ($PM_{2.5}$).

Based on the BAAQMD attainment status and ambient air quality monitoring data, ambient air quality in the vicinity of the project site has basically remained unchanged since approval of the GP EIR. However, the BAAQMD has made two key regulatory changes since the GP EIR was certified in 2014. The updated Clean Air Plan was adopted in April 2017 and revised BAAQMD CEQA Guidelines were adopted in May 2017. These changes in the project circumstances, as well as changes to the proposed project itself, are discussed and evaluated in the following section.

Clean Air Plan Consistency

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of an air quality plan is to bring an area into compliance with the requirements of federal and State air quality standards.

The GP EIR referenced the BAAQMD Bay Area 2010 Clean Air Plan to determine if the General Plan would conflict with or obstruct implementation of an applicable air quality plan. The GP EIR found that the General Plan would be substantially consistent with all applicable control measures in the Bay Area 2010 Clean Air Plan. However, the GP EIR determined that the General Plan would still have significant and unavoidable impacts associated with short-term construction and long-term operational emissions, as well as health risk exposure associated with toxic air contaminants and $PM_{2.5}$, and therefore, would not be considered to be fully consistent with the Clean Air Plan goals. As such, potential conflicts with the applicable air quality plan were considered to be significant.

The current BAAQMD clean air plan is the 2017 Clean Air Plan, adopted on April 19, 2017.[5] The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAQMD will continue progress toward attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve greenhouse gas (GHG) reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants. It also includes control measures to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Consistency with the Clean Air Plan can be determined if a project does the following: (1) supports the goals of the Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. Because the 2017 Clean Air Plan is the most current clean air plan applicable to the region, the proposed project is evaluated for compliance with this plan below.

As discussed in the Project Description, the proposed project is consistent with the intent of the Commercial/High Density Residential (CHDR) designation, which supports lodging uses. No changes in General Plan land use designations would be required for the proposed project. The project site would need to be re-zoned from High Density Residential (RH) and Commercial Office (CO) to General Commercial (GC) to allow for hotel development. However, the proposed project would include a new hotel on an infill site that would locate guests and employees near existing residential and commercial uses, reducing the demand for travel by single occupancy vehicles. Therefore, implementation of the proposed project would not substantially increase population, vehicle trips, or vehicle miles traveled (VMT). As such, the proposed project would not hinder the goals of the Clean Air Plan.

[5] Bay Area Air Quality Management District, 2017. *Bay Area 2017 Clean Air Plan*. April 19.

In addition, the proposed project would comply with all applicable control measures from the BAAQMD Clean Air Plan, as follows:

Stationary Source Control Measures. The stationary source measures, designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by BAAQMD Permit and Inspection programs. Since implementation of the proposed project would not include any stationary sources, the Stationary Source Measures of the Clean Air Plan are not applicable.

Transportation Control Measures. The BAAQMD identifies control measures as part of the Clean Air Plan to reduce ozone precursor emissions from stationary, area, mobile, and transportation sources. The Transportation Control Measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and VMT in addition to vehicle idling and traffic congestion. The proposed project is consistent with the intent of the CHDR designation and would include a new hotel on an infill site that would locate guests and employees near existing residential and commercial uses, reducing the demand for travel by single occupancy vehicles. Therefore, the proposed project would support the ability to use alternative modes of transportation and would promote initiatives to reduce vehicle trips and vehicle miles traveled. Therefore, the proposed project would not conflict with the identified Transportation and Mobile Source Control Measures of the Clean Air Plan.

Energy Control Measures. The Clean Air Plan also includes Energy and Climate Control Measures, designed to reduce ambient concentrations of criteria pollutants and to reduce emissions of CO_2. Implementation of these measures is intended to promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the "urban heat island" effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-volatile organic compound [VOC]-emitting) trees to reduce biogenic emissions, lower air temperatures, provide shade, and absorb air pollutants. The measures include voluntary approaches to reduce the heat island effect by increasing shading in urban and suburban areas through the planting of trees. Implementation of the proposed project would include paved areas that could result in a heating effect. However, the proposed project would include landscaping around the project site. In addition, the proposed project would be required to comply with the latest CALGreen standard building measures and Title 24 standards. Therefore, the proposed project would not conflict with the Energy and Climate Control Measures.

Building Control Measures. The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters, but has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes, to facilitate adoption of best GHG control practices and policies. As identified above, the proposed project would be required to comply with the latest CALGreen standard building measures and Title 24 standards. Therefore, the proposed project would not conflict with these measures.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane. Since the proposed project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban-tree plantings. Since implementation of the proposed project would not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan would not be applicable.

Waste Management Control Measures. The Waste Management Measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the proposed project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies, the Water Control Measures are not applicable to the proposed project.

Super GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. As identified above, the proposed project would be required to comply with the latest CALGreen standard building measures and Title 24 standards reducing GHG emissions. In addition, as discussed in Section 8 of this Environmental Checklist, Greenhouse Gas Emissions, the proposed project would be consistent with the City's Climate Action Plan. Therefore, the proposed project would not conflict with the Super-GHG Control Measures.

As discussed above, implementation of the proposed project would not disrupt or hinder implementation of the applicable measures outlined in the Clean Air Plan, including Transportation and Mobile Source Control Measures, Land Use and Local Impact Measures, and Energy Measures. Therefore, the proposed project supports the goals of the Clean Air Plan and would not conflict with any of the control measures identified in the plan or designed to bring the region into attainment. The proposed project's potential conflicts with the applicable air quality plan would be less than significant. Therefore, the proposed project would not create impacts related to clean air plan consistency that would be more severe than impacts identified in the GP EIR.

Construction-Related Impacts

The GP EIR did not quantify construction emissions; however the GP EIR determined that implementation of the General Plan would involve construction of development projects that would result in the temporary generation of ROG, NO_x, PM_{10} and $PM_{2.5}$ emissions from site preparation (e.g., excavation, grading, and clearing), off-road equipment, material import/export, worker commute exhaust emissions, paving, and other miscellaneous activities. The GP EIR found that emissions from individual construction projects could exceed BAAQMD project-level significance thresholds, and therefore, would result in a significant impact. The GP EIR determined that no additional measures are available that would reduce impacts from short-term construction emissions. All feasible

construction emission reduction measures have been incorporated into the General Plan. Therefore, the GP EIR determined that this impact would remain significant and unavoidable.

During construction of the proposed project, short-term degradation of air quality may occur due to the release of particulate matter emissions (e.g., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly-emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Site preparation and project construction would involve grading, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The BAAQMD has established standard measures for reducing fugitive dust emissions (PM_{10}). With the implementation of these Basic Construction Mitigation Measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROGs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the proposed project using the current California Emissions Estimator Model version 2016.3.2 (CalEEMod), consistent with BAAQMD recommendations. Project construction would begin in spring 2021 and would continue for approximately 12 to 24 months; therefore, to be conservative, this analysis assumes construction would occur for 12 months. As discussed in the Project Description, it is assumed that project construction would not require pile driving, but would utilize a typical mix of construction equipment for projects of a similar type and size, including graders, bulldozers, jackhammers, and cement mixers. Other specific construction details are not yet known; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were used. Construction-related emissions are presented in Table 1. CalEEMod output sheets are included in Appendix 1.

Table 1: Project Construction Emissions in Pounds Per Day

Project Construction	ROG	NO_x	Exhaust PM_{10}	Fugitive Dust PM_{10}	Exhaust $PM_{2.5}$	Fugitive Dust $PM_{2.5}$
Average Daily Emissions	4.4	12.5	0.5	0.5	0.5	0.1
BAAQMD Thresholds	54.0	54.0	54.0	BMP	82.0	BMP
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (January 2020).
Notes: BMP = Best Management Practices

As shown in Table 1, construction emissions associated with the project would be less than significant for ROG, NO_x, $PM_{2.5}$, and PM_{10} exhaust emissions. The BAAQMD requires the implementation of BAAQMD Basic Construction Mitigation Measures (Best Management Practices), which would be required as a Standard Condition of Approval, to minimize construction fugitive dust impacts. These measures are required for all construction projects:

- In order to meet the BAAQMD fugitive dust threshold, the following BAAQMD Basic Construction Mitigation Measures shall be implemented:
    - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
    - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
    - All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    - All vehicle speeds on unpaved roads shall be limited to 15 mph.
    - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
    - Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
    - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
    - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- A publicly visible sign shall be posted with the telephone number and person to contact at the City of Hayward regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project would not create impacts related to construction-related air quality more severe than impacts identified in the GP EIR.

Regional Air Pollutant Emissions

The proposed project would develop the site with a new four-story, approximately 100,000-square-foot building would include 150 guest rooms. In addition to the guest rooms, the proposed building could include a meeting room, lounge area with a bar and seating space, office space, and fitness center. An outdoor pool could also be provided. The proposed project would result in mobile air quality emissions from increased vehicle trips and area source air quality impacts such as emissions generated from the use of landscaping equipment and water heating. The GP EIR determined that project-related operational emissions of the ozone precursors ROG and NO_X would be reduced on an annual basis over the General Plan implementation period, as compared with existing conditions. However, the GP EIR also determined that operational PM_{10} and $PM_{2.5}$ emissions would increase compared to baseline conditions. According to the GP EIR, while the General Plan would be consistent with all applicable control measures in the 2010 Bay Area Clean Air Plan, the rate of increase in VMT and vehicle trips under the General Plan would be higher than the rate of population increase by 2035. Therefore, the GP EIR found that impacts associated with long-term operational emissions under the General Plan would be a significant impact.

The GP EIR determined that no additional measures would substantially reduce impacts from long-term operational emissions. All feasible long-term operational emission reduction measures have been incorporated into the goals, policies, and programs in the General Plan. Therefore, the GP EIR determined that this impact would be significant and unavoidable.

Emission estimates for operation of the proposed project were calculated using CalEEMod. Trip generation rates used in CalEEMod for the project were based on the Transportation Impact Analysis (TIA)[6], which estimates the proposed project would typically generate approximately 1,254 average daily trips. The daily and annual emissions associated with project operational trip generation, energy, and area sources are identified in Table 2 below for ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$. CalEEMod output sheets are included in Appendix 1.

The results shown in Table 2 indicate that the proposed project would not exceed the significance criteria for daily or annual ROG, NO_2, PM_{10} or $PM_{2.5}$ emissions; therefore, the proposed project would not have a significant effect on regional air quality and mitigation would not be required. Therefore, the proposed project would not result in new or more significant operation-related air quality impacts, and these impacts would be less than significant.

[6] Kittelson & Associates, Inc. 2019. *Transportation Impact Analysis – Draft Report. Route 238 Property Development Project (Parcel Group 9).* November.

Table 2: Project Operational Emissions

	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Emissions in Pounds Per Day					
Area Source Emissions	2.5	<0.1	<0.1	<0.1	<0.1
Energy Source Emissions	0.1	0.7	0.6	0.1	0.1
Mobile Source Emissions	1.7	2.6	15.5	4.5	1.2
Total Emissions	**4.3**	**3.3**	**16.2**	**4.6**	**1.3**
BAAQMD Threshold	54.0	54.0	N/A	82.0	54.0
Exceed?	**No**	**No**	**N/A**	**No**	**No**
Emissions in Tons Per Year					
Area Source Emissions	0.4	<0.1	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	0.1	0.1	<0.1	<0.1
Mobile Source Emissions	0.3	0.4	2.7	0.8	0.2
Total Emissions	**0.7**	**0.6**	**2.8**	**0.8**	**0.2**
BAAQMD Threshold	10.0	10.0	N/A	15.0	10.0
Exceed?	**No**	**No**	**N/A**	**No**	**No**

Source: LSA (January 2020).

Local CO Impacts

The BAAQMD 2017 CEQA Guidelines establishes a screening methodology that provides a conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the BAAQMD CEQA Guidelines, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans;
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project 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, or below-grade roadway).

Implementation of the proposed project would not conflict with the Alameda County Transportation Commission (ACTC) for designated roads or highways, a regional transportation plan, or other agency plans. Additionally, the proposed project is expected to generate approximately 70 AM peak hour trips and approximately 86 PM peak hour trips. Therefore, the proposed project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. The project site is not located in an area where mixing of air is limited. Therefore, because the project does not exceed the screening criteria, the project would not result in localized CO concentrations that would exceed State or federal standards and this potential impact would be less than significant. Therefore, the

proposed project would not create impacts related to local CO more severe than impacts identified in the GP EIR.

Local Community Risk and Hazard Impacts to Sensitive Receptors

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks.

According to the BAAQMD, a project would result in a significant impact if it would: individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$). A significant cumulative impact would occur if the project, in combination with other projects located within a 1,000-foot radius of the project site, would expose sensitive receptors to TACs resulting in an increased cancer risk greater than 100.0 in one million, an increased non-cancer risk of greater than 10.0 on the hazard index (chronic), or an ambient $PM_{2.5}$ increase greater than 0.8 $\mu g/m^3$ on an annual average basis. Impacts from substantial pollutant concentrations are discussed below.

As discussed in the GP EIR, implementation of development projects consistent with the General Plan could involve siting of sensitive receptors near major roadways or near major stationary sources of TAC and $PM_{2.5}$ emissions, as well as the siting of potential new sources of these emissions. Such actions could increase community health risk exposure associated with these emissions. The GP EIR found that impacts associated with health risk exposure to TACs and $PM_{2.5}$ would be a significant impact.

The GP EIR included a Community Risk Reduction Strategy (CRRS) to address health risk exposure from existing and future sources of TAC and $PM_{2.5}$ within the Hayward Planning Area. As part of the development of the CRRS, an inventory of emissions sources was collected and dispersion modeling conducted to determine which areas of the Hayward Planning Area are exposed to higher concentrations of cancer risk associated with the inhalation of TACs and/or higher concentrations of $PM_{2.5}$. The modeling produced four maps for understanding how levels of cancer risk and $PM_{2.5}$ concentrations vary throughout the City, which is shown in Exhibits 1 through 4 in the Hayward Community Risk Reduction Plan Technical Support Documentation in the GP EIR Air Quality appendix. Based on Exhibits 1 through 4 of the Community Risk Reduction Plan Technical Support Documentation, Parcel Group 9 is located within a high health risk exposure area. However, the proposed project would include a new hotel, which is not considered a sensitive receptor.

Parcel Group 9 is surrounded by multifamily housing, a church, and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used appliance store. Construction of the proposed project may expose surrounding sensitive receptors, including the multifamily housing, to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement BAAQMD Basic Construction Mitigation Measures. With implementation of

the Basic Construction Mitigation Measures, project construction emissions would be below BAAQMD significance thresholds. Once the project is constructed, the project would not be a source of substantial emissions. Therefore, implementation of the proposed project would not result in new sources of TACs. Therefore, the project would not expose sensitive receptors to substantial levels of TACs and would remain a less-than-significant impact. The proposed project would not result in new or more significant air quality-related impacts to sensitive receptors.

Objectionable Odors

As discussed in the GP EIR, implementation of the General Plan could result in the exposure of sensitive receptors to odors, as well as the siting of new sources of odor. As discussed in the GP EIR, existing potential sources of odor in Hayward include the Hayward Wastewater Treatment Plant and Oro Loma Wastewater Treatment Plant. No other major odor sources are identified. Other minor sources of odor associated with typical land uses located in commercial and industrial areas in urban communities are currently present in Hayward, such as restaurants, auto repair facilities, gasoline stations, manufacturing plants, and other similar uses. However, no major new sources of odor are proposed or designated in the General Plan. Therefore, the GP EIR found that since the General Plan would contain specific policies that avoid or minimize odor-related air quality impacts associated with new development, odor-related impacts would be less than significant.

During construction of the proposed project, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not create objectionable odors affecting a substantial number of people. Therefore, similar to the General Plan, the proposed project would not create objectionable odors affecting a substantial number of people, and no mitigation is required.

Applicable Mitigation

As described in the GP EIR, impacts related to air quality would be significant and unavoidable, after application of feasible mitigation; however, the proposed project would result in less-than-significant operation-related air quality impacts. With implementation of BAAQMD Basic Construction Mitigation Measures, which would be required as a Standard Condition of Approval, the proposed project would not create impacts related to construction-related air quality more severe than impacts identified in the GP EIR and no mitigation is required.

Applicable Policies

General Plan Policies

- *Policy NR-2.1: Ambient Air Quality Standards. The City shall work with the California Air Resources Board and the Bay Area Air Quality Management District to meet State and Federal ambient air quality standards in order to protect all residents, from the health effects of air pollution.*

- *Policy NR-2.2: New Development. The City shall review proposed development applications to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases (ROG), nitrogen oxides (NO_x), and particulate matter (PM_{10} and $PM_{2.5}$) through project location and design.*

- *Policy NR-2.7: Coordination with Bay Area Air Quality Management District. The City shall coordinate with the Bay Area Air Quality Management District to ensure projects incorporate feasible mitigation measures to reduce greenhouse gas emissions and air pollution if not already provided for through project design.*

- *Policy NR-2.9: Fleet Operations. The City shall continue to purchase low-emission or zero-emission vehicles for the City's fleet and to use available clean fuel sources such as bio-diesel for trucks and heavy equipment.*

- *Policy NR-2.10: Zero-Emission and Low-Emission Vehicle Use. The City shall encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities throughout the City.*

- *Policy NR-2.12: Preference for Reduced-Emission Equipment. The City shall give preference to contractors using reduced-emission equipment for City construction projects and contracts for services (e.g., garbage collection), as well as businesses that practice sustainable operations.*

- *Policy 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.*

- *Policy NR-2.16: Sensitive Uses. The City shall minimize exposure of sensitive receptors to toxic air contaminants (TAC), fine particulate matter ($PM_{2.5}$), and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and $PM_{2.5}$-emitting sources and odor sources in order to minimize health risk.*

- *Policy NR-2.17: Source Reduction Measures. The City shall coordinate with and support the efforts of the Bay Area Air Quality Management District, the California Air Resources Board, the U.S. Environmental Protection Agency, and other agencies as appropriate to implement source reduction measures and best management practices that address both existing and new sources of toxic air contaminants (TAC) and fine particulate matter ($PM_{2.5}$), and odors.*

- *Policy NR-2.18: Exposure Reduction BMPs 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 (TAC), and fine particulate matter ($PM_{2.5}$).*

- *Policy NR-2.19: Exposure Reduction Measures for both Existing and New Receptors. The City shall work with area businesses, residents and partnering organizations to provide information about best management practices that can be implemented on a voluntary basis to reduce exposure of sensitive receptors to toxic air contaminants (TAC) and fine particulate matter ($PM_{2.5}$).*

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

- *Policy LU-1.5: Transit-Oriented Development. The City shall support high-density transit-oriented development within the City's Priority Development Areas to improve transit ridership and to reduce automobile use, traffic congestion, and greenhouse gas emissions.*

- *Policy LU-1.6: Mixed-Use Neighborhoods. The City shall encourage the integration of a variety of compatible land uses into new and established neighborhoods to provide residents with convenient access to goods, services, parks and recreation, and other community amenities.*

- *Policy LU-1.9: Development Standards and Greenhouse Gas Emissions. The City shall explore the use of zoning and development standards that help reduce greenhouse gas emissions when preparing or updating plans and ordinances.*

- *Policy LU-1.12: Regional Planning. The City shall coordinate with regional and local agencies to prepare updates to regional growth plans and strategies, including the Bay Area's Regional Transportation Plan, Sustainable Communities Strategy, and Regional Housing Needs Allocation (RHNA).*

- *Policy LU-6.5: Incompatible Uses. The City shall protect the Industrial Technology and Innovation Corridor from the encroachment of uses that would impair industrial operations or create future land use conflicts.*

- *Policy PFS-2.5: Alternative Fuels. The City shall, wherever possible, require the use of alternative fuels in new services provided by City franchisees.*

- *Policy PFS-2.6: City Facilities Near Transit. When making decisions about where to rent or build new City facilities, the City shall give preference to locations that are accessible to an existing public transit line or ensure that public transit links (e.g. bus lines) are extended to the new locations.*

- *Policy HQL-7.5: Proximity to Pollution Sources. The City shall avoid locating new sensitive uses such as schools, childcare centers, and senior housing, to the extent feasible, in proximity to sources of pollution, odors, or near existing businesses that handle toxic materials. Where such uses are located in proximity to sources of air pollution, odors, or toxic materials, the City shall encourage building design, construction safeguards, and technological techniques to mitigate the negative impacts of hazardous materials and/or air pollution on indoor air quality.*

Conclusion

As previously discussed, based on the BAAQMD attainment status and ambient air quality monitoring data, ambient air quality in the vicinity of the project site has remained unchanged since approval of the GP EIR; therefore, baseline conditions related to air quality remain essentially unchanged. In addition, no new or more severe significant impacts would result from development of the proposed project as compared to the GP EIR. The GP EIR adequately evaluated the air quality impacts of the proposed project and with implementation of BAAQMD Basic Construction Mitigation Measures, air quality impacts associated with the proposed project would be less than significant. Therefore, no new or more severe impacts related to air quality would be associated with the proposed project.

4. BIOLOGICAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of 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?	☐	☐	☐	☒

Discussion

Special-Status Species

Approximately 40 percent of the lands within the City are developed, recently disturbed, or ruderal. These developed, disturbed, and/or ruderal lands generally do not provide suitable habitat for special-status species. The Hayward Hills on the eastern side of the City and the baylands/salt marsh adjacent to the bay shoreline on the west provide suitable habitat for special-status species, as well as the riparian and woodland areas that cross through the City.[7]

Parcel Group 9 consists of both undeveloped vacant land and existing structures. Three vegetation communities or land cover types were identified to occur on the parcel groups and include: non-native annual grassland, disturbed/ruderal, and development (urban/landscaping).

[7] Hayward, City of, 2014, op. cit.

The California Natural Diversity Database (CNDDB) review conducted by LSA identified 47 special-status plant species that could potentially occur within 5 miles of the project sites. However, the project sites lack suitable habitat for 36 of these special-status plant species. The remaining 11 special-status plant species that could potentially occur within the project sites include: bent-flowered fiddleneck (*Amsinckia lunaris*), Big-scale balsamroot (*Balsamorhiza macrolepis*), round-leaved filaree (*California macrophylla*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), Congdon's tarplant (*Centromadia parryi* subsp. *congdonii*), western leatherwood (*Dirca occidentalis*), Diablo helianthella (*Helianthella castanea*), Santa Cruz tarplant (*Holocarpha macradenia*), Northern California black walnut (*Juglans hindsii*), robust monardella (*Monardella villosa* subsp. *globosa*), and oval-leaved viburnum (*Viburnum ellipticum*).

The CNDDB review also identified special-status wildlife species that could potentially occur on the project sites. Due to the previously disturbed nature of the project sites, only two special-status wildlife species have the potential to occur on the project sites: pallid bat (*Antrozous pallidus*) and western mastiff bat (*Eumops perotis*).

If bats are roosting in buildings or trees within the project area, potential disturbance or loss of roosting habitat could occur as a result of construction activity. Implementation of the following Standard Condition of Approval, in compliance with the Migratory Bird Treaty Act and the California Fish and Game Code, would ensure that potential impacts to roosting bats during construction would be less than significant:

- Before the spring breeding season and prior to construction, a qualified biologist shall conduct a survey for roosting bat habitat. The survey shall include work areas adjacent to appropriate roosting habitat that are accessible from public or project areas within 200 feet of a work area. For trees considered to have a high or moderate probability for bat roosting, acoustic monitoring shall be conducted before any construction activities begin during the breeding season to determine if there are any roosting sites present. Surveys shall be conducted at the appropriate times to maximize detectability. If an active roost or maternity roost is found within 100 feet of a work area, the limits of the work area will be clearly marked and a qualified biological monitor shall remain onsite during construction activities within the vicinity of the roost or maternity roost.

  The biologist shall ensure that construction activities to do not encroach upon the 100-foot buffer around an active roost or maternity colony site. Buffers shall remain in place until the qualified biologist has determined that bats have vacated the occupied roost sites. If buffer reductions are requested and approved, a monthly report shall be submitted to CDFW with all of the information in the buffer reduction requests, monitoring results, and effects on bats. Reports shall be submitted for the duration of construction activities within buffer areas.

  Trees containing maternity roosts shall not be removed during the breeding season (March 1 through August 31) to avoid disturbing females with young that cannot fly. No trees containing maternity roosts may be removed until the qualified biologist determines that breeding is complete and young are able to fly.

If fall/winter hibernacula cannot be avoided, humane techniques may be implemented to passively vacate bats from roosts. Methods to passively evict bats from tree roosts may include incrementally trimming limbs to alter the air flow and temperature around the roost feature where slight changes to the surrounding environment of roost features encourage bats to vacate roost features on their own. If acoustic monitoring detects that bats are using trees that need to be cut down, these trees shall be removed only after it has been confirmed that roosting bats have departed.

Landscaping trees and shrubs on the project site may provide nesting habitat for raptors, passerines, and other birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Activities that may result in nest abandonment or mortality of eggs or young could result in significant impacts to protected bird species. Implementation of the following Standard Condition of Approval, in compliance with the Migratory Bird Treaty Act and the California Fish and Game Code, would ensure that potential impacts to nesting birds and raptors during construction would be less than significant:

- Prior to any vegetation removal activities, the Project Applicant shall provide written evidence to the City that, if feasible, all vegetation removal shall be undertaken during the non-breeding season (i.e., September 1 to January 31) to avoid direct impacts to nesting birds. If such work is scheduled during the breeding season, and per the direction of the City, the Project Applicant shall retain a qualified biologist or ornithologist to conduct a pre-construction survey of all trees, shrubs, and other suitable nesting habitat in and within 200 feet of the limits of work to search for active nests of native birds. The pre-construction survey shall be conducted within 15 days prior to the start of work from March through May (since there is a higher potential for birds to initiate nesting during this period), and within 30 days prior to start of work from June through July. If active nests are found during the survey, the biologist or ornithologist shall determine an appropriately-sized buffer around the nest. No work shall be allowed within this buffer until the young have successfully fledged and are foraging independently. The size of the nest buffer shall be determined by a qualified biologist based on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 250 feet for raptors and 50 feet for other birds have been used to prevent disturbance. These buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated or observed near the nest. Buffers shall be identified with environmentally sensitive area fencing placed at the edge of the buffer whenever possible. Given the urban nature of the site and high degree of disturbance already present, buffers may be adjusted to avoid blocking traffic, as needed.

Sensitive Natural Communities

The California Department of Fish and Wildlife (CDFW) tracks the occurrences of plant communities that are either known or believed to be of high priority for inventory in the CNDDB. As described above, the project site is located within a developed area and does not support any riparian or other

sensitive natural communities.[8] Therefore, no impact related to riparian habitat or other sensitive natural communities would occur with the proposed project.

Wetlands

The project site is within a developed area and is not located in an area that supports wetlands, drainages, or water bodies as defined by Section 404 of the Clean Water Act.[9] The proposed project would not result in the direct removal, filling, or hydrological interruption of such wetlands. Therefore, no impact to federally protected wetlands would occur with the proposed project.

Wildlife Movement

The project site is an undeveloped site that likely supports wildlife species typically associated with urban areas. Because the project site is within a developed area, no major wildlife movement corridors pass through or are adjacent to the site.

Existing trees are located throughout and around the project site. Trees and other landscape vegetation generally have the potential to support nests of common native bird species. All native birds, regardless of their regulatory status, are protected under the federal Migratory Bird Treaty Act and California Fish and Wildlife Code. If conducted during the breeding season (February through August), vegetation removal and construction activities could directly impact nesting birds by removing trees or vegetation that support active nests. Implementation of the Standard Condition of Approval described above would ensure that potential impacts to nesting birds and raptors during construction would be less than significant.

Local Polices or Ordinances

The City of Hayward Municipal Code, Chapter 10, Article 15 (Tree Preservation Ordinance) requires a permit for any person to remove any protected tree within the City of Hayward. As defined by the City's Municipal Code, Protected Trees include:

- Trees having a minimum trunk diameter of eight inches measured 54 inches above the ground. When measuring a multi-trunk tree, the diameters of the largest three trunks shall be added together.

- Street trees or other required trees such as those required as a condition of approval, Use Permit, or other Zoning requirement, regardless of size.

- All memorial trees dedicated by an entity recognized by the City, and all specimen trees that define a neighborhood or community.

- Trees of the following species that have reached a minimum of four inches diameter trunk size: Big Leaf Maple (*Acer macrophyllum*), California Buckeye (*Aesculus californica)*, Madrone

[8] U.S. Fish and Wildlife Service, 2019. National Wetlands Inventory (Map). Website: www.fws.gov/wetlands/data/mapper.html (accessed January 23, 2020).

[9] Ibid.

(*Arbutus menziesii)*, Western Dogwood (*Cornus nuttallii)*, California Sycamore (*Platanus racemosa)*, Coast Live Oak (*Quercus agrifolia)*, Canyon Live Oak (*Quercus chrysolepis)*, Blue Oak (*Quercus douglassii)*, Oregon White Oak (*Quercus garryana)*, California Black Oak (*Quercus kelloggi)*, Valley Oak (*Quercus lobata)*, Interior Live Oak (*Quercus wislizeni)*, California Bay (*Umbellularia californica).*

- A tree or trees of any size planted as a replacement for a Protected Tree.

Any proposed tree removal on private property in conjunction with new development would be required to comply with Chapter 10, Article 15 of the Hayward Municipal Code (Tree Preservation Ordinance) which requires submittal of an Arborist Report and the issuance of a Tree Removal Permit. If approved, the project will be required to submit a landscaping plan that identifies replacement trees of equal value and other replacement measures. Compliance with the City's Tree Preservation Ordinance would ensure that the proposed project does not conflict with any local policies or ordinances protecting biological resources. This impact would be less than significant.

Habitat Conservation Plan or Natural Community Conservation Plan

The project site is not within any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the proposed project would have no impact.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts on biological resources were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy LU-1.2 Urban Limit Lines. The City shall maintain its established Urban Limit Lines to protect the Hayward shoreline and hillsides as natural open space and recreational resources.*

- *Policy LU-1.7 Design Guidelines. The City shall maintain and implement commercial, residential, industrial, and hillside design guidelines to ensure that future development complies with General Plan goals and policies.*

- *Policy LU-7.5 Clustered Developments. The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.*

- *Policy NR-1.1 Native Wildlife Habitat Protection. The City shall limit or avoid new development that encroaches into important wildlife habitat; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.*

- *Policy NR-1.2 Sensitive Habitat Protection. The City shall protect sensitive biological resources, including State and Federally designated sensitive rate, threatened, and endangered plant, fish and wildlife species and their habitats from urban development and incompatible land uses.*

- *Policy NR-1.3 Sensitive Species Identification, Mapping, and Avoidance. The City shall require qualified biologists to identify, map, and make recommendations for avoiding all sensitive biological resources on the project site, including State and Federally sensitive, rare, threatened and endangered plant, fish and wildlife species and their habitats using methods and protocols in accordance with the U.S. Fish and Wildlife Services, California Department of Fish and Wildlife, and California Native Plant Society for all development applications proposed within sensitive biological resource areas.*

- *Policy NR-1.9 Native Plant Species Protection and Promotion. The City shall protect and promote native plant species in natural areas we well as in public landscaping.*

- *Policy NR-1.12 Riparian Corridor Habitat Protection. The City shall protect creek riparian habitats by:*

    - *Requiring sufficient setbacks for new development adjacent to creek slopes,*

    - *Requiring sensitive flood control designs to minimize habitat disturbance,*

    - *Maintaining natural and continuous creek corridor vegetation,*

    - *Protecting/replanting native trees, and*

    - *Protecting riparian plant communities from the adverse effects of increased stormwater runoff, sedimentation, erosion, pollution that may occur from improper development in adjacent areas.*

- *Policy PFS-5.8 Enhance Recreation and Habitat. The City shall require new stormwater drainage facilities to be designed to enhance recreation and habitat and shall work with HARD to integrate such facilities into existing parks and open space features.*

- *Policy HQL-8.3 Trees of Significance. The City shall require the retention of trees of significance (such as heritage trees) by promoting stewardship and ensuring that project design provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or suitable mitigation.*

Conclusion

The GP EIR adequately evaluated the biological resources impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

5. CULTURAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c. 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?	☐	☐	☐	☒

Discussion

As part of the Environmental Constraints Analysis prepared for the proposed project (LSA 2018), LSA conducted background research to identify cultural resources within, and cultural resources studies of, the five parcel groups. The background research consisted of a cultural resources records search at the Northwest Information Center (NWIC), a records search of the Native American Heritage Commission's (NAHC) Sacred Lands File, and a literature review. Subsequent to this background research a cultural resources field survey was conducted. LSA's findings are documented in a cultural resources report[10] and are summarized below.

Significant cultural resources in the City include structures that may be eligible for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or otherwise listed on the City of Hayward List of Officially-Designated Architecturally and Historically Significant Buildings. Currently, 20 structures have been officially designated by the City as Historically or Architecturally Significant. Additionally, one structure is listed on the national register of historic landmarks.[11]

The City of Hayward is located within the historic territory of the Ohlone tribe. Native Americans occupied the general area between 5,000 and 7,000 years or possibly longer. The modern city of Hayward was settled in the 1850s due to the Gold Rush. The City contains one officially designated historic district and several other areas that could potentially be designated as historic districts.[12]

Based on a records search at NWIC, no cultural resources were recorded on Parcel Group 9. No previous cultural resources studies on file at the NWIC included the site. NAHC was contacted in regards to the project. Frank Lienert, NAHC Associate Government Program Analyst, stated in a

10 LSA, 2019. *Environmental Constraints Analysis, Route 238 Properties, Hayward, California*. November.
11 Hayward, City of, 2014, op. cit.
12 Ibid.

letter sent to LSA via email on March 1, 2018, that a search of the Sacred Lands File "had negative results" for the parcel groups.

LSA reviewed archaeological and environmental data for the project area to assess the potential for buried pre-contact archaeological deposits in the parcel groups. An inverse relationship exists between landform age and the potential for buried cultural deposits. Some landforms predate human occupation of the region and, as such, archaeological deposits on these landforms, if present, would occur at or near the surface. Parcel Group 9 is on landforms that were formed before human occupation (Pre-Quaternary deposits and bedrock [br]), and have a low potential for buried archaeological deposits.

Historic Resources

For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources [CRHR]), it generally must be 50 years or older. Under CEQA, historical resources can include pre-contact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts.

No known historic resources are associated with the project site or the adjacent parcels (City of Hayward Background Conditions Report, Figures 1-3 and 1-4, and Table 1-2). However, the multistory apartment building, situated at the southeastern corner of the site, was constructed circa 1968. This structures has not been formally evaluated for listing in either the NRHP and/or CRHR.

The City of Hayward Municipal Code, Chapter 10, Article 11 (Historic Preservation Ordinance) requires that development projects, involving structures or buildings at least 50 years in age or which are located within an historic district, conduct additional analysis to determine if an historical alteration permit and/or historical resource demolition or relocation permit is required. Such analysis includes an evaluation prepared by a qualified historic consultant consistent with the California Register Criteria for Evaluation and the adopted Hayward Historic Context Statement to determine historical significance. Consistent with the City's Historic Preservation Ordinance, it is unlawful for any person to tear down, demolish, remove or relocate an historical resource, a potentially significant historical resource, a designated historical resource, a resource that has been listed on the City's adopted survey list, or a resource that lies within an historic district, without first obtaining an historical resource demolition or relocation permit.

In the unlikely event that historic or archaeological resources are discovered during excavation, Standard Conditions of Approval for all development projects require the contractor to stop all work adjacent to the find and contact the City of Hayward Development Services Department to preserve and record the uncovered materials so it can be safely removed. Compliance with the City's Historic Preservation Ordinance would ensure that the proposed project would not result in an adverse change in the significance of a historical resource.

Prehistoric and Historical Archaeological Resources

No archaeological resources have been identified on the project site and the project site is not considered to be sensitive for archaeological resources. As described above, In the unlikely event

that historic or archaeological resources are discovered during excavation, Standard Conditions of Approval for all development projects require the contractor to stop all work adjacent to the find and contact the City of Hayward Development Services Department to preserve and record the uncovered materials so it can be safely removed. Therefore, the proposed project would not lead to new or more severe impacts to archaeological resources beyond those identified in the GP EIR.

Disturbance of Human Remains

The potential to uncover human remains exists at locations throughout the Bay Area. Due to the existing urban nature of the area, it is not expected that the project would unearth artifacts or resources during project construction. However, as required by the City's Historic Preservation Ordinance (Chapter 10, Article 11 of the City of Hayward Municipal Code), the discovery of human remains shall be treated with respect and dignity and must fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws. In the unlikely event that artifacts are uncovered during the construction of the proposed project the City would implement standard conditions of approval that are required of all ground-disturbing development projects within the City. Specifically, if human remains are encountered during construction activities, work would cease and the County Coroner would be notified immediately. A qualified archaeologist would also be contacted to assess the situation in consultation with the appropriate agencies. If the human remains are of Native American origin, the Coroner would notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission would provide recommendations for the proper treatment of the remains and associated grave goods. The City of Hayward would follow the recommendations from the Native American Heritage Commission or the archaeologist, as required. Therefore, no impacts to human remains interred outside of formal cemeteries would occur.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts on historic and cultural resources were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

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

- *Policy LU-8.4 Survey and Historic Reports. The City shall maintain and expand its records of reconnaissance surveys, evaluations, and historic reports completed for properties located within the City.*

- *Policy LU-8.6 Historic Preservation Standards and Guidelines. The City shall consider The Secretary of the Interior's Standards of the Treatment of Historic Properties with Guidelines for*

Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings when evaluating development applications and City projects involving historic resources or development applications that may affect scenic views of the historic context of nearby historic resources.

- *Policy LU-8.14 Demolition of Historic Resources. The City shall prohibit the demolition of historic resources unless one of the following findings can be made:*
    - *The rehabilitation and reuse of the resource is not structurally or economically feasible.*
    - *The demolition is necessary to protect the health, safety, and welfare of the public.*
    - *The public benefits of demolition outweigh the loss of the historic resource.*
- *Policy NR-7.1 Paleontological Resource Protection. The City shall prohibit any new public or private development that damages or destroys a historically- or prehistorically-significant fossil, ruin, or monument or any object of antiquity.*
- *Policy NR-7.2 Paleontological Resource Mitigation. The City shall develop or ensure compliance with protocols that protect or mitigate impacts to paleontological resources, including requiring grading and construction projects to cease activity when a paleontological resource is discovered so it can be safely removed.*

Conclusion

The GP EIR adequately evaluated the potential cultural resources impacts of the proposed project. Therefore, potential impacts would be less-than-significant and additional mitigation is not required.

6. ENERGY

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion

Energy usage was evaluated in the GP EIR in Chapter 21.6, Energy, and the environmental and regulatory setting of the Hayward Planning Area with respect to energy conservation was described in detail in Section 7.6 Natural Resources: Energy Resources and Efficiency of the General Plan Background Report (City of Hayward, 2013). Pursuant to Section 15150 of the State CEQA Guidelines, the Background Report was incorporated into the GP EIR by reference.

Similar to build out of the General Plan, the proposed project would increase the demand for electricity, natural gas, and gasoline. The discussion and analysis provided below is based on data included in the CalEEMod output, which is included in Appendix 1.

Construction-Period Energy Use

The anticipated construction schedule assumes that the proposed project would be built over 12 to 24 months. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials, preparation of the site for grading activities, and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the project would restrict equipment idling times to 5 minutes or less and would require construction workers to shut off idle equipment, as required by BAAQMD Basic Construction Mitigation Measures. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, the proposed project would not result in new or more severe impacts related to energy than were identified in the GP EIR.

Operational Energy Use

Energy use consumed by the proposed project would be associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. LSA estimated energy and natural gas consumption using default energy intensities by land use type in CalEEMod. In addition, the proposed buildings would comply with the latest CALGreen standard building measures and Title 24 standards, which were included in CalEEMod. In addition, the proposed project would also

require energy demand associated with the proposed outdoor pool. Although CalEEMod does not provide default values for electricity or natural gas demand associated with pools, the proposed outdoor pool is expected to require minimal energy demand. Electricity and natural gas usage estimates associated with the proposed project are shown in Table 3.

In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. Based on CalEEMod, the proposed project would result in approximately 2,101,377 vehicle miles traveled (VMT) per year. The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.0 mpg in 2015.[13] Therefore, using the United States Environmental Protection Agency (USEPA) fuel economy estimates for 2015, the proposed project would result in the consumption of approximately 95,517 gallons of gasoline per year. Table 3, below, shows the estimated potential increased electricity and natural gas demand associated with the proposed project.

Table 3: Estimated Annual Energy Use of Proposed Project

Electricity Use (kWh per year)	Natural Gas Use (therms per year)	Gasoline (gallons per year)
772,300	**27,703**	**95,517**

Source: LSA (January 2020).

As shown in Table 3, the estimated potential increased electricity demand associated with the proposed project would be 772,300 kilowatt-hours (kWh) per year. In 2018, California consumed approximately 281,120 gigawatt-hours (GWh) (281,120,193,430 kWh).[14] Of this total, Alameda County consumed 10,417 GWh or 10,417,109,747 kWh.[15] Therefore, electricity demand associated with the proposed project would be approximately 0.01 percent of Alameda County's total electricity demand.

In addition, as shown in Table 3, the estimated potential increased natural gas demand associated with the proposed project would be 27,703 therms per year. In 2018, California consumed approximately 12,638 million therms or 12,368,157,740 therms, while Alameda County consumed approximately 377 million therms or approximately 377,001,740 therms.[16] Therefore, natural gas

13 U.S. Department of Transportation. Bureau of Transportation Statistics. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: www.bts.gov/archive/publications/national_transportation_statistics/table_04_23 (accessed January 2020).

14 California Energy Commission, 2018a. Energy Consumption Data Management Service. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed January 2020).

15 Ibid.

16 California Energy Commission, 2018b. Energy Consumption Data Management Service. Gas Consumption by County. Website: www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed January 2020).

demand associated with the proposed project would be approximately 0.01 percent of Alameda County's total natural gas demand.

The proposed project would also result in energy usage associated with gasoline to fuel project-related trips. As shown above in Table 3, vehicle trips associated with the proposed project would consume approximately 95,517 gallons of gasoline per year. In 2015, vehicles in California consumed approximately 15.1 billion gallons of gasoline.[17] Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

The proposed project would develop the site with a new four-story, approximately 100,000-square-foot building would include 150 guest rooms. In addition to the guest rooms, the proposed building could include a meeting room, lounge area with a bar and seating space, office space, and fitness center. An outdoor pool could also be provided. The expected energy consumption during operation of the proposed project would be consistent with typical usage rates for hotel uses; however, energy consumption is largely a function of the physical structure and layout of buildings. The proposed project is consistent with the intent of the CHDR designation and would include a new hotel on an infill site that would locate guests and employees near existing residential and commercial uses, reducing the demand for travel by single occupancy vehicles. Therefore, the proposed project would support the ability to use alternative modes of transportation and would promote initiatives to reduce vehicle trips and vehicle miles traveled, which would allow for a decreased dependence on nonrenewable energy resources.

In addition, as indicated above, the proposed project would be constructed to the latest CALGreen standard building measures and Title 24 standards, which would help to reduce energy and natural gas consumption. Therefore, the proposed project would implement the General Plan's energy-related policies that promote jobs-housing balance, growth and infill development, green building and landscaping, complete neighborhoods, energy efficiency, and bicycling, walking, and transit amenities, and parks access. As such, the proposed project would not result in the wasteful, inefficient or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Therefore, the proposed project would not result in new or more severe impacts related to energy than were identified in the GP EIR.

Conflict or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and their

[17] California Energy Commission, 2017. California Gasoline Data, Facts, and Statistics. Available online at: www.energy.ca.gov/almanac/transportation_data/gasoline (accessed January 2020).

infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC is in the process of adopting the 2019 Integrated Energy Policy Report.[18] The 2019 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2019 Integrated Energy Policy Report covers a broad range of topics, including implementation of Senate Bill 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to Senate Bill 1383), updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage in the project area during construction and operation would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2019 Integrated Energy Policy Report. Thus, as shown above, the project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Impacts would be less than significant.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts on energy were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

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

[18] California Energy Commission, 2019. *2019 Integrated Energy Policy Report.* California Energy Commission. Docket # 19-IEPR-01.

- *Policy LU-1.3: Growth and Infill Development. The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.*

- *Policy LU-1.6: Mixed-Use Neighborhoods. The City shall encourage the integration of a variety of compatible land uses into new and established neighborhoods to provide residents with convenient access to goods, services, parks and recreation, and other community amenities.*

- *Policy LU-1.8: Green Building and Landscaping Requirements. The City shall maintain and implement green building and landscaping requirements for private- and public-sector development to:*

    - *Reduce the use of energy, water, and natural resources.*

    - *Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties.*

    - *Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors.*

    - *Encourage the use of durable, sustainably-sourced, and/or recycled building materials.*

    - *Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste.*

- *Policy LU-3.1: Complete Neighborhoods. The City shall promote efforts to make neighborhoods more complete by encouraging the development of a mix of complementary uses and amenities that meet the daily needs of residents. Such uses and amenities may include parks, community centers, religious institutions, daycare centers, libraries, schools, community gardens, and neighborhood commercial and mixed-use developments.*

- *Policy 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.*

- *Policy NR-4.1: Energy Efficiency Measures. The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.*

- *Policy NR-4.3: 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.*

- *Policy 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 or exceeding the State's zero net energy goals by 2020.*

- *Policy 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.*

- *Policy NR-4.13: Energy Use Data. The City shall consider requiring disclosure of energy use and/or an energy rating for single family homes, multifamily properties, and commercial buildings at certain points or thresholds. The City shall encourage residents to voluntarily share their energy use data and/or ratings with the City as part of collaborative efficiency efforts.*

- *Policy NR-4.15: Energy Efficiency Programs. The City shall promote the use of the Energy Star Portfolio Manager program and energy benchmarking training programs for nonresidential building owners.*

- *Policy PFS-2.7: Energy Efficient Buildings and Infrastructure. The City shall continue to improve energy efficiency of City buildings and infrastructure through implementation of the Municipal Green Building Ordinance, efficiency improvements, equipment upgrades, and installation of clean, renewable energy systems.*

- *Policy M-1.6: Bicycling, Walking, and Transit Amenities. The City shall encourage the development of facilities and services, (e.g., secure term bicycle parking, street lights, street furniture and trees, transit stop benches and shelters, and street sweeping of bike lanes) that enable bicycling, walking, and transit use to become more widely used modes of transportation and recreation.*

- *Policy M-3.8: Connections with New Development. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, pedestrian ways, and transit facilities.*

- *Policy M-3.9: Private Complete Streets. The City shall encourage large private developments (e.g., office parks, apartment complexes, retail centers) to provide internal complete streets that connect to the existing public roadway system and provide a seamless transition to existing and planned transportation facilities.*

- *Policy M-6.2: Encourage Bicycle Use. The City shall encourage bicycle use in all neighborhoods, especially where short trips are most common.*

- *Policy M-6.5: Connections between New Development and Bikeways. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways and do not interfere with existing and proposed bicycle facilities.*

- *Policy HQL-2.1: Physical Activity and the Built Environment. The City shall support new developments or infrastructure improvements in existing neighborhoods that enable people to drive less and walk, bike, or take public transit more.*

- *Policy HQL-10.7: Parks Access. The City shall work with HARD to ensure that new parks are accessible to pedestrians and bicyclists, and are connected with transit, to the extent feasible.*

Conclusion

The GP EIR adequately evaluated the energy impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

7. GEOLOGY AND SOILS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Discussion

Information for this section was obtained from maps and publications published from the United States Geological Survey (USGS), the California Geological Survey (CGS), the Association of Bay Area Governments (ABAG), the City of Hayward General Plan, the GP EIR, and the Preliminary Geotechnical Investigation prepared for the project site.[19]

A portion of the City is underlain with soft alluvial soils and artificial fill along the bay and on slopes in the Hayward Hills. During large earthquakes, saturated fill is susceptible to ground shaking and liquefaction-associated hazards and the slopes are susceptible to earthquake-induced landslides.

[19] ENGEO, 2016a. *Route 238 Bypass – Group 9, Hayward, California, Preliminary Geotechnical Exploration*. March 23.

Potential seismic hazards in the City also include surface rupture, ground shaking, liquefaction, lateral spreading, and fault creep.[20, 21]

A Preliminary Geotechnical Exploration[22] prepared for the site included soil borings, excavation of test pits, and excavation of exploratory trenches to evaluate subsurface conditions and geologic hazards. Preliminary geotechnical recommendations were provided for selection of engineered fill materials, site preparation, removal of existing fill and landslide materials, slope gradients and setbacks, and preliminary foundation recommendations.

Seismicity and Seismic Hazards

Fault Rupture. The City is located within a seismically active region of the San Francisco Bay area. Several major earthquake faults in the region, including the San Andreas, Hayward, and Calaveras Faults, could generate strong earthquakes in the vicinity of the parcel groups. The Hayward Fault traverses the City in a northwest to southeast direction and is considered a seismically active fault under the Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo program requires the California Geologic Survey (CGS) to establish regulatory zones around fault traces that are considered active and sufficiently defined (i.e., located). These active faults are considered to have the potential for surface fault rupture hazards and pose a hazard to structures. The Chabot and Carlos Bee Faults run parallel to the Hayward Fault and are located approximately 0.6 and 0.2 mile east of the Hayward Fault, respectively. These two faults are considered inactive. [23]

The site is located approximately 500 feet northeast of the Alquist-Priolo Earthquake Fault Zone for the Hayward Fault. Therefore, the proposed project would not directly or indirectly cause substantial adverse effects related to fault rupture, and this impact would be less than significant.

Strong Seismic Ground Shaking. The project site is located in the San Francisco Bay Area, a region of intense seismic activity. Ground shaking is likely to occur within the life of the project as a result of future earthquakes. As noted above, the project site is approximately 500 feet northeast of the Hayward Fault. Other active faults within the area that are likely to produce large earthquakes include the Calaveras, located 8.3 miles east, Concord-Green Valley, located 15.8 miles northeast, and San Andreas, located 17 miles west. Due to the location of the project site in a seismically active area, strong seismic ground shaking at the site is highly probable during the life of the project.

The intensity of ground shaking would depend on the characteristics of the fault, distance from the fault, the earthquake magnitude and duration, and site-specific geologic conditions. The Working Group on California Earthquake Probabilities and the USGS have predicted a 14.3 percent probability of a 6.7 magnitude (Mw, or Moment Magnitude) or greater earthquake on the Hayward Fault, a 7.4 percent chance on the Calaveras Fault, and a total probability of 72 percent that an

20 Hayward, City of, 2014, op. cit.

21 Fault creep is slow, constant slippage that can occur on some active faults without there being an earthquake.

22 ENGEO, 2016a, op. cit.

23 Hayward, City of, 2014, op. cit.

earthquake of that magnitude will occur on one of the regional San Francisco Bay Area faults during that time.

The City requires projects to comply with the 2016 California Building Code (Title 24, California Code of Regulations),[24] which provides for stringent construction requirements on projects in areas of high seismic risk based on numerous inter-related factors. Seismic hazards cannot be completely eliminated, even with implementation of advanced building practices. However, the seismic design standards of the 2016 California Building Code (CBC) are intended to prevent catastrophic building failure in the most severe earthquakes currently anticipated.

A site-specific geotechnical investigation would be performed for the proposed project as required by State regulations, and the City of Hayward General Plan policies. Compliance with geotechnical recommendations and the CBC during design and construction would ensure that the potential impacts associated with ground shaking would be less than significant.

Seismic-Related Ground Failure and Liquefaction. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. These soils lose strength during ground shaking. Due to the loss of strength, the soil may move both horizontally and vertically. In areas where sloping ground or open slope faces are present, this mobility can result in lateral spreading. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that are relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. The State of California Seismic Hazard Zones Map shows a small area susceptible to liquefaction within the southwest corner of the project site. However, the proposed project would implement recommendations included in the Preliminary Geotechnical Investigation, which would include supporting the proposed building with either a ridged mat foundation, conventional footings in combination with non-expansive import, or pier-and-grade-beam foundation with raised floor. With this foundation, impacts related to liquefaction would be reduced to a less-than-significant level.

Landslides. Slope failure can occur as either rapid movement of large masses of soil or imperceptibly slow movement of soils on slopes. The northeastern portion of the property is located on a hillside with a southwest-facing slope. The State of California Seismic Hazard Zones Map shows a portion of the southwest-facing slope as having the potential for earthquake-induced landslides and evidence of sloughing and slope failures of unknown depth were observed on the existing slope during the site reconnaissance performed for the Preliminary Geotechnical Investigation.

The Preliminary Geotechnical Investigation includes recommendations to reduce the potential impacts associated with landslides, including removal of landslide materials and replacement as engineered fill. The design and construction of the project in accordance with geotechnical recommendations would reduce potential impacts related to landslides to a less-than-significant level.

[24] Hayward, City of. Municipal Code, Chapter 9, Article 1.

Erosion/Loss of Top Soil

The development of the project site would involve construction activities such as grading and excavation, which could result in temporary soil erosion when the disturbed soils are exposed to wind or rainfall. Because the proposed project would involve over one acre of land disturbance, it would be required to comply with the State Water Resources Control Board's Construction General Permit, which requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include erosion control best management practices that would minimize erosion during construction. Policy NR-6.5 of the General Plan also requires that the City control site preparation procedures and construction phasing to reduce erosion and exposure of soils to the maximum extent possible. Upon completion of construction, the project site would be covered with structures, pavement, and landscaping and would not include areas of exposed soil. Therefore, the proposed project would result in less-than-significant impacts related to soil erosion or loss of top soil.

Unstable and Expansive Soils

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. The changes in soil volume can result in substantial cosmetic and structural damage to buildings and hardscape developed over expansive soils. Expansive soils are typically fine grained with high clay content.

According to the Preliminary Geotechnical Investigation, conventional grading operations, incorporating fill placement specifications tailored to the expansive characteristics of the soil, and use of a mat foundation (either post-tensioned or conventionally reinforced) would address the expansive potential of the foundation soils. In addition, the proposed project would be required to comply with the 2016 California Building Code and the geotechnical recommendations identified in the site-specific geotechnical investigation. Compliance with geotechnical recommendations and the CBC during design and construction would ensure that the potential impacts associated with expansive soils would be less than significant.

Septic Tanks/Wastewater Disposal

Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would have no impact related to septic tanks or alternative wastewater disposal systems.

Paleontological Resources

The project site rests upon sediments and bedrock comprised of Holocene to Late Pleistocene Surficial Sediments, the Late Jurassic to early Cretaceous Knoxville Formation, the Late Jurassic to Cretaceous Franciscan Assemblage, and the Late Jurassic Coast Range Ophiolite Complex. The geology of the site consists entirely of Surficial Sediments, which have low sensitivity from the surface to a depth of 10 feet and high sensitivity below a depth of 10 feet. In locations with the Surficial Sediments, ground disturbance deeper than 10 feet would also have the potential for impacts to paleontological resources. In the event that paleontological resources are discovered during construction, Standard Conditions of Approval for all development projects require the

contractor to stop all work adjacent to the find and contact the City of Hayward Development Services Department to preserve and record the uncovered materials so it can be safely removed. Compliance with the City's standard conditions of approval would ensure that the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to geology, soils, minerals and paleontological resources were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy LU-7.1 Slopes. The City shall prohibit the construction of buildings on unstable and steep slopes (slopes greater than 25 percent).*

- *Policy LU-7.2 Ridgelines. The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend development with the natural features of the hillside.*

- *Policy LU-7.3 Hillside Street Layouts. The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.*

- *Policy LU-7.4 Hillside Street Design. The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curb and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.*

- *Policy NR-6.4 Minimizing Grading. The City shall minimize grading and, where appropriate, consider requiring onsite retention and settling basins.*

- *Policy NR-6.5 Erosion Control. The City shall concentrate new urban development in areas that are the least susceptible to soil erosion into water bodies in order to reduce water pollution.*

- *Policy NR-8.2 Hillside Site Preparation Techniques. The City shall require low-impact site-grading, soils repair, foundation design, and other construction methods to be used on new residential structures and roadways above 250 feet in elevation to protect aesthetics, natural topography, and views of hillsides and surrounding open space.*

- *Policy HAZ-2.1 Seismic Safety Codes and Provisions. The City shall enforce the seismic safety provisions of the Building Code and Alquist-Priolo Special Studies Zone Act to minimize earthquake-related hazards in new construction, particularly as they relate to high occupancy structures or buildings taller than 50 feet in height.*

- *Policy HAZ-2.2 Geologic Investigations. The City shall require a geologic investigation for new construction on sites within (or partially within) the following zones:*

    - *Fault Zone (see Figure 9.2-1 in the Hazards Background Report)*
    - *Liquefaction Zone (see Figure 9.2-2 in the Hazards Background Report)*
    - *Landslide Zone (see Figure 9.2-3 in the Hazards Background Report)*

    A licensed geotechnical engineer shall conduct the investigation and prepare a written report of findings and recommended mitigation measures to minimize potential risks related to seismic and geologic hazards.

- *Policy HAZ-2.3 Fault Zone Assumption. The City shall assume that all sites within (or partially within) any fault zone are underlain by an active fault trace until a geotechnical investigation by a licensed geotechnical engineer provides otherwise.*

- *Policy HAZ-2.4 New Buildings in a Fault Zone. The City shall prohibit the placement of any building designed for human occupancy over active faults. All buildings shall be set back from active faults by at least 50 feet. The City may require a greater setback based on the recommendations of the licensed geotechnical engineer evaluating the site and the project.*

- *Policy HAZ-2.6 Infrastructure and Utilities. The City shall require infrastructure and utility lines that cross faults to include design features to mitigate potential fault displacement impacts and restore service in the event of major fault displacement. Mitigation measures may include plans for damage isolation or temporary bypass by using standard isolation valves, flexible hose or conduit, and other techniques and equipment.*

Conclusion

The GP EIR adequately evaluated the geology and soils impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

8. GREENHOUSE GAS EMISSIONS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
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?	☐	☐	☐	☒

Discussion

Greenhouse gas emissions (GHGs) associated with the General Plan are evaluated in Chapter 10, Global Climate Change and Greenhouse Gas Emissions, of the GP EIR. The following includes a discussion of the potential impacts related to GHG emissions associated with the General Plan as compared to the proposed project.

GHGs are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF_6)

While GHGs produced by human activities include naturally-occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere. Certain other gases, such as water vapor, are short-lived in the atmosphere compared to those GHGs that remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this analysis, the term “GHGs” will refer collectively to the six gases identified in the bulleted list provided above.

Construction Greenhouse Gas Emissions

As discussed in the GP EIR, construction activities would generate GHG emissions through the use of on- and off-road construction equipment in new development projects. While no project-specific details were known at the time the GP EIR was prepared, short-term construction emissions were estimated for worst-case, average annual levels of development assumed to occur under the General Plan through the year 2040. Average annual development assumptions were estimated by dividing the net increase in residential units and commercial building square feet associated with build out of the General Plan by 25 years. Construction emissions were estimated for this annualized average level development within the first full calendar year after anticipated General Plan adoption in order to obtain a "worst case" estimate of average annual construction-related GHG emissions. The GP EIR determined that total construction-related GHG emissions in 2015 would be approximately 1,186 metric tons (MT) of CO_2e per year.

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the proposed project would generate approximately 383.9 MT CO_2e during construction of the project. In addition, when considered over the 30-year life of the project, the amortized construction emissions would be approximately 12.8 MT of CO_2e per year. Annual construction-related GHG emissions associated with the proposed project would be lower than the estimated average annual construction-related GHG emissions identified in the GP EIR. In addition, implementation of BAAQMD's Basic Construction Mitigation Measures would reduce construction-related GHG emissions by reducing the amount of construction vehicle idling and by requiring the use of properly maintained equipment. As noted above, the BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; therefore, project construction impacts associated with GHG emissions would be considered less than significant. Construction of the proposed project would not result in new or more severe impacts related to construction-period GHG emissions than identified in the GP EIR.

Operational Greenhouse Gas Emissions

The GP EIR estimated operational emissions from existing development in Hayward in the years 2005 and 2010, as well as projected "Business As Usual" GHG emissions associated with forecasted growth in the City's population and employment in 2020, 2040 and 2050. The 2020, 2040 and 2050 projections reflect both existing and proposed land uses and population and employment growth assumed in the proposed General Plan, but do not take into account any specific GHG reduction measures associated with State or federal legislative actions or the City's 2009 CAP. The GP EIR found that any impacts resulting from GHG associated with implementation of the General Plan would be less than significant.

Development of the proposed project would contribute to the GHG emissions identified in the GP EIR. Long-term operation of the proposed project would generate GHG emissions from mobile, area, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips. Area-source emissions would be associated with activities such as landscaping and maintenance on the

project site. Energy source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The proposed project would develop the site with a new four-story, approximately 100,000-square-foot building would include 150 guest rooms. In addition to the guest rooms, the proposed building could include a meeting room, lounge area with a bar and seating space, office space, fitness center, and outdoor pool. The proposed project is consistent with the intent of the CHDR designation and would include a new hotel on an infill site that would locate guests and employees near existing residential and commercial uses, reducing the demand for travel by single occupancy vehicles. Therefore, the proposed project would support the ability to use alternative modes of transportation and would promote initiatives to reduce vehicle trips and vehicle miles traveled, which would help reduce GHG emissions.

Following guidance from the BAAQMD, GHG emissions were estimated for the proposed project using CalEEMod. Table 4 shows the calculated GHG emissions for the proposed project. Motor vehicle emissions are the largest source of GHG emissions for the project at approximately 70 percent of the total. Energy use is the next largest category at 26 percent of CO_2e emissions. Solid waste and water use are about 3 percent and 1 percent of the total emissions, respectively. CalEEMod output sheets are included in Appendix 1.

Table 4: Operational Greenhouse Gas Emissions

Emissions Source Category	Operational Emissions (Metric Tons per Year)				
	CO_2	CH_4	N_2O	CO_2e	Percent of Total Project Emissions
Area	<0.1	<0.1	0.0	<0.1	0
Energy	263.0	<0.1	<0.1	264.7	26
Mobile	696.2	<0.1	0.0	696.8	70
Waste	13.3	0.8	0.0	32.9	3
Water	4.6	0.1	<0.1	8.6	1
Total Operational				**1,003.0**	**100**
BAAQMD Threshold				**1,100**	**-**
Exceed?				**No**	**-**

Source: LSA (January 2020).

According to the BAAQMD, a project would result in a less-than-significant GHG impact if it would:

- Result in operational-related greenhouse gas emissions of less than 1,100 metric tons of CO_2e a year; or

- Result in operational-related greenhouse gas emissions of less than 4.6 metric tons of CO_2e per service population (residents plus employees).

Based on the analysis results, the proposed project would generate approximately 1,003.0 MT CO_2e which would be below the BAAQMD's numeric threshold of 1,100 MT CO_2e. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment and would have a less than significant impact related to operational GHG emissions. Operation of the proposed project would not result in new or more severe impacts related to GHG emissions than identified in the GP EIR.

Consistency with Greenhouse Gas Reduction Plans

The City of Hayward adopted the 2009 Climate Action Plan (CAP) to reduce GHG emissions communitywide. The 2009 CAP was designed to reduce communitywide emissions 12.5 percent below 2005 levels by the year 2020, and to set the City on a course to achieve a long-term emission reduction goal of 82.5 percent below 2005 levels by the year 2050.

As discussed in the GP EIR, the General Plan integrates and updates the comprehensive, community-wide GHG emission reduction strategy contained in the City's 2009 CAP to achieve a GHG emission reduction target of 20 percent below 2005 levels by the year 2020. The proposed General Plan also recommends longer-term goals for GHG reductions of 61.7 percent below 2005 levels by the year 2040 and 82.5 percent below 2005 levels by the year 2050. The GP EIR summarizes the total GHG emission reductions from both State and Federal regulatory actions, as well as locally based GHG emission reductions required to achieve the targets for 2020, 2040 and 2050 in Table 10.2 of the GP EIR. Legislative-adjusted projected emissions take into account GHG emission reductions as a result of State and Federal regulatory actions. Additional net GHG emission reductions would be required to meet the proposed targets for 2020, 2040 and 2050; however, the GP EIR determined that the scale of reductions required to achieve the much more aggressive longer-term emission reduction goals will require significant improvements in the availability and/or cost of technology, as well as potential increased reductions from ongoing State and Federal legislative actions.

As discussed in the GP EIR, the General Plan contains a comprehensive strategy that achieves a communitywide GHG emission reduction target of 20 percent below 2005 levels by the year 2020, and sets the City on course toward achieving ongoing GHG emission reductions in the future through the year 2050. Thus, the GP EIR determined that the General Plan would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. In addition, the GP EIR determined that estimated GHG emissions per service population in 2020, 2040 and 2050 would be below the BAAQMD-recommended threshold of 6.6 MT CO_2e per service population per year. Thus, the GP EIR determined that the General Plan would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and impacts would be less than significant.

As indicated above, the proposed project would develop the site with a new four-story, approximately 100,000-square-foot building would include 150 guest rooms. In addition to the guest rooms, the proposed building could include a meeting room, lounge area with a bar and seating space, office space, fitness center, and outdoor pool. The proposed project is consistent with the

intent of the CHDR designation and would include a new hotel on an infill site that would locate guests and employees near existing residential and commercial uses, reducing the demand for travel by single occupancy vehicles. Therefore, the proposed project would support the ability to use alternative modes of transportation and would promote initiatives to reduce vehicle trips and vehicle miles traveled, which would help reduce GHG emissions.

In addition, as indicated above, the proposed project would be constructed to the latest CALGreen standard building measures and Title 24 standards, which would help to reduce energy and natural gas consumption. Therefore, the proposed project would implement the General Plan's energy-related policies that promote jobs-housing balance, growth and infill development, green building and landscaping, complete neighborhoods, energy efficiency, and bicycling, walking, and transit amenities, and parks access. As such, the proposed project would be consistent with goals to reduce GHG emissions.

Therefore, the proposed project would implement appropriate GHG reduction strategies and would not conflict with applicable plan, policy, or regulations pertaining to GHGs. Therefore, the proposed project would not result in new significant impacts beyond those identified in the GP EIR. No new mitigation measures are required.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts on greenhouse gas emissions were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Objectives

- *Policy 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.*

- *Policy NR-2.7: Coordination with Bay Area Air Quality Management District. The City shall coordinate with the Bay Area Air Quality Management District to ensure projects incorporate feasible mitigation measures to reduce greenhouse gas emissions and air pollution if not already provided for through project design.*

- *Policy NR-2.10: Zero-Emission and Low-Emission Vehicle Use. The City shall encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities throughout the City.*

- *Policy NR-4.1: Energy Efficiency Measures. The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.*

- *Policy NR-4.3: 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 nonrenewable resources throughout the life-cycle of a structure.*

- *Policy 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 or exceeding the State's zero net energy goals by 2020.*

- *Policy 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.*

- *Policy NR-4.1:3 Energy Use Data. The City shall consider requiring disclosure of energy use and/or an energy rating for single family homes, multifamily properties, and commercial buildings at certain points or thresholds. The City shall encourage residents to voluntarily share their energy use data and/or ratings with the City as part of collaborative efficiency efforts.*

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

- *Policy LU-1.6: Mixed-Use Neighborhoods. The City shall encourage the integration of a variety of compatible land uses into new and established neighborhoods to provide residents with convenient access to goods, services, parks and recreation, and other community amenities.*

- *Policy LU-1.8: Green Building and Landscaping Requirements. The City shall maintain and implement green building and landscaping requirements for private- and public-sector development to:*

    - *Reduce the use of energy, water, and natural resources.*

    - *Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties.*

    - *Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors.*

    - *Encourage the use of durable, sustainably-sourced, and/or recycled building materials.*

    - *Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste.*

- *Policy M-1.4: Multimodal System Extensions. The City shall require all new development that proposes or is required to construct or extend streets to develop a transportation network that complements and contributes to the City's multimodal system, maximizes connections, and minimizes barriers to connectivity.*

- *Policy M-1.6: Bicycling, Walking, and Transit Amenities. The City shall encourage the development of facilities and services, (e.g., secure term bicycle parking, street lights, street furniture and trees, transit stop benches and shelters, and street sweeping of bike lanes) that enable bicycling, walking, and transit use to become more widely used modes of transportation and recreation.*

- *Policy M-5.1: Pedestrian Needs. The City shall consider pedestrian needs, including appropriate improvements to crosswalks, signal timing, signage, and curb ramps, in long-range planning and street design.*

- *Policy M-5.2: Pedestrian System. The City shall strive to create and maintain a continuous system of connected sidewalks, pedestrian paths, creekside walks, and utility greenways throughout the City that facilitates convenient and safe pedestrian travel, connects neighborhoods and centers, and is free of major impediments and obstacles.*

- *Policy M-5.4: Sidewalk Design. The City shall require that sidewalks, wherever possible, be developed at sufficient width to accommodate pedestrians including the disabled; a buffer separating pedestrians from the street and curbside parking; amenities; and allow for outdoor uses such as cafes.*

- *Policy M-5.5: Streetscape Design. The City shall require that pedestrian-oriented streets be designed and maintained to provide a pleasant environment for walking including shade trees; plantings; well-designed benches, trash receptacles, and other furniture; pedestrian-scaled lighting fixtures; wayfinding signage; integrated transit shelters; public art; and other amenities.*

- *Policy M-6.5: Connections between New Development and Bikeways. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways and do not interfere with existing and proposed bicycle facilities.*

- *Policy PFS-7.12: Construction and Demolition Waste Recycling. The City shall require demolition, remodeling and major new development projects to salvage or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.*

Conclusion

The GP EIR adequately evaluated the greenhouse gas emissions impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

9. HAZARDS AND HAZARDOUS MATERIALS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would 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 of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Discussion

The following discussion is based on the findings from the Phase I Environmental Site Assessment[25] (Phase I ESA) prepared for the proposed project.

Transport, Use, Storage, and Disposal of Hazardous Materials

Although small quantities of commercially available hazardous materials could be used during project construction activities (e.g., oil, gasoline, paint) and for landscape maintenance within the project site, these materials would not be used in sufficient quantities to pose a threat to human or environmental health. Therefore, development of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

[25] ENGEO, Inc., 2016b. *Phase I Environmental Site Assessment, Route 238 Bypass, Group 9, Hayward, California.* March 25.

Release of Hazardous Materials and Risk of Upset

The proposed hotel development would not involve storage or use of hazardous materials (except for small quantities for routine maintenance as described above) or generation of significant hazardous wastes. As such, potential significant impacts related to a foreseeable upset would not be expected.

During construction, hazardous materials such as fuel, lubricants, paint, sealants, and adhesives would be transported and used at the project site. Management of these materials at the project site would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Compliance with the Construction General Permit would require preparation and implementation of an SWPPP designed to reduce the risk of spills or leaks from the reaching the environment. The SWPPP would also include a Spill Response Plan to address minor spills of hazardous materials. Compliance with SWPPP requirements would ensure that potential significant hazards associated with routine transport, use, or disposal of hazardous materials during and after construction would be less than significant.

A Phase I Environmental Site Assessment[26] (ESA) was prepared for the project site. The Phase I ESA evaluated the potential for past land uses to have impacted the environmental condition of the site through the review of historical information sources (e.g., historic aerial photos and maps) and government databases that list hazardous materials release sites and facilities that handle hazardous materials.

The Phase I ESA prepared for the proposed project identified no Recognized Environmental Conditions (RECs), Controlled RECs (CRECs), or Historical RECs (HRECs); however, the following potential Recognized Environmental associated with the current and past use of the property was identified:

- Review of historical photographs found that the central portion of the property had formerly consisted of a public right-of-way, an extension of Oak Street. Additionally, in the 1980s, on-ramps leading to Interstates 238 and 580 were constructed along the western property boundary. Given the proximity to existing and former public right-of-ways, there is a potential for environmental impacts to the near-surface soil from aerially deposited lead (ADL).

Construction of the proposed project could expose workers and/or the public to potentially contaminated soil associated with historical car emissions prior to the elimination of lead in gasoline. If soils are not properly managed during construction, exposure to these hazardous materials could pose a health hazard to construction workers. Exposure to contaminants in soil could occur through inhalation of fugitive dust, incidental ingestion, or dermal contact with contaminated material.

[26] ENGEO, 2016b. op. cit.

The Phase I ESA recommended that a Phase II ESA, including soil sampling along the alignment of both Oak Street (former) and the on-ramp to I-238/580, be conducted to address potential environmental impacts to near-surface soil from aerially deposited lead (ADL).

If the Phase II ESA identifies soil contamination at levels exceeding regulatory screening levels for the proposed land use (e.g., the Regional Water Board's Environmental Screening Levels [ESLs]), the Project Applicant would be required to submit it to the appropriate regulatory oversight agency (e.g., Alameda County Environmental Health Department [ACDEH], Regional Water Board, or DTSC) for review. The Phase II ESA would recommend corrective actions to address the identified contamination, including developing and implementing a Soil Management Plan (SMP) and/or a Remedial Action Plan (RAP) for the remediation of contaminated soil, if required by a regulatory oversight agency. Any corrective actions would be performed under the oversight of the applicable regulatory oversight agencies, and clearance for the proposed land use would need to be obtained from the applicable regulatory oversight agencies.

Policy HAZ-6.2 of the City's General Plan requires that environmental investigations be prepared before discretionary project approvals are issued by the City in order to ensure that the presence of hazardous materials and/or waste contamination would not have the potential to affect the environment or the health and safety of future property owners or users.

Compliance with all applicable local, State, and federal regulations and standards pertaining to the release of hazardous materials and risk of upset would ensure that impacts associated with the release of hazardous materials would be less than significant.

Emission of Hazardous Materials within 0.25 miles of a School

Strobridge Elementary School, located at 2140 Bedford Drive, is located approximately 1,400 feet northeast of the project site. No other schools were identified within a quarter-mile of the project site.[27] As discussed above, the potential for a hazardous materials release during construction and operation activities would be less than significant following required compliance with existing regulations. Therefore, the proposed project would result in a less-than-significant impact to existing or proposed school facilities from the emission of hazardous materials.

Hazardous Materials Site Pursuant to Government Code Section 65962.5

Government Code Section 65962.5 requires the Cal/EPA to develop, at least annually, an updated list of hazardous materials release sites known as the Cortese List. The project site was not identified on the Cortese List or other hazardous material release databases during review of regulatory records for the Phase I ESA. Therefore, no impacts associated with locating a project on a site included on a list of hazardous materials is expected to occur.

[27] Hayward, City of, 2014. op. cit.

Aviation Hazards

The project site is not located in the vicinity of a private airstrip or within the Airport Influence Area of the Hayward Executive Airport, and therefore the project would not result in impacts related to aviation hazards.

Emergency Response or Evacuation Plan

The proposed project involves a hotel development on contiguous parcels and would not impair implementation of or interfere with the City of Hayward Local Hazard Mitigation Plan or the Alameda County Local Hazard Mitigation Plan. The proposed project would not impair implementation of, or interfere with, emergency response or evacuation plans because the proposed project would not alter the existing streets surrounding the project site, which could be used for emergency access or evacuation. The proposed project would involve limited short-term use of City streets for delivery of construction equipment and supplies, and commuting workers. During construction activities, all construction equipment would be stored on the project site. Therefore, potential impacts to emergency evacuation routes or emergency response plans from the proposed project are considered less than significant.

Wild Fire

The project site is in an urban area and is not within or adjacent to a wildland fire hazard area.[28] Therefore, the proposed project would not expose people or structures to a significant loss, injury or death involving wildland fires.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to hazards and hazardous materials were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy 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.*

- *Policy HAZ-5.1 Wildland/Urban Interface Guidelines. The City shall maintain and implement Wildland/Urban Interface Guidelines for new development within fire hazard areas.*

[28] California Department of Forestry and Fire Protection, 2008. Alameda County, Very High Fire Hazard Severity Zones in Local Responsibility Areas (map). Available at: https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf (accessed January 27, 2020). September 3.

- *Policy HAZ-5.2 Fire Prevention Codes. The City shall enforce fire prevention codes that require property owners to reduce wildfire hazards on their property.*

- *Policy HAZ-5.3 Defensible Space and Fuel Reduction. The City shall promote defensible space concepts to encourage property owners to remove overgrown vegetation and to reduce fuel loads on hillside properties, especially near structures and homes.*

- *Policy HAZ-6.1 Hazardous Materials Program. The City shall maintain its status as a Certified Unified Program agency and implement the City's Unified Hazardous Materials and Hazardous Waste Management Program, which includes:*

    - *Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans – HBMP);*

    - *California Accidental Release Prevention (CalARP) Program;*

    - *Underground Storage Tank (UST) Program;*

    - *Above-ground Petroleum Storage Act (APSA) Program, including Spill Prevention, Control, and Countermeasure (SPCC) Plans;*

    - *Hazardous Waste Generator Program;*

    - *On-site Hazardous Waste Treatment (Tiered Permit) Program; and*

    - *California Fire Code Hazardous Material Management Plans (HMMP) and Hazardous Materials Inventory Statements (HMIS).*

- *Policy HAZ-6.2 Site Investigations. The City shall require site investigations to determine the presence of hazardous materials and/or waste contamination before discretionary project approvals are issued by the City. The City shall require appropriate measures to be taken to protect the health and safety of site users and the greater Hayward community.*

- *Policy HAZ-6.3 Permit Requirements. The City shall direct the Fire Chief (or their designee) and the Planning Director (or their designee) to evaluate all project applications that involve hazardous materials, electronic waste, medical waste, and other hazardous waste to determine appropriate permit requirements and procedures.*

- *Policy HAZ-6.7 Agency Coordination. The City shall coordinate with State, Federal, and local agencies to develop and promote best practices related to the use, storage, transportation and disposal of hazardous materials.*

- *Policy HAZ-6.8 Truck Routes. The City shall maintain designated truck routes for the transportation of hazardous materials through the City of Hayward. The City shall discourage truck routes passing through residential neighborhoods to the maximum extent feasible.*

- *Policy HQL-7.3 Home Use of Hazardous Materials. The City shall encourage and educate residents, non-profits, and businesses to implement integrated pest management principles, and reduce or discontinue the use of pesticides, herbicides, and toxic cleaning substances.*

- *Policy HQL-7.5 Proximity to Pollution Sources. The City shall avoid locating new sensitive uses such as schools, childcare centers, and senior housing, to the extent feasible, in proximity to sources of pollution, odors, or near existing businesses that handle toxic materials, Where such uses are located in proximity to sources of air pollution, odors, or toxic materials, the City shall encourage building design, construction safeguards, and technological techniques to mitigate the negative impacts of hazardous materials and/or air pollution on indoor air quality.*

- *Policy HQL-9.5 Hazards Resiliency. The City shall continue to assess and monitor risks from local environmental (e.g., flooding, earthquake) and man-made hazards and work with community groups and State and regional agencies to prepare residents, businesses, and visitors in the event of an incident.*

- *Policy HQL-9.8 Climate Adaptation in Plans. The City shall address climate adaptation in all disaster preparedness and emergency response plans.*

- *Policy M-4.5 Emergency Access. The City shall develop a roadway system that is redundant (i.e., include multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.*

Conclusion

The GP EIR adequately evaluated the impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

10. HYDROLOGY AND WATER QUALITY

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

Discussion

Water Quality Standards

Construction. Construction and demolition activities for the proposed project would involve disturbing, grading, and excavating soil, which could result in temporary erosion and movement of sediments into the storm drain system, particularly during precipitation events. The potential for chemical releases is present at most construction sites due to the use of paints, solvents, fuels, lubricants, and other hazardous materials associated with heavy construction equipment. Once released, these hazardous materials could be transported to nearby surface waterways in stormwater runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters. The release of sediments and other pollutants during construction and demolition could adversely affect water quality in receiving waters.

The proposed project would disturb greater than 1 acre of land, and therefore would be required to obtain coverage under the Construction General Permit (State Water Board Order 2009-0009-DW).[29] On-site construction activities subject to the Construction General Permit include clearing, grading, excavation, and soil stockpiling. As stated above, State Water Resources Control Board's Construction General Permit also requires the development of an SWPPP by a Qualified SWPPP Developer. An SWPPP identifies all potential pollutants and their sources, including erosion, sediments, and construction materials and must include a list of BMPs to reduce the discharge of construction-related stormwater pollutants. An SWPPP must include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. Typical sediment and erosion BMPs include protecting storm drain inlets, establishing and maintaining construction exits and perimeter controls to avoid tracking sediment off-site onto adjacent roadways. An SWPPP also defines proper building material staging and storage areas, paint and concrete washout areas, describes proper equipment/vehicle fueling and maintenance practices, measures to control equipment/vehicle washing and allowable non-stormwater discharges, and includes a spill prevention and response plan.

Monitoring wells in the vicinity of the site appear to indicate that local groundwater may occur at depths between 2 and 13 feet. No groundwater seepage or other indication of near-surface groundwater was observed during a geotechnical site reconnaissance performed in 2016.[30] Based on the estimated depths to groundwater at the site, construction related dewatering may be required. Turbid and/or contaminated groundwater could cause degradation of the receiving water quality if discharged directly to storm drains or surface water without treatment. The discharge of dewatering effluent would be subject to permits from the City of Hayward or the Regional Water Board, depending if the discharge were to the sanitary sewer or storm drain system, respectively. The Construction General Permit allows the discharge of dewatering effluent if the water is properly filtered or treated, using appropriate technology. If the dewatering activity is deemed by the Regional Water Board not to be covered by the Construction General Permit, then the discharger could potentially prepare a Report of Waste Discharge, and if approved by the Regional Water Board, be issued site-specific Waste Discharge Requirements (WDRs) under NPDES regulations. If it is infeasible to meet the requirements of the Construction General Permit, acquire site-specific WDRs, or meet the City of Hayward's wastewater discharge requirements, the construction contractor would be required to transport the dewatering effluent off-site for treatment and disposal.

Required compliance with State and local regulations regarding stormwater and dewatering during construction would ensure that the proposed project would result in less-than-significant impacts to water quality during construction.

Operation. Because the project would replace over 10,000 square feet of existing impervious surface area, the project would be required to comply with Provision C.3 requirements of the San

[29] State Water Resources Control Board Division of Water Quality, 2009. Construction General Permit Fact Sheet. 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ.

[30] ENGEO. 2016a. op. cit.

Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP).[31] The project would result in alteration of over 50 percent of the existing impervious surface of the project site, and therefore all new and replaced impervious surfaces would require treatment under the MRP. Provision C.3 of the MRP requires implementation of low impact development (LID) source control, site design, and stormwater treatment for regulated projects. LID employs principles such as preserving and recreating natural landscape features and minimizing impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. Additionally, Policy NR-6.6 of the City's General Plan requires the City to promote stormwater management techniques that minimize surface water runoff and impervious ground surface, including requiring LID techniques.

Provision C.3.g of the MRP pertains to hydromodification management.[32] The MRP requires that regulated projects which create and/or replace over 1 acre of impervious surface and increase the amount of impervious surface compared to the existing condition include measures to address hydromodification to ensure that stormwater discharges do not cause an increase in the erosion potential of the receiving stream. Increases in runoff flow and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force. The proposed project would be subject to hydromodification management requirements because the proposed project would increase the amount of impervious surface compared to the existing condition, and stormwater runoff from the project site is eventually discharged into natural creeks, which are susceptible to erosion. Hydromodification management controls may include the installation of retention/detention systems (e.g., swales, basins, ponds, or cisterns) which would reduce runoff rates and volumes.

Additionally, Policies NR-6.4, NR-6.5, and NR-6.6 of the City's General Plan requires the implementation of BMPs to minimize erosion, sedimentation, and water quality degradation resulting from the construction of new impervious surfaces. Policy PFS-5.3 of the City's General Plan requires new development projects to prepare drainage studies to assess storm runoff impacts on the local and regional storm drain and flood control system, and to develop recommended detention and drainage facilities to ensure that increased risks of flooding do not result from development and to prevent increased erosion and siltation of creek beds and banks.

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31 San Francisco Bay Regional Water Quality Control Board, 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19.

32 Hydromodification or hydrograph modification causes streambank erosion, channelization, increased flood flows, and other physical modifications that can adversely impact aquatic ecosystems due to increased sedimentation and reduced water quality (e.g., higher water temperatures, lower dissolved oxygen concentrations).

Required compliance with applicable regulations and implementation of City policies, as described above, would reduce potential impacts to water quality from operation of the project to a less-than significant level.

Deplete Groundwater Supplies

Dewatering during construction activities may be required. If performed, construction-related dewatering would be temporary and limited to areas of excavation on the project site and would not substantially contribute to depletion of groundwater supplies.

Operation of the proposed project would not involve use of groundwater as potable water, because potable water is supplied to the project site by the City of Hayward. The project site is predominantly undeveloped, and partially covering undeveloped areas with impervious surfaces, as proposed by the project, could reduce infiltration of rainfall and runoff, which in turn could adversely affect aquifer recharge and groundwater supplies. In accordance with the requirements of Provision C.3 of the MRP, site design and treatment measures must be implemented at the project site to encourage infiltration of storm water runoff. Site design and treatment measures may include detention and retention basins, stormwater harvesting, vegetated swales and planters, and pervious pavements. A Storm Water Control Plan that specifies the types of infiltration-based site design and treatment measures to be incorporated into the project would be required by the City prior to construction. Implementation of infiltration-based site design and treatment measures, as required by the MRP and the City, would reduce potential impacts to groundwater supplies to a less-than-significant level.

Drainage Pattern and Surface Run-off

The proposed project would not alter the course of a stream or river. However, the project would alter drainage patterns by creating new landscaped areas and impermeable pavement surfaces. As discussed above, the proposed project would be required to comply with the hydromodification requirements of the MRP and Policies NR-6.6 and NR-6.8 of the City's General Plan. The Project Applicant would be required to prepare a drainage study to ensure that the changes in drainage patterns resulting from the project would not adversely impact storm drain and flood control systems or cause erosion and siltation of creek beds and banks.

Required compliance with applicable regulations and implementation of City policies, as described above, would reduce potential impacts of the project related to changes in drainage patterns to a less-than-significant level.

Flood Hazard, Tsunami, Seiche Zones

Based on the distance from the Bay, coastal hazards, such as sea level rise, seiche, tsunami, or extreme high tides, would not pose a threat of flooding for the proposed project. Parcel Group 9 is not located within 100-year flood hazard zones as mapped by the Federal Emergency Management

Agency (FEMA);[33] however, 100-year flood hazard zones mapped by FEMA are located along San Lorenzo Creek, downstream of the parcel group. The project site is also not located within a dam failure inundation area.[34] Therefore, the project would not result in impacts related to flooding, inundation by tsunami, or seiche.

Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

As discussed above, due to the size of the proposed project, construction and operation of the project would be subject to State and regional requirements related to stormwater runoff and any contaminated groundwater. Required compliance with State and local regulations regarding stormwater and dewatering during construction would ensure that the proposed project would not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. As a result, a less-than-significant impact would occur.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to hydrology and water quality were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies and Actions

- *Policy LU-1.8 Green Building and Landscaping Requirements. The City shall maintain and implement green building and landscaping requirements for private- and public-sector development to:*
    - *Reduce the use of energy, water, and natural resources.*
    - *Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties.*
    - *Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors.*
    - *Encourage the use of durable, sustainably-sources, and/or recycled building materials.*
    - *Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste.*

[33] Federal Emergency Management Agency (FEMA). 2018. Flood Map Services Center. Available online at: https://msc.fema.gov/portal/search?AddressQuery=Hayward%20CA#searchresultsanchor (accessed January 27, 2020).

[34] Hayward, City of, 2014, op. cit.

- *Policy NR-1.12 Riparian Corridor Habitat Protection. The City shall protect creek riparian habitats by:*
    - *Requiring sufficient setbacks for new development adjacent to creek slopes,*
    - *Requiring sensitive flood control designs to minimize habitat disturbance,*
    - *Maintaining natural and continuous creek corridor vegetation,*
    - *Protecting/replanting native trees, and*
    - *Protecting riparian plant communities from the adverse effects of increased stormwater runoff, sedimentation, erosion, pollution that may occur from improper development in adjacent areas.*
- *Policy LU-1.10 Infrastructure Capacities. The City shall ensure that adequate infrastructure capacities are available to accommodate planned growth throughout the City.*
- *Policy NR-6.4 Minimize Grading. The City shall minimize grading and, where appropriate, consider requiring onsite retention and settling basins.*
- *Policy NR-6.5 Erosion Control. The City shall concentrate new urban development in areas that are least susceptible to soil erosion into water bodies in order to reduce water pollution.*
- *Policy NR-6.6 Stormwater Management. The City shall promote stormwater management techniques that minimize surface water runoff and impervious ground surfaces in public and private developments, including requiring the use of Low-Impact Development (LID) techniques to best manage stormwater through conservation, onsite filtration, and water recycling.*
- *Policy NR-6.8 NPDES Permit Compliance. The City shall continue to comply with the San Francisco Bay Region National Pollutant Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit.*
- *Policy 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.*
- *Policy HAZ-2.7 Dam Failure. The City shall coordinate with agencies responsible for the maintenance of the South Reservoir Dam, the Del Valle Dam, and other small dams along Alameda Creek to ensure that dam infrastructure is maintained and enhanced to withstand potential failure during an earthquake.*
- *Policy HAZ-3.2 Development in Flood Plains. The City shall implement Federal, State, and local requirements related to new construction in flood plain areas to ensure that future flood risks to life and property are minimized.*

- *Policy HAZ-3.3 Flood Plain Management Ordinance. The City shall maintain and enforce a Flood Plain Management Ordinance to:*
    - *Promote public health, safety, and general welfare by minimizing public and private losses due to floods;*
    - *Implement the Cobey-Alquist Flood Plain Management Act, and*
    - *Comply with the eligibility requirements of the National Flood Insurance Program.*
- *Policy PFS-3.9 High Quality Service Provision. The City shall provide water service that meets or exceeds State and Federal drinking water standards.*
- *Policy PFS-4.1 Sewer Collection System Master Plan. The City shall maintain and implement the Sewer Collection System Master Plan.*
- *Policy PFS-4.2 Water Pollution Control Facility Master Plan. The City shall maintain and implement the Water Pollution Control Facility Master Plan.*
- *Policy PFS-5.1 Accommodate New and Existing Development. The City shall work with the Alameda County Flood Control and Water Conservation District to expand and maintain major stormwater drainage facilities to accommodate the needs of existing and planned development.*
- *Policy PFS-5.3 Watershed Drainage Plans. The City shall require developers of proposed large development projects to prepare watershed drainage plans. Drainage plans shall define needed drainage improvements per City standards, estimate construction costs for these improvements, and be implemented through the Stormwater Management and Urban Runoff Control Program and Alameda Countywide Clean Water Program.*
- *Policy PFS-5.4 Green Stormwater Infrastructure. The City shall encourage "green infrastructure" design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).*
- *Policy PFS-5.6 Grading Projects. The City shall impose appropriate conditions on grading projects performed during the rainy season to ensure that silt is not conveyed to storm drainage.*
- *Policy PFS-5.7 Diversion. The City shall require new development to be designed to prevent the diversion of stormwater onto neighboring parcels.*
- *Policy PFS-5.8 Enhance Recreation and Habitat. The City shall require new stormwater drainage facilities to be designed to enhance recreation and habitat and shall work with HARD to integrate such facilities into existing parks and open space features.*

- *Policy HQL-7.3 Home Use of Hazardous Materials. The City shall encourage and educate residents, non-profits, and businesses to implement integrated pest management principles, and reduce or discontinue the use of pesticides, herbicides, and toxic cleaning substances.*

Conclusion

The GP EIR adequately evaluated the impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

11. LAND USE AND PLANNING

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

Divide an Established Community

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying area. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The project site is located in an urban area in the City of Hayward/Alameda County and is surrounded by commercial, and residential uses, as well as I-238, and I-580. The proposed project would include the development of the project site with a new hotel. The proposed project would not require the construction of any new infrastructure that would divide an established community, and would not remove any means access. The proposed project would not result in a physical division of an established community or adversely affect the continuity of land uses in the vicinity. This impact would be less than significant. Therefore, this impact would not result in new or more significant impacts beyond those analyzed in the GP EIR.

Conformance with Land Use Plans

The City's General Plan Land Use Map designates the portion of Parcel Group 9 within the City as Commercial/High Density Residential (up to 34.8 dwelling units per net acre) and Public/Quasi-Public. The site is zoned for Commercial Office, Public Facilities, and High Density Residential (minimum lot size 1,250 square feet). The purpose of the Commercial Office District is to provide for and protect administrative, professional, business, and financial organizations that are compatible with residential use of adjacent properties.

The portion of the site within the unincorporated community of Castro Valley is designated as Public/Institutional on the Castro Valley General Plan Land Use Map and is zoned for Retail Business, Suburban Residential (8 dwelling units per acre), General Business, and Industrial Park. However, the proposed project would be located solely within the portion of the project site that lies within the City of Hayward.

The proposed project is consistent with the type and intensity of development allowed within the General Plan Land Use Designation. The proposed project would not require changes to General Plan land use designations; however, as described in Attachment A, Project Description, the project site would need to be re-zoned from High Density Residential (RH) and Commercial Office (CO) to General Commercial (GC) to allow for hotel development. The City of Hayward Planning Commission and City of Hayward City Council would consider approving the re-zone as part of their review of the proposed project. With the proposed change in zoning, the proposed project would be consistent with the City's Zoning Ordinance, including permitted development intensity, setbacks, parking, and other development regulations. Therefore, the proposed project would not result in new or more severe impacts related to conformity with land use plans beyond those already analyzed in the GP EIR.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to land use and planning were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

- *Policy LU-1.3 Growth and Infill Development. The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.*

- *Policy LU-1.7 Design Guidelines. The City shall maintain and implement commercial, residential, industrial, and hillside design guidelines to ensure that future development complies with General Plan goals and policies.*

- *Policy LU-2.14 University-Oriented Uses. The City shall support the development of university-oriented uses, including student and faculty housing, satellite campuses and university-oriented retail and service uses, within the City's Priority Development Areas (excluding the Cannery Transit Neighborhood).*

- *Policy LU-3.1 Complete Neighborhoods. The City shall promote efforts to make neighborhoods more complete by encouraging the development of a mix of complementary uses and amenities that meet the daily needs of residents. Such uses and amenities may include parks, community centers, religious institutions, daycare centers, libraries, schools, community gardens, and neighborhood commercial and mixed-use developments.*

- *Policy LU-3.6 Residential Design Strategies. The City shall encourage residential developments to incorporate design features that encourage walking within neighborhoods by:*

    - *Creating a highly connected block and street network.*

- *Designing new streets with wide sidewalks, planting strips, street trees, and pedestrian-scaled lighting.*
- *Orienting homes, townhomes, and apartment and condominium buildings toward streets or public spaces.*
- *Locating garages for homes and townhomes along rear alleys (if available) or behind or to the side of the front façade of the home.*
- *Locating parking facilities below or behind apartment and condominium buildings.*
- *Enhancing the front façade of homes, townhomes, and apartment and condominium buildings with porches, stoops, balconies, and/or front patios.*
- *Ensuring that windows are provided on facades that front streets or public spaces.*

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  - *Locating parking facilities below or behind apartment and condominium buildings.*
  - *Enhancing the front façade of homes, townhomes, and apartment and condominium buildings with porches, stoops, balconies, and/or front patios.*
  - *Ensuring that windows are provided on facades that front streets or public spaces.*
- *Policy LU-7.2 Ridgelines. The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend development with the natural features of the hillside.*
- *Policy LU-7.3 Hillside Street Layouts. The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.*

- *Policy LU-7.4 Hillside Street Design. The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curb and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.*

- *Policy LU-7.5 Clustered Developments. The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.*

- *Policy NR-6.8 NPDES Permit Compliance. The City shall continue to comply with the San Francisco Bay Region National Pollutant Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit.*

- *Policy NR-8.1 Hillside Residential Design Standards. The City shall regulate the design of streets, sidewalks, cluster home development, architecture, site design, grading, landscaping, utilities, and signage in hillside areas to protect aesthetics, natural topography, and views of surrounding open space through the continued Hillside Design and Urban/Wildland Interface Guidelines.*

- *Policy NR-8.2 Hillside Site Preparation Techniques. The City shall require low-impact site grading, soils, repair, foundation design, and other construction methods to be used on new residential structures and roadways above 250 feet in elevation to protect aesthetics, natural topography, and views of hillsides and surrounding open space.*

- *Policy M-1.3 Multimodal Connections. The City shall implement a multimodal system that connects residents to activity centers throughout the City, such as commercial centers and corridors, employment centers, transit stops/stations, the airport, schools, parks, recreation area, and other attractions.*

- *Policy M-1.4 Multimodal System Extensions. The City shall require all new development that proposes or is required to construct or extend streets to develop a transportation network that complements and contributes to the City's multimodal system, maximizes connections, and minimizes barriers to connectivity.*

- *Policy M-1.6 Bicycling, Walking and Transit Amenities. The City shall encourage the development of facilities and services (e.g., secure term bicycle parking, street lights, street furniture and trees, transit stop benches and shelters, and street sweeping of bike lanes) that enable bicycling, walking, and transit use to become more widely used modes of transportation and recreation.*

- *Policy M-1.7 Eliminate Gaps. The City shall strive to create a more comprehensive multimodal transportation system by eliminating gaps in roadways, bikeways, and pedestrian networks, increasing transit access in underserved areas, and removing natural and man-made barriers to accessibility and connectivity.*

- *Policy M-3.6 Context Sensitive. The City shall consider the land use and urban design context of adjacent properties in both residential and business districts as well as urban, suburban, and rural areas when designing complete streets.*

- *Policy M-3.8 Connections with New Development. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, pedestrian ways and transit facilities.*

- *Policy M-5.2 Pedestrian System. The City shall strive to create and maintain a continuous system of connected sidewalks, pedestrian paths, creekside walks, and utility greenways through the City that facilitates convenient and safe pedestrian travel, connects neighborhoods and centers, and is free of major impediments and obstacles.*

- *Policy M-6.1 Bikeway System. The City shall maintain and implement the Hayward Bicycle Master Plan.*

- *Policy M-6.5 Connections between New Development and Bikeways. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, and do not interfere with existing and proposed bicycle facilities.*

- *Policy HAZ-2.7 Dam Failure. The City shall coordinate with agencies responsible for the maintenance of the South Reservoir Dam, the Del Valle Dam, and other small dams along Alameda Creek to ensure that dam infrastructure is maintained and enhanced to withstand potential failure during an earthquake.*

- *Policy HAZ-3.3 Flood Plain Management Ordinance. The City shall maintain and enforce a Flood Plain Management Ordinance to:*

    - *Promote public health, safety, and general welfare by minimizing public and private losses due to floods;*

    - *Implement the Cobey-Alquist Flood Plain Management Act, and*

    - *Comply with the eligibility requirements of the National Flood Insurance Program.*

- *PFS-1.3 Public Facility Master Plans. The City shall maintain and implement public facility master plans to ensure compliance with appropriate regional, State, and Federal laws; the use of modern and cost-effective technologies and best management practices; and compatibility with current land use policy.*

- *PFS-3.2 Urban Water Management Plan. The City shall maintain and implement the Urban Water Management Plan, including water conservation strategies and programs, as required by the Urban Water Management Planning Act.*

- *PFS-3.14 Water Conservation Standards. The City shall comply with provisions of the State's 20x2020 Water Conservation Plan (California Water Resources Control Board, 2010).*

- *Policy PFS-5.1 Accommodate New and Existing Development. The City shall work with the Alameda County Flood Control and Water Conservation District to expand and maintain major stormwater drainage facilities to accommodate the needs of existing and planned development.*

- *Policy PFS-5.3 Watershed Drainage Plans. The City shall require developers of proposed large development projects to prepare watershed drainage plans. Drainage plans shall define needed drainage improvements per City standards, estimate construction costs for these improvements, and be implemented through the Stormwater Management and Urban Runoff Control Program and Alameda Countywide Clean Water Program.*

- *Policy PFS-5.8 Enhance Recreation and Habitat. The City shall require new stormwater drainage facilities to be designed to enhance recreation and habitat and shall work with HARD to integrate such facilities into existing parks and open space features.*

- *Policy PFS-7.3 Landfill Capacity. The City shall continue to coordinate with the Alameda County Waste Management Authority to ensure adequate landfill capacity in the region of the duration of the contract with its landfill franchise.*

- *Policy PFS-7.4 Solid Waste Diversion. The City shall comply with State goals regarding diversion from landfill, and strive to comply with the provisions approved by the Alameda County Waste Management Authority.*

Conclusion

The GP EIR adequately evaluated the potential land use impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

12. MINERAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

Mineral resources that exist or existed within the City limits include stone, limestone, clay, fire clay, halite, and salt. The La Vista Quarry, located to the east of Mission Boulevard and Tennyson Road, is designated as a mineral resource site of regional significance; however, all operations at the La Vista Quarry site have been terminated due to depletion of aggregate resources. No other significant mineral resources are located within the City.[35] As such, implementation of the proposed project would have no impacts on mineral resources.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan, impacts related to mineral resources were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

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

Conclusion

The GP EIR adequately evaluated the mineral resource impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

[35] Hayward, City of, 2014, op. cit.

13. NOISE

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c. For a project located within the vicinity of a private airstrip an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

The predominant sources of noise include traffic noise from major roadways, freight and passenger trains, and aircraft. Noise generated by industrial facilities and other stationary sources contribute to the ambient noise levels in their general area.[36] Table 5 summarizes the modeled existing traffic noise levels on roadway segments that are in close proximity to Parcel Group 9. The information in Table 5 is summarized from Table 9-11 in the Hayward 2040 General Plan Background Report. The segment of Foothill Boulevard from Mattox Road to Grove Way is in close proximity to Parcel Group 9. Existing noise levels along this stretch of roadway are 73 dB from 50 feet from the roadway centerline.

Table 5: Summary of Modeled Existing Traffic Noise Levels of Roadways Adjacent to Parcel Group 9

Roadway Segment	Location	dB at 50 feet from Roadway Centerline	Feet from Roadway Centerline (Distance to Noise Contours)			
			70 dBA	65 dBA	60 dBA	55 dBA
Foothill Boulevard	Mattox Road to Grove Way	73	96	303	957	2,609

Source: *Hayward 2040 General Plan Background Report* (2014).

Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Land uses near Parcel Group 9 include multifamily housing, a church and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used appliance store. The closest sensitive

[36] Hayward, City of, 2014, op. cit.

receptors include the multifamily housing located adjacent to the northern and eastern borders of the project site.

The Hayward Executive Airport, located in the northwestern portion of the City, also generates noise from flight operations. However, the parcel group is located outside of the Hayward Executive Airport influence area.[37]

Construction-Period Impacts

The Hayward Municipal Code limits construction activities to between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Saturday and between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays. In addition, the Hayward Municipal Code limits noise levels generated by an individual device or piece of equipment to no more than 83 dBA at a distance of 25 feet from the source and the noise level at any point outside of the property plane[38] shall not exceed 86 dBA.

The GP EIR determined that implementation of projects under the General Plan would involve construction that would result in temporary noise generated primarily from the use of heavy-duty construction equipment. The GP EIR identified that construction activities associated with future planned development could include site preparation (e.g., excavation, grading), laying of concrete foundations, paving, equipment installation, finishing, and cleanup. These activities typically involve the use of noise-generating equipment such as cranes, excavators, dozers, graders, dump trucks, generators, backhoes, compactors, and loaders.

As discussed in the GP EIR, with regard to construction noise, the site preparation phase typically results in the most noise generated from the use of heavy-duty equipment such as excavators, graders, dozers, loaders, and trucks. Based on typical equipment noise levels and accounting for typical usage factors of individual pieces of equipment associated with a typical site preparation phase of construction, the GP EIR determined that construction noise could result in noise levels of up to 93 dB L_{eq} and 97 dB L_{max} at 25 feet from a typical construction site, which would exceed the limits allowed by the adopted Municipal Code.

The GP EIR identified Mitigation 15-1, which would limit construction activities to the less sensitive times of the day, require site-specific noise studies to reduce potential impacts, and preparation and adoption of a Construction Noise Control Ordinance that would apply to all construction projects, including discretionary projects. With adoption of the General Plan Policies and implementation program, the GP EIR concluded that exposure of sensitive receptors located near construction activities to excessive noise levels would be avoided or reduced to a less-than significant level.

As identified above, land uses near Parcel Group 9 include multifamily housing, a church and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used

[37] Alameda County Community Development Agency, 2012. *Hayward Executive Airport - Airport Land Use Compatibility Plan.*

[38] According to the City of Hayward Municipal Code, "property plane" means a vertical plane including the property line, which determines the property boundaries in space.

appliance store. The closest sensitive receptors include the multifamily housing located adjacent to the northern and eastern borders of the project site.

The Hayward Municipal Code also limits noise levels generated by an individual device or piece of equipment to no more than 83 dBA at a distance of 25 feet from the source and the noise level at any point outside of the property plane shall not exceed 86 dBA. The project's construction noise levels could result in an exceedance of the City's allowable construction noise levels from construction equipment and could result in a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Consistent with Mitigation 15-1 identified in the GP EIR, and General Plan Policies HAZ-8.17, *Community Noise Control Ordinance,* HAZ-8.20, *Construction Noise Study,* HAZ-8.21, *Construction and Maintenance Noise Limits,* and HAZ-8.24, *Construction Noise Control Ordinance,* the City will require a noise impact assessment for the proposed project, which will determine construction noise impacts, will limit the hours of construction to less sensitive hours of the day, and will enforce the Construction Noise Control Ordinance to minimize noise impacts associated with construction. In compliance with these policies and Mitigation 15-1, the following Standard Condition of Approval for project construction would be implemented to ensure potential construction period noise impacts for the indicated sensitive receptors would be less than significant.

- The project contractor shall implement the following best management practice measures during construction of the project:
    - Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
    - Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
    - Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.
    - Construction haul trucks and materials delivery traffic shall avoid residential areas whenever feasible.
    - Prohibit extended idling time of internal combustion engines.
    - Ensure simultaneous operation of multiple pieces of construction equipment would not occur near noise-sensitive receptors. The construction contractor shall limit the use of construction equipment within 20 feet of noise-sensitive receptors to one piece of equipment at a time.
    - Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Saturday and between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays.

- Temporary noise control blanket barriers shall be installed in a manner to shield adjacent land uses

- All noise-sensitive receptors located within 500 feet of the project site shall be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet shall also be posted at the project site. All notices and the signs shall indicate the dates and durations of construction activities, as well as provide a telephone number for a "noise disturbance coordinator."

- Designate a "disturbance coordinator" at the City of Hayward who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem, and ensure noise levels do not exceed noise ordinance standards.

Implementation of the above best management practices would limit construction activities to the less noise-sensitive periods of the day and would reduce construction impacts to the extent feasible. With implementation of this Standard Condition of Approval, the proposed project would not create impacts related to construction noise more severe than impacts identified in the GP EIR.

Vibration Impacts

The GP EIR determined that construction activities due to implementation of the General Plan could result in the temporary ground vibration from the use of heavy-duty construction equipment as well as long-term exposure to ground vibration from sources such as trains, busses, and the Bay Area Rapid Transit (BART). The GP EIR also indicated that the General Plan contains policies that require construction activities located in close proximity to existing sensitive land uses, as well as new development projects located in close proximity to vibration noise sources, to conduct vibration noise studies. Noise studies would determine vibration impacts, and the City would require all feasible mitigation to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur. Therefore, the GP EIR determined that new development would not be exposed to excessive levels of vibration and this impact would be less than significant.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from constru ction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construc-tion site. With the exception of old buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

The proposed project is not located within close proximity to major vibration sources (e.g., railroads, freeways, BART lines). In addition, the streets surrounding the project area are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause

groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur and, therefore, no vibration impact analysis of on-road vehicles is necessary. Therefore, once constructed, the proposed project would not contain uses that would generate groundborne vibration. This impact would be less than significant.

Construction Vibration. Construction of the project could result in the generation of groundborne vibration. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and will assess the potential for building damages using vibration levels in PPV (in/sec) because vibration levels calculated in RMS are best for characterizing human response to building vibration, while vibration level in PPV is best used to characterize potential for damage. The Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment guidelines indicate that a vibration level up to 102 VdB (an equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

Table 6 shows the PPV and VdB values at 25 feet from a construction vibration source. As shown in Table 6, bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment. At this level, groundborne vibration has the potential to result in annoyance to residents and workers, but would not cause any damage to the buildings.

Table 6: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 feet	
	PPV (in/sec)	L_V (VdB)[a]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
[a] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
µin/sec = micro-inches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residential buildings in the project vicinity). Outdoor site preparation for the proposed project is expected to include the use of bulldozers and loaded trucks. The greatest levels of vibration are anticipated to occur during the site preparation

phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$L_vdB\ (D) = L_vdB\ (25\ feet) - 30\ Log\ (D/25)$$
$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

As identified above, land uses near Parcel Group 9 include multifamily housing, a church and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used appliance store. The closest sensitive receptors include the multifamily housing located adjacent to the northern and eastern borders of the project site. Based on distance attenuation, groundborne vibration levels associated with heavy construction equipment would exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) for building damage when heavy construction equipment is used within 15 feet of existing structures.

Consistent with General Plan Policy HAZ-8.22, *Vibration Impact Assessment,* the City requires a vibration impact assessment for the proposed project, which will determine vibration impacts. Under this policy, the City would require all measures to reduce impacts associated with vibration noise and vibration damage to buildings, if deemed necessary.

For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer, which would generate 87 VdB at 25 feet. The closest surrounding land uses to the project site include the multifamily housing located adjacent to the northern and eastern borders of the project site. Due to building setbacks, the multifamily buildings located adjacent to the northern border of the project site would be located approximately 20 feet from project construction and the multifamily buildings located adjacent to the eastern border of the project site would be located approximately 10 feet from project construction. The multifamily residences located to the adjacent to the northern border of the project site would experience vibration levels of up to 90 VdB (0.124 PPV [in/sec]) and the multifamily buildings located adjacent to the eastern border of the project site would experience vibration levels of up to 99 VdB (0.352 PPV [in/sec]).

Construction vibration levels at the multifamily buildings located adjacent to the eastern border of the project site from construction equipment or activity could exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) for non-engineered timber and masonry building damage when bulldozers and loaded trucks operate at or near the project construction boundary. Therefore, in compliance with General Plan Policy HAZ-8.22, as a Standard Condition of Approval for the proposed project, the City will require that the use of heavy construction equipment within 15 feet of existing structures be prohibited. With implementation of this Standard Condition of Approval, potential construction-related vibration impacts would not occur and therefore would not result in a new or worsening impact than those identified in the GP EIR.

- The use of heavy construction equipment within 15 feet of existing structures shall be prohibited.

Implementation of the Standard Condition of Approval described above would ensure that construction vibration levels would be below the FTA threshold of 94 VdB (0.2 in/sec PPV) for building damage. Although construction vibration levels at the adjacent sensitive receptors would have the potential to result in annoyance, these vibration levels would no longer occur once construction of the project is completed. Therefore, impacts associated with construction vibration would be considered less than significant. With implementation of Standard Conditions of Approval, the proposed project would not create impacts related to construction vibration more severe than impacts identified in the GP EIR.

Traffic Noise Impacts

As identified in the GP EIR, future planned development with implementation of the General Plan could be exposed to existing community noise as well as increases in traffic noise due to anticipated traffic increases on transportation networks within the Planning Area. In addition, existing development within the Planning Area may also be exposed to increases in traffic noise as a result of the General Plan.

The GP EIR modeled existing and future traffic noise levels throughout the City to determine the anticipated traffic noise levels along major roadways. Based on the modeling, future projected traffic volumes on modeled roadways would result in some level of traffic noise increase in most cases (in some cases traffic-related noise decreases slightly). The GP EIR identified increases in traffic noise that ranges from 3 dB up to an approximate 15 dB increase. Based on human perception of noise increase, 3 decibels is perceived as barely noticeable. Thus, with regard to traffic noise specifically, a noticeable increase in noise (i.e., 3 dB or greater), for the purposes of this analysis, would be considered a substantial increase in noise.

The GP EIR identified Mitigation 15-2, which requires all new development to comply with the City's noise standards, noise mitigation procedures, and sensitive land use siting policies. Mitigation 15-2 would require new projects to evaluate noise exposure and provide mitigation measures to reduce noise exposure at sensitive land uses and meet noise standards for the specific project type. Therefore, Mitigation 15-2 requires project-level noise studies to comply with adopted noise standards to ensure that individuals are not exposed to excessive noise levels.

Implementation of the proposed project would result in new daily trips on local roadways in the project site vicinity. As indicated above, a characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level. The proposed project would generate approximately 1,254 average daily trips. Based on the Hayward 2040 General Plan Background Report, the adjacent Foothill Boulevard carries approximately 43,910 average daily trips. Project trips would represent a small increase in noise level, up to approximately 0.1 dBA CNEL based on the following equation:

$$Change\ in\ . \qquad 10 * \log \frac{\qquad}{\qquad}$$

Project daily trips would not result in a perceptible noise increase along any roadway segment in the project vicinity and therefore, would be less than significant. Therefore, the proposed project would not create impacts related to traffic noise more severe than impacts identified in the GP EIR.

Stationary Noise Impacts

Stationary and area sources include parking lot activities, landscape and building maintenance activities, stationary mechanical equipment (e.g., pumps, generators, heating, ventilation, and air conditioning [HVAC] units), garbage collection activities, commercial and industrial activities, and other stationary and area sources such as people's voices, amplified music, and public address systems.

As discussed in the GP EIR, adoption of the General Plan would include policies that require project-level noise studies to be conducted for projects prone to high noise exposure. The noise studies would evaluate noise standard compliance of the project as well as provide mitigation measures to reduce noise exposure and meet City noise goals, policies, and standards. Based on the type of development that would occur with implementation of the proposed General Plan (e.g., mostly residential and commercial), it is anticipated that stationary sources would be generally minor (e.g., HVAC units, loading docks, yard maintenance equipment) and would be able to meet adopted noise standards and policies with implementation of feasible mitigation, as recommended by project-level studies. Therefore, the GP EIR determined that additional stationary sources that result from implementation of the General Plan would comply with all City noise standards, and future or existing sensitive receptors would not be exposed to excessive noise levels from these types of sources.

Implementation of the proposed project would generate minimal onsite stationary noise sources, primarily from HVAC mechanical equipment, occasional truck delivery loading/unloading activities, and typical motor vehicle/parking area activities. Of the on-site stationary noise sources during operation of the project, noise associated with motor vehicle/parking area activities would generate the highest maximum noise levels as the proposed parking areas are located adjacent to the surrounding sensitive receptors. Typical parking activities, such as people conversing or doors slamming, would generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 feet.

As identified above, land uses near Parcel Group 9 include multifamily housing, a church and commercial uses, including hotels, auto sale dealerships, a discount mattress store, and a used appliance store. The closest sensitive receptors include the multifamily housing located adjacent to the northern and eastern borders of the project site. This analysis assumes that the closest existing sensitive receptors would be located approximately 20 feet from proposed parking spaces. Adjusted for distance to the nearest off-site sensitive receptors, the off-site residences would be exposed to a noise level of 68 dBA to 78 dBA L_{max} generated by parking lot activities. However, peak noise levels from parking activities would be intermittent and when averaged over 1 hour, these sources would not exceed the City's noise level standard for residential land uses. Additionally, when averaged over the 24-hour period, noise would not cause an increase in noise levels of more than 3 dBA. Therefore it is not expected that the proposed project would substantially increase noise levels over existing conditions and impacts would be less than significant.

The proposed project could also generate noise associated with landscaping and garbage collection activities; however, these noise levels would be required to comply with the Municipal Code. Therefore, the project would not expose persons to noise levels in excess of noise standards and noise impacts would be less than significant. Therefore, the proposed project would not create impacts related to stationary noise sources more severe than impacts identified in the GP EIR.

Land Use Compatibility

The City sets forth normally acceptable noise level standards for exterior noise and land use compatibility and interior noise exposure of new development. The normally acceptable exterior noise level for hotel land uses is up to 65 dBA L_{dn}. The normally acceptable interior noise level for hotel land uses is 45 dBA L_{dn}. The noise environment at Parcel Group 9 is dominated by vehicle traffic on Foothill Boulevard. The traffic noise modeling presented in Table 5 indicates that traffic noise levels would be approximately 73 dBA L_{dn} at 50 feet from Foothill Boulevard. The proposed hotel is located approximately 100 feet from Foothill Boulevard; therefore, based on distance attenuation, the proposed project would be subject to traffic noise levels of approximately 67 dBA L_{dn}. Based on the City's noise compatibility standards, this noise level is above the normally acceptable level for hotel land uses. Therefore, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Therefore, the land use may be permitted only after detailed analysis of the noise reduction features proposed to be incorporated in the building design.

Based on the USEPA's Protective Noise Levels,[39] with a combination of walls, doors, and windows, standard construction for Northern California buildings (STC-24 to STC-28) would provide more than 25 dBA in exterior-to-interior noise reduction with windows closed and 15 dBA or more with windows open. With windows open, the hotel would not meet the City's normally acceptable interior noise standard of 45 dBA L_{dn} (i.e., 67.0 dBA – 15 dBA = 52.0 dBA). Therefore, an alternate form of ventilation, such as an air-conditioning system, would be required to ensure that windows can remain closed for a prolonged period of time. A ventilation system would reduce noise levels for guests with windows closed and would meet the City's normally acceptable interior noise level criterion of 45 dBA (i.e., 67.0 dBA – 25 dBA = 42.0 dBA). Therefore, the City should verify that the hotel includes fresh air ventilation. Implementation of the HVAC system would allow windows to remain closed in order to reduce interior noise levels by 25 dBA, resulting in interior noise levels of 42.0 dBA L_{dn}, which would meet the City's interior noise standard of 45 dBA L_{dn}. The following Standard Condition of Approval would be implemented to ensure that the proposed project would comply with the City's noise and land use compatibility standards and reduce interior noise impacts to a less-than-significant level.

- In order for windows and doors to remain closed, mechanical ventilation such as air conditioning shall be provided.

[39] U.S. Environmental Protection Agency, 1978. *Protective Noise Levels, Condensed Version of EPA Levels Document*. November.

- All windows and glass doors shall be rated STC-24 or higher such that the noise reduction provided will satisfy the interior noise standard of 45 dBA L_{dn}.

As identified above, noise levels on the project site would be up to 67 dBA L_{dn}. Based on the City's noise and land use compatibility standards, this noise level is above the normally acceptable level for hotel land uses. According to the City's guidelines, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. The existing on-site noise level would meet the City's exterior noise level standards if noise reduction requirements and noise insulation features are included in the design to meet the interior noise standard. As discussed above, interior noise levels would meet the City's standards with implementation of the Standard Condition of Approval outlined above. Therefore, the proposed project would not create impacts related to noise and land use compatibility more severe than impacts identified in the GP EIR.

Aircraft Noise Source Impacts

The Hayward Executive Airport, located in the northwestern portion of the City, also generates noise from flight operations. However, the parcel group is located outside of the Hayward Executive Airport influence area.[40] Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels due to the proximity of a public or public use airport. This impact would be less than significant. Therefore, the proposed project would not create impacts related to aircraft noise more severe than impacts identified in the GP EIR.

Applicable Mitigation

Mitigation 15-1. The proposed General Plan includes Goal HAZ-8; Policies HAZ-8.17, HAZ-8.20, HAZ-8.21, and HAZ-8.24; and Implementation Program HAZ 7, which establish the overall goal and intentions of the City with regards to construction-related noise. Policy HAZ-8.17 refers to a community noise control ordinance for the purposes of regulating community noise levels. The City has adopted Section 4-1.03.4 of the Municipal Code (Construction and Alteration of Structures; Landscaping Activities), which states that individual devices/pieces of construction equipment are not to exceed 83 dB at a distance of 25 feet from the source and 86 dB at any point of the property plane Monday through Saturday from 7:00 AM to 7:00 PM and Sundays from 10:00 AM to 6:00 PM, "unless otherwise provided pursuant to a duly-issued permit or a condition of approval." Thus, while the code establishes specific standards to reduce construction noise from typical construction activities, it may not apply to all development projects requiring discretionary approval. However, Policy HAZ-8.24 establishes the City's intent to develop specific construction noise standards, and Implementation Program HAZ-7 would result in the preparation and adoption of a Construction Noise Control Ordinance that would apply to all construction projects, including discretionary projects.

Policy HAZ-8.20 establishes that a site-specific noise study may be required by the City for discretionary projects requiring land use entitlements. In addition, Policy HAZ-8.21 establishes limits

[40] Alameda County Community Development Agency, 2012, op. cit.

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

Adoption of these proposed General Plan policies and implementation program would ensure that exposure of sensitive receptors located near construction activities to excessive noise levels would be avoided or reduced to a ***less-than significant level.***

Mitigation 15-2. The implementation of the proposed policies and standards included in Tables 15.5 and 15.6 above would require all new development to comply with the City's noise standards, noise mitigation procedures, and sensitive land use siting policies. The proposed policies would require new projects to evaluate noise exposure and provide mitigation measures, if applicable, to reduce noise exposure at sensitive land uses and meet noise standards for the specific project type. Therefore, conducting project-level noise studies to comply with adopted noise standards would ensure that individuals are not exposed to excessive noise levels.

Although adoption of the proposed policies would ensure that new development would comply with adopted noise standards and, therefore, would not expose new receptors to excessive noise levels, the proposed General Plan would still result in increases in traffic-related noise (i.e., increases of 3 or more dB and up to 15 dB in some areas of the City). As a result, project-generated increases in noise would result in a substantial permanent increase in community noise levels that could adversely affect existing receptors.

Much of the City is already built out, and anticipated growth under the proposed General Plan is expected to occur as infill, primarily in PDAs located near transit stations, in the City's downtown, and along major corridors. The ability of the City to reduce adverse effects of increased traffic noise on existing receptors by either constructing sound barriers or walls, or requiring new development to construct these sound walls, is constrained by a number of factors. First, many existing homes and other sensitive uses front on major traffic corridors from which the increased traffic noise is generated, and construction of new sound walls would be infeasible or incompatible with these developed uses. Second, the proposed General Plan contains Policy LU-4.10 (New Sound Walls and Fences), which discourages the construction of new sound walls and fences along corridors, and encourages new developments to front corridors whenever feasible. There are no additional, feasible measures or policies that would reduce this impact. Therefore, this impact would remain ***significant and unavoidable.***

Applicable Policies

General Plan Policies

- *Policy HAZ-8.1: Locating Noise Sensitive Uses. The City shall strive to locate noise sensitive uses, (e.g., residences, schools, hospitals, libraries, religious institutions, and convalescent homes) away from major sources of noise.*

- *Policy HAZ-8.2: Noise Study and Mitigation. The City shall require development projects in areas where they may be exposed to major noise sources (e.g., roadways, rail lines, and aircraft or*

other non-transportation noise sources) to conduct a project level environmental noise analysis. The noise analysis shall determine noise exposure and noise standard compatibility with respect to the noise standards identified in Table HAZ-1 and shall incorporate noise mitigation when located in noise environments that are not compatible with the proposed uses of the project. The City shall use Table HAZ-1 (Exterior Noise Standards for Various Land Uses) and Figure HAZ-1 (Future Noise Contour Maps) to determine potential noise exposure impacts, noise compatibility thresholds, and the need for mitigation. The City shall determine mitigation measures based on project-specific noise studies, and may include sound barriers, building setbacks, the use of closed windows and the installation of heating and air conditioning ventilation systems, and the installation of noise attenuating windows and wall/ceiling insulation.

- *Policy 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 interior noise level for all new residential units (single-family, duplex, mobile home, multi-family, and mixed use units) shall be an L_{dn} of 45 dB with windows closed.*
    - *For project locations that are primarily exposed to aircraft, train, and BART noise, the maximum instantaneous noise level in bedrooms shall not exceed 50dB(A) at night (10:00 p.m. to 7:00 a.m.), and the maximum instantaneous noise level in all interior rooms shall not exceed 55dB(A) during the day (7:00 a.m. to 10:00 p.m.) with windows closed.*
    - *The maximum acceptable exterior noise level for the primary open space area of a detached single-family home, duplex or mobile home, which is typically the backyard or a fenced side yard, shall be an L_{dn} of 60 dB. This standard shall be measured at the approximate center of the primary open space area. This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.*
    - *The maximum acceptable exterior noise level for the primary open space area of townhomes and multi-family apartments or condominiums (private rear yards for townhomes; and common courtyards, roof gardens, or gathering spaces for multi-family projects) shall be an L_{dn} of 65 dB. This standard shall be measured at the approximate center of the primary open space area. This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.*
    - *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.*

- *Policy HAZ-8.8: Park Noise. The City shall coordinate with the Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD) to establish and enforce hours of operation for park and recreational facilities near residential homes.*

- *Policy HAZ-8.17: Community Noise Control Ordinance. The City shall maintain, implement, and enforce a community noise control ordinance to regulate noise levels from public and private properties, vehicles, construction sites, and landscaping activities.*

- *Policy HAZ-8.20: Construction Noise Study. The City may require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.*

- *Policy HAZ-8.21: Construction and Maintenance Noise Limits. The City shall limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00 a.m. to 7:00 p.m. Monday through Saturday and 10:00 a.m. to 6:00 p.m. on Sundays and holidays).*

- *Policy HAZ-8.22: Vibration Impact Assessment. The City shall require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.*

- *Policy HAZ-8.24: Construction Noise Control Ordinance. The City shall develop noise control standards to regulate noise levels generated from temporary construction and landscaping activities.*

- *Implementation Program HAZ 7: Construction Noise Control Ordinance. The City shall prepare and adopt a Construction Noise Control Ordinance to regulate the noise levels generated from temporary construction and landscaping activities. The ordinance shall include decibel level thresholds that should not be exceeded for construction equipment as well as establish appropriate hours and reduction measures for construction and landscaping activities to minimize impacts on nearby sensitive receptors.*

Conclusion

The GP EIR adequately evaluated the potential noise impacts of the proposed project and, with implementation of Standard Conditions of Approval, the proposed project would not result in significant noise impacts and there would be no new or more severe impacts related to noise than those analyzed in the GP EIR.

14. POPULATION AND HOUSING

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

Discussion

Population Growth

The proposed project includes the construction of a new hotel on the project site. The proposed project does not include housing and is located in a developed urban area. The proposed hotel would generate employees. While the project would generate the need for a small number of employees, this growth is consistent with and within the scope of the planned employment growth assumed in the City's General Plan. The project site is designated as Commercial/High Density Residential (up to 34.8 dwelling units per net acre), which is intended to provide for townhomes, live-work units, multi-story apartment and condominium buildings, commercial buildings, shopping centers, and mixed-use buildings that contain commercial uses on the ground floor and residential units or office space on upper floors. Because it is anticipated that uses within the Commercial/High Density Residential designation would provide employment, the proposed project would not induce substantial unplanned population growth in the area, and this impact would be less than significant. Therefore, the proposed project would not result in new or more significant population growth than was analyzed and described in the GP EIR.

Displacement of Existing People or Housing

As outlined in the project description, an apartment building is located at the corner of Oak Street and Apple Avenue. The apartment building is located adjacent to the project within unincorporated Castro Valley. The apartment building would be demolished as part of a separate project, prior to commencement of the proposed hotel development.

The proposed project is being constructed solely within the City of Hayward's jurisdiction on land that is currently vacant. Therefore, the proposed project would not displace substantial numbers of existing housing or people, such that replacement housing would need to be constructed elsewhere. The proposed project would not result in new or more significant housing impacts than were analyzed and described in the GP EIR.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to population and housing were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy LU-1.2 Urban Limit Lines. The City shall maintain its established Urban Limit Lines to protect the Hayward shoreline and hillsides as natural open space and recreational resources.*

- *Policy LU-1.3 Growth and Infill Development. The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.*

Conclusion

The GP EIR adequately evaluated the potential population and housing impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

15. PUBLIC SERVICES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☐	☒

Discussion

Fire Protection

The Hayward Fire Department provides fire protection, paramedic advanced life support/emergency medical, and emergency services to all areas within the City limits, and to the Fairview Fire Protection District on a contract basis. The Hayward Fire Department (Fire Department) operates nine stations, seven within the City and two within the Fairview area. Parcel Group 9 is partially located within the response area of Fire Station 1.

The Alameda County Fire Department (ACFD) provides fire and paramedic services to Castro Valley, except to the area that is within the Fairview Fire Protection District.[41] ACFD operates four stations in Castro Valley. ACFD Station 23, located at 19745 Meekland Avenue, responds to portions of unincorporated areas of Hayward, including Parcel Group 9.

Development of the new hotel would increase the daytime and nighttime population of the project site and incrementally increase the demand for emergency fire services and emergency medical services. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. In addition, the Fire Department would also review the site plans to ensure that adequate emergency access is provided prior to issuance of a building permit.

The Fire Department would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would also not be required. The proposed project would not result in a significant impact on the physical environment due to the incremental increase in demand for fire protection and life

41 Alameda County. 2019. *Fire Stations/Facilities.* Available online at: https://www.acgov.org/fire/about/station23.htm (last accessed January 28, 2020).

safety services, and the potential increase in demand for service is not expected to adversely affect existing response times to the site or within the City.

General Plan policies ensure that the City reviews Police Department and Fire Department staffing levels to ensure the availability of adequate police and fire manpower and service facilities. Additionally, General Plan policies would prevent future growth that exceeds the community capability to provide service, including fire and police services. The implementation of these policies would ensure that adequate capital improvements are made to accommodate the increased demand for police and fire protection services. Therefore, because development associated with the proposed project is within the amount analyzed by the GP EIR, potential impacts associated with an increase in demand for police and fire protection services are considered less than significant and need no further mitigation.

Police Protection

The Hayward Police Department (Police Department) provides police protection services within the City. The Hayward Police Department headquarters are located at 300 West Winton Avenue, and the two district offices are located at 1190 B Street (Northern District Office) and at 28200 Runs Road (Southern District Office).[42] Parcel Group 9 is located closer to the Northern District Office. The City is divided into nine geographic areas called Beats; patrol officers are deployed to the beats during each shift. Parcel Group 9 is partially located within Beat B.[43]

The Alameda County Sheriff's Department provides patrol and investigative services to the unincorporated areas of Alameda County, including Castro Valley. The County Sheriff's Department employs 1,500 staff, including about 1,000 sworn officers.[44] The County Sheriff's Department is located at 24405 Amador Street in the City. The portion of Parcel Group 9 within Castro Valley would be within the response area of the County Sheriff's Department.

Development of the proposed project would increase the daytime and nighttime population on the project site and incrementally increase demand for emergency police services to the project site. However, the Police Department would continue to provide service to the project site and would not require additional officers to serve the project site. The construction of new or expanded police facilities would not be required.

As described above, General Plan policies ensure that the City reviews Police Department and Fire Department staffing levels to ensure the availability of adequate police and fire manpower and service facilities. Additionally, General Plan policies would prevent future growth that exceeds the community capability to provide service, including fire and police services. The implementation of these policies would ensure that adequate capital improvements are made to accommodate the increased demand for police and fire protection services. Therefore, because development associated with the proposed project is within the amount analyzed by the GP EIR, potential impacts

42 Hayward, City of. 2014. op. cit.

43 Hayward Police Department. 2019. *Beat Map.* Available online at: https://www.hayward-ca.gov/police-department/about/beat-map (last accessed January 28, 2020).

44 Hayward, City of. 2014. op. cit.

associated with an increase in demand for police and fire protection services are considered less than significant.

Schools

The Hayward Unified School District (HUSD) provides educational services to the City and operates 22 elementary, five middle, and four high schools within their service area. In addition, Chabot College and CSU East Bay are located within the City. The proposed project does not include any residential uses, and therefore would not directly affect student population. A fraction of the employees of the proposed hotel may move to Hayward solely for employment, but this growth would only result in an incremental increase in student population, and would be spread amongst the whole school district, depending upon place of residence. Therefore, the proposed project would not result in a substantial increase in the number of school-age children in the area.

Further, because it is anticipated that uses within the Commercial/High Density Residential designation would provide employment, the proposed project would not induce substantial unplanned population growth in the area. Therefore, because the level of development and projected population growth associated with the proposed project is consistent with that analyzed in the GP EIR, implementation of the proposed project would not result in demand for school services beyond existing or planned capacity of the Hayward Unified School District.

Parks

The proposed project would include the development of a new hotel on an existing undeveloped site. The proposed project does not include any residential uses and would not generate a direct need for additional park space. As noted above, a fraction of employees of the proposed hotel may move to Hayward. However, this growth would only result in an incremental increase in demand for parks, and would be spread throughout the City, depending on place of residence. Further, because it is anticipated that uses within the Commercial/High Density Residential designation would provide employment, the proposed project would not induce substantial unplanned population growth in the area. Therefore, because the proposed project would not result in an increase in population above what was already analyzed in the GP EIR, potential impacts associated with the provision of parks are considered less than significant.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to public services were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy LU-1.3 Growth and Infill Development. The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.*

- *Policy LU-3.1 Complete Neighborhoods. The City shall promote efforts to make neighborhoods more complete by encouraging the development of a mix of complementary uses and amenities that meet the daily needs of residents. Such uses and amenities may include parks, community centers, religious institutions, daycare centers, libraries, schools, community gardens, and neighborhood commercial and mixed-use developments.*

- *Policy LU-3.2 Centralized Amenities. The City shall encourage the development of neighborhood amenities and complementary uses in central locations of the neighborhood whenever feasible.*

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

- *Policy HAZ-5.1 Wildland/Urban Interface Guidelines. The City shall maintain and implement Wildland/Urban Interface Guidelines for new development within fire hazard areas.*

- *Policy HAZ-5.2 Fire Prevention Codes. The City shall enforce fire prevention codes that require property owners to reduce wildfire hazards on their property.*

- *Policy HAZ-5.3 Defensible Space and Fuel Reduction. The City shall promote defensible space concepts to encourage property owners to remove overgrown vegetation and to reduce fuel loads on hillside properties, especially near structures and homes.*

- *Policy CS-1.9 Crime Prevention Through Environmental Design. The City shall continue to include the Police Department in the review of development projects to promote the implementation of Crime Prevention Through Environmental Design (CPTED) principles.*

- *Policy CS-1.10 Lighting. The City shall encourage property owners to use appropriate levels of exterior light to discourage criminal activity, enhance natural surveillance opportunities, and reduce fear.*

- *Policy CS-1.11 Technology. The City shall encourage and support the use of technology (such as private surveillance cameras, deployed public camera systems, theft-prevention devices, emergency call boxes, alarms, and motion-sensor lighting) to discourage crime.*

- *Policy CS-2.2 Police Strategic Plan. The City shall maintain and implement a Police Department Strategic Plan to:*

- *Set near-term goals for the Department in response to a dynamic and changing environment.*
- *Align police services with the community's desires and expectations.*
- *Accurately assess the operational needs of the Police Department to best serve the Hayward community.*

- *Policy CS-2.3 Police Staffing. The City shall maintain optimum staffing levels for both sworn police officers and civilian support staff in order to provide quality police services to the community.*
- *Policy CS-2.4 Response Time for Priority 1 Calls. The City shall strive to arrive at the scene of Priority 1 Police Calls within 5 minutes of dispatch, 90 percent of the time.*
- *Policy CS-2.5 Police Equipment and Facilities. The City shall ensure that Police equipment and facilities are provided and maintained to meet modern standards of safety, dependability, and efficiency.*
- *Policy CS-2.6 Police Facilities Master Plan. The City shall maintain and implement a Police Department Facilities Master Plan that serves as the long-term plan for providing the Police Department with state-of-the-art equipment and facilities, including police headquarters, polices substations, training facilities, detention facilities, shooting ranges, and emergency operations centers.*
- *Policy CS-2.13 Community Facilities Districts. The City shall consider the establishment of community facilities districts to ensure the new development does not constrain the City's ability to provide adequate police services to the Hayward community.*
- *Policy CS-2.14 Development Fees. The City shall consider the establishment of development impact fees to help fund Police Department operations.*
- *Policy CS-3.2 Fire and Building Codes. The City shall adopt and enforce fire and building codes.*
- *Policy CS-3.3 Development Review. The City shall continue to include the Fire Department in in the review of development proposals to ensure projects adequately address fire access and building standards.*
- *Policy CS-3.4 Adequate Water Supply for Fire Suppression. The City shall require new development projects to have adequate water supplies to meet the fire-suppression needs of the project without compromising existing fire suppression services to existing uses.*
- *Policy CS-3.5 Water Supply Infrastructure. The City shall require development to construct and install fire suppression infrastructure and equipment needed to serve the project.*

- *Policy CS-3.7 Removal of Fire Hazards. The City shall maintain code enforcement programs that require private and public property owners to minimize fire risks by:*
    - *Maintaining buildings and properties to prevent blighted conditions,*
    - *Removing excessive or overgrown vegetation (e.g., trees, shrubs, weeds), and*
    - *Removing litter, rubbish, and illegally dumped items from properties*.
- *Policy CS-4.1 Fire Strategic Plan. The City shall maintain and implement a Fire Department Strategic Plan to:*
    - *Set near-term goals for the Department in response to a dynamic and changing environment.*
    - *Align fire and emergency medical services with the community's desires and expectations.*
    - *Accurately assess the operational needs of the Fire Department to best serve the Hayward community.*
- *Policy CS-4.2 Fire Department Staffing. The City shall maintain optimum staffing levels for sworn, civilian, and support staff, in order to provide quality fire protection and emergency medical services to the community.*
- *Policy CS-4.3 Fire Department Response Times. The City shall maintain the ability to respond to fire and emergency medical calls based on the following standards:*
    - *The first unit shall arrive on scene within five minutes of dispatch, 90 percent of the time.*
    - *All remaining units shall arrive on scene within 8 minutes of dispatch.*
- *Policy CS-4.4 Timing of Services. The City shall ensure that growth and development does not outpace the expansion of Hayward Fire Department staffing and the development of strategically located and fully equipped fire stations.*
- *Policy CS-4.7 Fire Facilities Master Plan. The City shall develop, maintain, and implement Fire Department Facilities Master Plan that serves as the long-term for providing the Fire Department with state-of-the-art equipment and facilities.*
- *Policy CS-4.11 Community Facilities Districts. The City shall consider the establishment of community facilities districts to ensure the new development does not constrain the City's ability to provide adequate fire services to the Hayward community.*
- *Policy CS-4.12 Development Fees. The City shall consider the establishment of development impact fees to help fund Fire Department operations.*

- *Policy HQL-5.3 Eyes on the Street. The City shall promote urban design principles that support active use of public spaces in neighborhoods, commercial areas, and employment centers at all times of day. Active use of public spaces provides "eyes-on-the-street" to enhance public safety in these areas.*

- *Policy HQL-5.4 Safety Measures. The City shall improve safety and the perception of safety by requiring adequate lighting, street visibility, and defensible spaces within new development projects.*

- *Policy HQL-10.1 Parks and Recreation Master Plan. The City shall with HARD to maintain and implement the Parks and Recreation Master Plan.*

- *Policy HQL-10.2 Parks Standard. The City shall seek to increase the number of parks throughout the City by working with HARD to achieve and maintain the following park standards per 1,000 Hayward residents:*

    - *Two acres of local parks,*

    - *Two acres of school parks,*

    - *Three acres of regional parks,*

    - *One mile of trails and linear parks, and*

    - *Five acres of parks district-wide.*

- *Policy HQL-10.3 Miniparks and Tot Lots. The City shall encourage the creation and maintenance of neighborhood "miniparks" and tot lots through partnerships with private, non-profit, and business interests in areas where it is not possible to meet HARD standards related to park size.*

- *Policy HQL-10.12 Maximum Park Dedications. The City shall maintain park dedication requirements and in lieu fees for new residential development at the maximum allowed under State law.*

- *Policy HQL-11.1 Recreational Corridors. The City shall establish and maintain an integrated recreational corridor system that connects regional trails (e.g., Bay Trail, the San Francisco Bay Area Water Trail, San Lorenzo Creek Trail, Ridge Trail, the Juan Bautista DeAnza National Historic Trail), Baylands (i.e., Hayward Regional Shoreline), local creeks and open space corridors, hillside areas, and EBRPD and HARD parks.*

- *Policy HQL-11.2 Greenway Corridors. The City shall coordinate with HARD and the EBRPD to consider additional greenway linkages along fault line corridors and in other areas (e.g., rail line, creek, and utility corridors) to encourage walking and cycling and to provide improved access to activity centers.*

- *Policy HQL-11.3 Creekside Paths and Trails. The City shall seek to accentuate, "daylight", and "green" creeks, culverts, and underground drainage infrastructure through infrastructure improvements and the development review process to establish or extend pathways and trails.*

- *Policy EDL-3.11 School Impact Fees. The City shall coordinate with school districts to ensure that the impacts of new development are identified and mitigated through the payment of school impact fees in accordance with State law.*

- *Policy EDL-6.1 Standard for Library Space. The City shall strive to expand library space within the community to meet t maintain a minimum standard of 0.75 square feet of space per 1,000 residents (excluding school and college libraries).*

- *Policy EDL-6.8 Library Impact Fee. The City shall consider the establishment of a library impact fee for new residential construction.*

Conclusion

The GP EIR adequately evaluated the potential public services impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

16. RECREATION

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion

As discussed in Section 14 of this Environmental Checklist, Public Services, the proposed project would include the development of a new hotel, the primary use of which would be for temporary lodging rather than permanent residential uses. As such, the proposed project would not generate population growth that would result in an increase in the use existing neighborhood and regional parks or other recreational facilities. In addition, the proposed project would include indoor recreational facilities for use by hotel guests. Therefore, the proposed project would not result in greater impacts to existing neighborhood and regional park facilities than those identified in the GP EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The GP EIR adequately evaluated the potential recreation impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

17. TRANSPORTATION

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Discussion

This section summarizes the findings of the Transportation Impact Analysis (TIA)[45] completed for the proposed project, as well as the analysis included in the GP EIR. The TIA report is available as part of the project file. As discussed in more detail below, no new or substantially more severe impacts related to traffic or circulation impacts were identified for the proposed project as compared to the 2040 General Plan.

Significance Criteria

The City of Hayward and Alameda County have not yet adopted VMT impact criteria per S.B. 743 legislation, which has set a July 1, 2020 date for adoption. Therefore, this analysis uses level of service according to each jurisdiction's criteria.

Policy M-4.3 in the City's 2040 General Plan requires intersections to maintain a peak-hour level of service (LOS) of E or better for 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 (e.g., right-of-way acquisition, degradation of the pedestrian environment). In addition, the proposed project would have a significant impact on traffic and circulation of an intersection already operating at LOS F under an Existing or No Project scenario if the addition of project traffic results in an increase of 5.0 seconds or more in the intersections average control delay.

Two study intersections are located in unincorporated Alameda County. LOS D is the maximum acceptable level of service for intersections in unincorporated Alameda County. The proposed project would have a significant impact if it would degrade the AM or PM peak hour from an acceptable LOS D or better under the no project scenario to an unacceptable LOS E or F under the

[45] Kittelson & Associates, Inc., 2019. *Transportation Impact Analysis, Route 238 Property Development Project (Parcel Group 5 and Parcel Group 6)*, Hayward, California. June 18.

Plus Project scenario. In addition, the proposed project would have a significant impact on an intersection operating at LOS E or F under an Existing or No Project scenario if the addition of project traffic results in an increase of 5.0 seconds or more in the intersections average control delay.

At unsignalized intersections, the proposed project's impact is based on LOS and delay, and whether any of the following are met: (1) traffic signal warrant; (2) pedestrian signal warrant; or (3) all-way stop warrant. Note that solely triggering a warrant does not constitute a significant impact, but the relevant jurisdiction at an intersection will, at its discretion, determine whether or not a signal will be installed.

GP EIR

The GP EIR analyzed transportation and circulation conditions in the Plan Area under four different scenarios, which represent two time periods (existing conditions and Year 2035) using the Alameda County Transportation Commission (CTC) Countywide Model with Association of Bay Area Governments (ABAG) Projections 2009 to forecast regional growth totals. In addition, the traffic model was adjusted to include network modifications as part of the 2035 baseline conditions that were not previously included in the Alameda CTC countywide model assumptions.

The impact analysis included AM and PM Peak hour traffic conditions at 42 key intersections, 13 freeway segments and 32 roadway segments. The following scenarios were analyzed for the intersection analysis: (1) Existing Conditions; (2) 2035 No Project Conditions (includes anticipated future cumulative growth under the previous City of Hayward GP, as well as future planned local and regional transportation improvements); and (3) 2035 Project Conditions (includes cumulative growth under the 2040 GP, as well as future planned local and regional transportation improvements).

As noted in the GP EIR, the development program represents buildout of the adopted GP through 2035. The land use data for the 2040 GP was categorized into total households, single-family dwelling units, multi-family dwelling units, total employment, and employment by sector (retail, service, manufacturing, wholesale, and other) by traffic analysis zone (TAZ) for input to the model. A memorandum detailing the assumed development levels at all the sites, comparisons to land use densities assumed as part of the GP EIR, and changes to TAZs used in the City's traffic model is provided in Appendix H of the TIA.

The GP EIR identified two significant transportation and circulation impacts associated with implementation of the General Plan:

- **Impact 18-1: Project Intersection Impacts.** Under the 2035 Project condition, implementation of the GP would result in traffic volumes that exceed the City standard for intersection performance. According to City guidelines, this change due to the proposed General Plan would potentially constitute a considerable project contribution to the significant cumulative impact.

- **Impact 18-2: Cumulative Intersection Impacts.** Future growth in Hayward and the region would result in substandard intersection LOS under 2035 conditions with or without the project. These changes constitute a significant cumulative impact.

Mitigation Measures 18-1 and 18-2 identified intersection improvements to reduce traffic impacts; however, even with implementation of mitigation, impacts at some intersections remained significant and unavoidable.

Parcel Group 9

As outlined in Attachment A, Project Description, the proposed project would consist of up to a 150-room hotel. Inbound access would be provided via Apple Avenue (off of Mission Boulevard); inbound and outbound access would be provided via Oak Street (off of Grove Way). Additional project elements would include street improvements such as curbs, gutters, sidewalks, utilities, and lighting.

Automobile trip generation for the proposed project was derived from average rates, regression equations, and adjustments contained in the Institute of Transportation Engineer's (ITE) Trip Generation Manual 10th Edition. As shown in Table 7, the proposed project would generate about 70 vehicle trips during the AM peak hour and 86 vehicle trips during the PM peak hour.

Table 7: Project Vehicle Trip Generation

Trip Generation Rates								
Land Use	**Rate**	**Daily**	**Weekday AM Peak Hour**			**Weekday PM Peak Hour**		
			In	***Out***	***Total***	***In***	***Out***	***Total***
Hotel (ITE Code 310)	per Room	8.36	59%	41%	T=0.50(X)-5.34	51%	49%	T=0.75(X)-26.02
Trip Generation Estimates								
Land Use	**Size**	**Daily**	**Weekday AM Peak Hour**			**Weekday PM Peak Hour**		
			In	***Out***	***Total***	***In***	***Out***	***Total***
Hotel (ITE Code 310)	150 Room	1,254	41	29	70	44	42	86

Source: Kittelson & Associates (2019).
DU = Dwelling Units

Automobile Level of Service. The results of the five intersections analyzed for the AM and PM peak hour are presented in Table 8. The table also compares the change in delay between the Existing and Existing Plus Project conditions.

As shown in Table 8, Intersection 3 (Mission Boulevard and Grove Way) operates unacceptably at LOS E during the PM peak hour under Existing Conditions and continues to operate at LOS E under Existing Plus Project Conditions. However, the increase in delay is expected to be less than five seconds. Therefore, the impact at this intersection would be less than significant.

All other study intersections continue to operate acceptably during both the AM and PM peak hours with the addition of project traffic. Therefore, the proposed project would not result in significant impacts at any of the study intersections under Existing Plus Project conditions.

Table 8: LOS Analysis - Existing and Existing Plus Project

#	Intersection	Jurisdiction	Control[1]	Peak Hour	Existing		Existing Plus Project		Delay Delta[2]
					Delay[2]	LOS	Delay[2]	LOS	
1	Gary Drive & Grove Way	County	AWSC	AM	14.2	B	14.2	B	0.0
				PM	9.5	A	9.6	A	0.1
2	Foothill Blvd. & Grove Way	Hayward	Signal	AM	31.9	C	33.4	C	1.5
				PM	38.6	D	40.9	D	2.3
3	Mission Blvd. & Grove Way	County	Signal	AM	30.2	C	30.4	C	0.2
				PM	**55.5**	**E**	**56.6**	**E**	1.1
4	Foothill Blvd. & City Center Dr. (N)/Hazel Ave.	Hayward	Signal	AM	30.7	C	30.8	C	0.1
				PM	34.4	C	34.5	C	0.1
5	Foothill Blvd. & City Center Dr. (S)/Maple Ct.	Hayward	Signal	AM	21.4	C	21.3	C	-0.1
				PM	30.2	C	30.2	C	0.0

Source: Kittelson & Associates, Inc. (2019).
Bold signifies unacceptable operations. Shading signifies a significant impact.
[1] AWSC = All-way stop control; TWSC = Two-way stop control
[2] Delay is measured in seconds per vehicle.

Cumulative Year 2035 Conditions. The potential impacts to the transportation system were evaluated for the Cumulative Year 2035 Condition using projected peak hour traffic volumes derived from the Hayward General Plan Update version of the Alameda CTC Countywide Model.[46] Given that some level of development at the project site was assumed for the General Plan buildout and the City model, the Cumulative 2035 Plus Project analysis assesses the difference in development under the proposed project as compared to General Plan land use densities. Therefore, the increase in traffic between Cumulative 2035 and Cumulative 2035 Plus Project scenarios has the potential to be less than the increases experienced under the Existing Plus Project scenario.

Table 9 presents the Cumulative 2035 and Cumulative 2035 Plus Project delays and LOS for the study intersections. The table also compares the change in delay between the two scenarios. The traffic generated by the proposed Projects is expected to result in significant impacts at several additional intersections under the Cumulative 2035 Plus Project condition than were identified in the 2014 GP EIR. Mitigation Measures 18-1 and 18-2 identified in the GP EIR will be updated to address these additional intersections, as described below.

As shown in Table 9:

- Intersection 1 (Gary Drive and Grove Way) would operate unacceptably at LOS E during the AM peak hour under Cumulative 2035 Conditions and continues to operate at LOS E under Cumulative Plus Project Conditions. However, the increase in delay is expected to be less than five seconds. Therefore, the impact at this intersection would be less than significant.

[46] Note that while the model version used for the TIA is the 2035 Citywide General Plan Model with ABAG Projections 2009, the Alameda CTC Countywide Model has been extended to 2040 and includes less conservative ABAG Plan Bay Area projections. However, to compare impacts to those identified in the GP EIR, it was determined, in coordination with City staff, that the GP Model should be used for this study.

- Intersection 3 (Mission Boulevard & Grove Way) would operate unacceptably at LOS F during both the AM and PM peak hours under Cumulative 2035 conditions and would continue to operate at LOS F under Cumulative Plus Project conditions. However, the increase in delay is expected to be less than five seconds. Therefore, the impact at this intersection would be less than significant.

- All other study intersections continue to operate acceptably during both the AM and PM peak hours under Cumulative 2035 Plus Project conditions.

Therefore, the proposed project would not result in significant impacts at any of the study intersections under Cumulative Plus Project conditions.

Table 9: LOS Analysis - Cumulative and Cumulative Plus Project

#	Intersection	Jurisdiction	Control[1]	Peak Hour	Cumulative		Cumulative Plus Project		Delay Delta[2]
					Delay[2]	LOS	Delay[2]	LOS	
1	Gary Drive & Grove Way	County	AWSC	AM	46.8	E	47.6	E	0.8
				PM	16.7	C	16.8	C	0.1
2	Foothill Blvd. & Grove Way	Hayward	Signal	AM	47.3	D	49.8	D	2.5
				PM	51.9	D	53.9	D	2.0
3	Mission Blvd. & Grove Way	County	Signal	AM	**175.8**	**F**	**176.3**	**F**	0.5
				PM	**290.6**	**F**	**291.7**	**F**	1.1
4	Foothill Blvd. & City Center Dr. (N)/Hazel Ave.	Hayward	Signal	AM	57.2	E	58.0	E	0.8
				PM	46.3	D	46.8	D	0.5
5	Foothill Blvd. & City Center Dr. (S)/Maple Ct.	Hayward	Signal	AM	29.6	C	29.6	C	0.0
				PM	32.3	C	32.4	C	0.1

Source: Kittelson & Associates, Inc. (2019).
Bold signifies unacceptable operations. Shading signifies a significant impact.
[1] AWSC = All-way stop control; TWSC = Two-way stop control
[2] Delay is measured in seconds per vehicle.

Transit, Bicycle and Pedestrian Facilities

The proposed project would include installation of street improvements, such as curbs, gutters, sidewalks, utilities, and lighting. At this time, the project site, including Apple Avenue along the southern edge of the project site), does not include any pedestrian amenities.

Inbound vehicular access would be provided via Apple Avenue (off Mission Boulevard), while both inbound and outbound access would be provided via Oak Street (off Grove Way). At both of these intersections, pedestrian crossing facilities are somewhat limited. Consistent with General Plan policies supporting alternative modes, the City would require implementation of treatments to improve pedestrian conditions in these locations, as part of the design review process and conditions of approval for the proposed project. Potential treatments could include: installation of a continental crosswalk and/or signage at the intersection of Oak Street & Grove Way, or installation of ADA curb ramps at the intersections of Oak Street & Grove Way and Foothill Boulevard & Apple Avenue.

The City of Hayward is currently preparing the Hayward Bicycle and Pedestrian Master Plan Update. The draft plan was released in September 2019 and is undergoing community input. At this time, planned bikeways are preliminary, however, current plans include proposed Class II (separated bikeways) bike lanes along Grove Way (which intersects Oak Street).

The proposed project would include direct vehicular access points and generate additional vehicle trips along this planed bikeway. Consistent with General Plan policies supporting alternative modes, the City would require implementation of treatments to improve bicyclist conditions at this location, as part of the design review process and conditions of approval for the proposed project. Potential treatments could include: (1) installation of driveway conflict paint at the intersection with Oak Street; and (2) installation signage at and approaching the intersection with Oak Street.

As noted in the GP EIR, buildout of the General Plan area is not anticipated to generate transit ridership that would exceed the available capacity of the transit system. In addition, the proposed project is not expected to result in any operational impacts at intersections used by local transit, such as AC Transit buses.

Therefore, implementation of the proposed project would not conflict with plans, programs and policies regarding bicycle, pedestrian, or transit facilities, or decrease the performance and safety of such facilities. Therefore, impacts to bicyclists, pedestrians, and transit service providers resulting from implementation of the proposed project would remain less than significant and the proposed project would not result in new or more severe impacts related to alternative forms of transportation beyond those identified in the GP EIR.

Air Traffic Patterns

The project site is not located in the vicinity of a private airstrip or within the Airport Influence Area of the Hayward Executive Airport, and therefore the project would not result in impacts related to air traffic patterns.

Design Features

As described in Attachment A, Project Description, inbound access would be provided via Apple Avenue (off of Mission Boulevard); inbound and outbound access would be provided via Oak Street (off of Grove Way). Pedestrian facilities are provided along Foothill Boulevard, including sidewalks, continental crosswalks, and ADA-compliant curb ramps. Sidewalk gaps exist on Grove Way east of Foothill Boulevard (north and south side) leading to the Oak Street access point. The Oak Street crosswalk at Grove Way is also fading. No sidewalks are provided along Oak Street or Apple Valley Avenue. As part of the proposed project, sidewalks would be provided along the project frontage, as well as Oak Street and Apple Avenue.

The proposed project would be required to comply with General Plan policies promoting a safe, multi-modal transportation system, and the City's Design Guidelines. Potential design issues would be addressed through the design review process of the proposed project. Therefore, the proposed project would have a less-than-significant impact related to design hazards.

Emergency Access

General Plan Policies M-1.1, M-1.2, M-1.3, M-1.7, M-3.8 and M-4.5 would require the management and development of the local roadway system to support the Land Use Element, which would mitigate impacts to the emergency access system. Specifically, General Plan Policy M-4.5 requires the City to develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies. Additionally, the City has implemented, and will continue to implement, traffic signal system upgrades that help to facilitate more efficient emergency vehicle access and give priority to emergency vehicles.

The design, construction, and maintenance of project access locations and on-site roads would be in compliance with the City's Municipal Code and would meet all emergency access standards. The Hayward Fire Department would also review the proposed site plan and would provide input on final design in relation to emergency access prior to issuance of a building permit. Additionally, as noted in Section 4.17.a, the proposed project would not result in a significant increase in the amount of traffic volume on the local roadway network. Therefore, the proposed project would not result in new or more severe impacts beyond those already analyzed in the GP EIR.

Consistency with Adopted Policies

The Circulation Element of the City's General Plan provides the policy framework for the regulation and development of transportation systems, balancing demands for moving people and goods through the City while promoting multi-modal transportation. The General Plan contains goals and specific recommendations for facilitating traffic circulation, maintaining an acceptable level of service at signalized intersections, traffic demand management programs, parking management, and improving transit service and facilities for non-motorized transportation.

Policy M-4.3 established that the lowest acceptable LOS at a signalized intersection is LOS E (delay per vehicle greater than 55 seconds but less than 80 seconds) 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. Additionally, Policy M-1.5 allows for flexible LOS standards as part of a multimodal system approach. Hayward does not have an LOS standard for unsignalized intersections. The proposed project would be required to abide by these and all other applicable goals and policies in the adopted General Plan.

Applicable Mitigation

As described in the GP EIR, impacts related to transportation at some intersections were determined to be significant and unavoidable, after application of feasible mitigation. Impacts at other intersections were determined to be less than significant with implementation of Mitigation Measures 18-1 and 18-2, identified in the GP EIR. As described above, the proposed project would not result in significant impacts at any of the study intersections with the addition of project traffic. Therefore, the mitigation measures identified in the GP EIR do not apply to the proposed project.

Applicable Policies

- *Policy M-1.1 Transportation System. The City shall provide a safe and efficient transportation system for the movement of people, goods, and services through and within Hayward.*

- *Policy M-1.2 Multimodal Choices. The City shall promote the development of an integrated, multi-modal transportation system that offers desirable choices among modes including pedestrian ways, public transportation, roadways, bikeways, rail and aviation.*

- *Policy M-1.3 Multimodal Connections. The City shall implement a multimodal system that connects residents to activity centers throughout the City, such as commercial centers and corridors, employment centers, transit stops/stations, the airport, schools, parks, recreation area, and other attractions.*

- *Policy M-1.4 Multimodal System Extensions. The City shall require all new development that proposes or is required to construct or extend streets to develop a transportation network that complements and contributes to the City's multimodal system, maximizes connections, and minimizes barriers to connectivity.*

- *Policy M-1.5 Flexible LOS Standard. The City shall consider flexible Level of Service (LOS) standards, as part of a multimodal system approach for projects that increase transit-ridership, biking, and walking in order to reduce air pollution, energy consumption, and greenhouse gas emissions.*

- *Policy M-1.6 Bicycling, Walking and Transit Amenities. The City shall encourage the development of facilities and services (e.g., secure term bicycle parking, street lights, street furniture and trees, transit stop benches and shelters, and street sweeping of bike lanes) that enable bicycling, walking, and transit use to become more widely used modes of transportation and recreation.*

- *Policy M-1.7 Eliminate Gaps. The City shall strive to create a more comprehensive multimodal transportation system by eliminating gaps in roadways, bikeways, and pedestrian networks, increasing transit access in underserved areas, and removing natural and man-made barriers to accessibility and connectivity.*

- *Policy M-3.1 Serving All Users. The City shall provide safe, comfortable, and convenient travel along and across streets to serve all users, including pedestrians, the disabled, bicyclists, and motorists, movers of commercial goods, and users, and operators of public transportation.*

- *Policy M-3.2 Non-Auto Needs. The City shall consider the needs of transit riders, pedestrians, people in wheelchairs, cyclists, and others in long-range planning and street design.*

- *Policy M-3.6 Context Sensitive. The City shall consider the land use and urban design context of adjacent properties in both residential and business districts as well as urban, suburban, and rural areas when designing complete streets.*

- *Policy M-3.8 Connections with New Development. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, pedestrian ways and transit facilities.*

- *Policy M-3.10 Motorists, Bicyclists, and Pedestrian Conflicts. The City shall develop safe and convenient bikeways and pedestrian crossings that reduce conflicts between pedestrians, bicyclists, and motor vehicles on streets, multi-use trails and sidewalks.*

- *Policy M-312 Americans with Disabilities Act Compliance. The City shall continue to implement the Americans with Disabilities Act when designing, constructing, or improving transportation facilities.*

- *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.*

- *Policy M-4.5 Emergency Access. The City shall develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.*

- *Policy M-5.1 Pedestrian Needs. The City shall consider pedestrian needs, including appropriate improvements to crosswalks, signal timing, signage, and curb ramps, in long-range planning and street design.*

- *Policy M-5.2 Pedestrian System. The City shall strive to create and maintain a continuous system of connected sidewalks, pedestrian paths, creekside walks, and utility greenways through the City that facilitates convenient and safe pedestrian travel, connects neighborhoods and centers, and is free of major impediments and obstacles.*

- *Policy M-5.7 Safe Sidewalks. The City shall develop safe and convenient pedestrian facilities that are universally accessible, adequately illuminated, and properly designed to reduce conflicts between motor vehicles and pedestrians.*

- *Policy M-6.1 Bikeway System. The City shall maintain and implement the Hayward Bicycle Master Plan.*

- *Policy M-6.5 Connections between New Development and Bikeways. The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, and do not interfere with existing and proposed bicycle facilities.*

- *Policy M-7.1 Transit System. The City shall support a connected transit system by improving connections between transit stops/stations and roadways, bikeways, and pedestrian facilities.*

- *Policy M-7.6 Safe System. The City shall work with AC Transit, BART, and Amtrak to maintain a safe, clean, comfortable, and rider-friendly waiting environment at all transit stops within the City.*

- *Policy M-7.9 Development Impacts on Transit. The City shall require developers of large projects to identify and address, as feasible, the potential impacts of their projects on AC Transit ridership and bus operations as part of the project review and approval process.*

- *Policy M-11.1 Good Movement. The City shall provide an efficient transportation system for the movement of goods and services through and within Hayward, while meeting the safety and mobility needs of all roadway users.*

Conclusion

The GP EIR adequately evaluated the transportation impacts of the proposed project. Therefore, there would be no new impacts related to traffic and circulation associated with the proposed project.

18. TRIBAL CULTURAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Discussion

As previously discussed in Section 5 of this Environmental Checklist, Cultural Resources, the GP EIR determined that impacts to cultural and historic resources would be reduced to less-than-significant levels with implementation of General Plan policies. This finding applies to tribal cultural resources. Therefore, the proposed project would not result in new or more severe impacts to tribal cultural resources than were identified in the GP EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

General Plan Policies

- *Policy NR-7.1 Paleontological Resource Protection. The City shall prohibit any new public or private development that damages or destroys a historically- or prehistorically-significant fossil, ruin, or monument or any object of antiquity.*

- *Policy NR-7.2 Paleontological Resource Mitigation. The City shall develop or ensure compliance with protocols that protect or mitigate impacts to paleontological resources, including requiring grading and construction projects to cease activity when a paleontological resource is discovered so it can be safely removed.*

Conclusion

The GP EIR adequately evaluated the potential tribal cultural resources impacts for the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

19. UTILITIES AND SERVICE SYSTEMS

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

Discussion

Construction of New or Expanded Utility Facilities

Wastewater collection at the project site is provided by the Oro Loma Sanitary District (District), which serves the communities of unincorporated Alameda County, including San Lorenzo, Ashland, Cherryland, Fairview, portions of Castro Valley, and designated areas of the Cities of Hayward and San Leandro.

Wastewater is collected and transported via underground sewer lines to the District's treatment plant, which is jointly owned by Oro Loma Sanitary District (75%) and Castro Valley Sanitary District (25%). The treatment plant has a permitted capacity of 20 million gallons per day, and treats an average dry weather flow of 12.4 million gallons per day. The District's wastewater collection system includes about 273 miles of sewer mains, and 13 sewage lift stations.

The proposed project would generate domestic wastewater, treated by the District. As described in Attachment A, A 6-inch vitrified clay pipe (VCP) main is located in Apple Avenue and Oak Street. In addition, a 6-inch VCP is located in the undeveloped Oak Street right-of-way within the site. Site-specific plans would be reviewed and approved by the City, consistent with the City's Municipal Code and General Plan Policy PFS-4.9, to ensure the provision of adequate wastewater service prior to issuance of building permits. Implementation of the proposed project would not result in a significant environmental impact related to the extension of water or wastewater lines.

The project site is located within the East Bay Municipal Utility District (EBMUD) service area, which covers approximately 332 square miles from Crockett on the north, southward to San Lorenzo, eastward from San Francisco to Walnut Creek, and south through the San Ramon Valley. Approximately 90 percent of the raw water entering EBMUD's system originates from the Mokelumne River watershed, and 10 percent originates as runoff from the watershed lands in the East Bay Area.[47] EBMUD's potable water system consists of 4,200 miles of pipe, 125 pumping plants, and 165 water distribution reservoirs. EBMUD updated its Urban Water Management Plan (UWMP) in 2015, which was adopted in 2016. According to the UWMP, the annual water use in 2015 was approximately 190 million gallons per day (mgd).

As discussed below, the proposed project would not substantially increase demand for water and would therefore not exceed the capacity of existing water treatment facilities. The proposed project would not require the construction of new water treatment facilities, or the expansion of existing facilities. The proposed project would include the installation of new water lines connecting to the existing 8-inch steel water mains located in Apple Avenue and Oak Street. The proposed project would connect directly to existing mains, which have sufficient capacity to accommodate the proposed project. Therefore, the impact of the proposed project on water infrastructure would be less than significant.

Refer to Section 10, Hydrology and Water Quality, for a discussion of impacts to the storm drain system, which would be less than significant for the proposed project. On-site drainage would be designed consistent with the National Pollutant Discharge Elimination System (NPDES) C.3 requirements for Low Impact Development (LID). As such, the proposed project would not result in any new or more significant impacts than identified in the GP EIR.

Electric service is accessible to the site by overhead electric lines on joint utility poles in Oak Street, and by extending into the undeveloped Oak Street right-of-way on the site. Gas service is distributed to the site by underground mains. A 1.25-inch and a 2-inch gas main are located in Apple Avenue and Oak Street. The proposed project would connect to these existing facilities and would not require the construction of new facilities to accommodate the proposed project.

The proposed project is consistent with the type and intensity of development analyzed in the GP EIR. Therefore, because the proposed project would connect to existing utility services within or adjacent to the project site, the relocation or reconstruction of new or expanded water, wastewater treatment or stormwater drainage, electric power, or telecommunications facilities would not be required. The proposed project would not result in new or more severe impacts beyond those analyzed in the GP EIR.

Water Supply

EBMUD provides water to the project site. The primary source of water is the Mokelumne River, which is conveyed via the Mokelumne Aqueducts from Pardee Reservoir across the Sacramento-San

[47] East Bay Municipal Utility District, 2016. *2015 Urban Water Management Plan*. Available online at: https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/ (accessed January 28, 2020). July.

Joaquin River Delta to various local storage and treatment facilities in the East Bay. EBMUD has water rights that allow for delivery of up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff, senior water rights of other users, and downstream fishery flow requirements. EBMUD's secondary water supply source is local runoff from the East Bay area watersheds, which is stored in the terminal reservoirs within EBMUD's service area.

In addition, in 2006, EBMUD signed a Long Term Renewal Contract (LTRC) with United States Bureau of Reclamation (USBR) provides for delivery of up to 133,000 acre-feet (AF) in a single qualifying year, not to exceed a total of 165,000 AF in three consecutive qualifying years from the Central Valley Project (CVP). In 2015, EBMUD received 33,250 acre-feet of CVP water.

The EBMUD 2015 UWMP describes the existing and planned sources of water available in the water system service area over the next 20 years, in 5-year increments. It also includes a Water Shortage Contingency Plan (WSCP) to account for a variety of situations that could affect water supply, including short-term emergencies and longer-term droughts. The 2015 UWMP demand analysis includes information on potential future development as identified in the adopted general plans of the cities and counties in EBMUD's service area and on meetings with local planning agencies.[48] According to the EBMUD 2015 UWMP, with a combination of reductions in water use and acquisition of supplementation supplies, EBMUD can provide adequate water service through 2040 to meet customer demands.

As outlined in Attachment A, Project Description, approximately 2,400 linear feet of new 8-inch water main would be installed in Maitland Drive, connecting to the existing 6-inch water main in Central Boulevard at both ends of Maitland Drive. Approximately 2,500 linear feet of new 8-inch water main would be installed in Bunker Hill Drive, connecting to the existing 6-inch water main in Central Boulevard and to the existing 8-inch water main in Carlos Bee Boulevard at each end of Bunker Hill Drive and the proposed extension to Carlos Bee Boulevard.

General Plan Policies NR-4.3, NR-6.9, NR-6.15, and NR-6.16 require water conservation, use of renewable resources, and native landscaping to reduce water use. The City has also adopted indoor water use efficiency standards for new construction, which mandate installation of the most water-conserving fixtures that are available and which have been shown to work effectively. In addition, the City must approve all connections to the water and sewer system, and new water meters need to be installed before water service can be activated. Compliance with the approval and permitting requirements of the City, which would be incorporated into the conditions of approval for the proposed project, would ensure that no new impacts associated with water services would result from the proposed project.

The proposed project would generate additional water demand to serve the multi-family residential and commercial uses on the project site. The project site was designated for Commercial/High Density Residential use under the City's General Plan and this land use was factored into EBMUD's water demand projections in the 2015 UWMP. The GP EIR determined that buildout of the General

48 East Bay Municipal Utilities District, 2016. op. cit.

Plan would have a less-than-significant impact on water supplies. Therefore, because the proposed project would include development consistent with the type and intensity of development evaluated in the GP EIR and the EBMUD 2015 UWMP, the proposed project would not result in greater impacts than those already identified by the GP EIR.

Solid Waste

The California Integrated Waste Management Board estimates waste generation of approximately 2 pounds per room day for hotel/motel uses.[49] Using this rate, the proposed project would generate approximately 300 pounds of waste per day. This waste generation represents approximately 0.0013 percent of the permitted daily throughput (11,150 tons/day) at the Altamont Landfill facility[50] and approximately 0.007 percent of the permitted daily throughput (2,150 tons/day) at the Vasco Road Landfill.[51] Additionally, the proposed project's solid waste contribution would be minimized by the provision of recycling and green waste collection service. Therefore, because the proposed project would include development consistent with the type and intensity of development evaluated in the GP EIR, the proposed project would not result in greater impacts than those already identified by the GP EIR.

Applicable Mitigation

As described in the GP EIR, 2040 General Plan impacts related to utilities and service systems were determined to be less than significant and no mitigation measures were identified. No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Applicable Policies

- *Policy 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.*

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

- *Policy 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.*

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49 CalRecycle. Estimated Solid Waste Generation Rates Website: www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed January 28, 2020).

50 CalRecycle, 2019a. SWIS Facility Detail: Altamont Landfill & Resource Recovery (01-AA-0009). Website: www2.calrecycle.ca.gov/swfacilities/Directory/01-AA-0009 (accessed June 19, 2019).

51 CalRecycle, 2019b. SWIS Facility Detail: Vasco Road Sanitary Landfill (01-AA-001). Website: www2.calrecycle.ca.gov/swfacilities/Directory/01-AA-0010 (accessed June 19, 2019).

- *Policy NR-6.16 Landscape Ordinance Compliance. The City shall continue to implement the Bay-Friendly Water Efficient Landscape Ordinance.*

- *Policy PFS-1.2 Priority for Infrastructure. The City shall give high priority in capital improvement programming to funding rehabilitation or replacement of critical infrastructure that has reached the end of its useful life or has capacity constraints.*

- *Policy PFS-1.3 Public Facility Master Plans. The City shall maintain and implement public facility master plans to ensure compliance with appropriate regional, State, and Federal laws; the use of modern and cost-effective technologies and best management practices; and compatibility with current land use policy.*

- *Policy PFS-1.4 Development Fair Share. The City shall, through a combination of improvement fees and other funding mechanisms, ensure that new development pays its fair share of providing new public facilities and services and/or the costs of expanding/upgrading existing facilities and services impacted by new development (e.g., water, wastewater, stormwater drainage).*

- *Policy PFS-3.1 Water Distribution System Master Plan. The City shall maintain and implement the Water Distribution System Master Plan.*

- *Policy PFS-3.2 Urban Water Management Plan. The City shall maintain and implement the Urban Water Management Plan, including water conservation strategies and programs, as required by the Urban Water Management Planning Act.*

- *Policy PFS-3.8 Water Treatment Capacity and Infrastructure. In the event that San Francisco Public Utilities Commission is unable to provide water that meets drinking water standards, the City shall plan, secure funding for, and procure sufficient water treatment capacity and infrastructure to meet projected water demands.*

- *Policy PFS-3.13 New Development. The City shall ensure that water supply capacity is in place prior to granting building permits for new development.*

- *Policy PFS-3.14 Water Conservation Standards. The City shall comply with provisions of the State's 20x2020 Water Conservation Plan (California Water Resources Control Board, 2010).*

- *Policy PFS-4.1 Sewer Collection System Master Plan. The City shall maintain and implement the Sewer Collection System Master Plan.*

- *Policy PFS-4.2 Water Pollution Control Facility Master Plan. The City shall maintain and implement the Water Pollution Control Facility Master Plan.*

- *Policy PFS-4.9 Service New and Existing Development. The City shall ensure the provision of adequate wastewater service to all new development, before new developments are approved,*

and support the extension of wastewater service to existing developed areas where this service is lacking.

- *Policy PFS-5.1 Accommodate New and Existing Development. The City shall work with the Alameda County Flood Control and Water Conservation District to expand and maintain major stormwater drainage facilities to accommodate the needs of existing and planned development.*

- *Policy PFS-5.3 Watershed Drainage Plans. The City shall require developers of proposed large development projects to prepare watershed drainage plans. Drainage plans shall define needed drainage improvements per City standards, estimate construction costs for these improvements, and be implemented through the Stormwater Management and Urban Runoff Control Program and Alameda Countywide Clean Water Program.*

- *Policy PFS-5.4 Green Stormwater Infrastructure. The City shall encourage "green infrastructure" design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).*

- *Policy PFS-5.6 Grading Projects. The City shall impose appropriate conditions on grading projects performed during the rainy season to ensure that silt is not conveyed to storm drainage.*

- *Policy PFS-5.7 Diversion. The City shall require new development to be designed to prevent the diversion of stormwater onto neighboring parcels.*

- *Policy PFS-7.1 Mandatory Collection. The City shall continue to require weekly solid waste collection through the City.*

- *Policy PFS-7.2 Adequate Services. The City shall monitor its solid waste and recycling services franchisee to ensure that services provided are adequate to meet the needs of the community and to meet the provisions of the City's Franchise Agreement.*

- *Policy PFS-7.3 Landfill Capacity. The City shall continue to coordinate with the Alameda County Waste Management Authority to ensure adequate landfill capacity in the region for the duration of the contract with its landfill franchisee.*

- *Policy PFS-7.4 Solid Waste Diversion. The City shall comply with State goals regarding diversion from landfill, and strive to comply with the provisions approved by the Alameda County Waste Management Authority.*

- *Policy PFS-7.12 Construction and Demolition Waste Recycling. The City shall require demolition, remodeling, and major new development projects to salvage or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.*

- *Policy PFS-7.13 Residential Recycling. The City shall encourage increased participation in residential recycling programs, and strive to comply with the recycling provisions approved by the Alameda County Waste Management Authority Board. The City shall work with StopWaste.org to monitor participation in residential recycling programs and educate the community regarding actual composition of waste sent to landfills.*

- *Policy CS-3.4 Adequate Water Supply for Fire Suppression. The City shall require new development projects to have adequate water supplies to meet the fire-suppression needs of the projects without compromising existing fire suppression services to existing uses.*

Conclusion

The GP EIR adequately evaluated the potential utilities impacts for the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

20. WILDFIRE

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

As previously discussed in Section 9 of this Environmental Checklist, Hazards and Hazardous Materials, the project site is not located within any state responsibility areas (SRA) for fire service,[52] and is not within a very high fire hazard severity zone.[53] The proposed project would not impair the implementation of, or physically interfere with, and adopted emergency response plan. Additionally, as noted in Section 2.0, Project Description, the portion of the project site proposed for development is generally level, and is surrounded by existing development. Therefore, the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or exacerbate fire risk. Impacts related to wildfire would be less than significant.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the GP EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

[52] California Department of Forestry and Fire Protection, 2007. Alameda County, Fire Hazard Severity Zones in SRA (map). Available at: https://osfm.fire.ca.gov/media/7271/fhszs_map1.pdf (accessed January 27, 2020). November 7.

[53] California Department of Forestry and Fire Protection, 2008. Alameda County, Very High Fire Hazard Severity Zones in Local Responsibility Areas (map). Available at: https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf (accessed January 27, 2020). September 3.

Conclusion

The GP EIR adequately evaluated the potential wildfire impacts of the proposed project. Therefore, potential impacts would be less than significant and additional mitigation is not required.

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APPENDIX 1

AIR QUALITY AND GREENHOUSE GAS EMISSIONS DATA

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Route 238 Property Development – Apple Avenue/Oak Street (Parcel Group 9)

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	150.00	Space	0.67	60,000.00	0
Hotel	150.00	Room	2.00	100,000.00	0
Recreational Swimming Pool	0.90	1000sqft	0.02	900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E 2015)

Land Use - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking and outdoor pool.

Construction Phase - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking

Vehicle Trips - Based on the Transportation Impact Analysis prepared for the proposed project

Construction Off-road Equipment Mitigation - assuming compliance with BAAQMD Basic Construction Mitigation Measures

Mobile Land Use Mitigation -

Energy Mitigation - Compliance with 2019 Title 24 improvements

Waste Mitigation - Assuming 25 percent reduction in waste disposed, consistent with the CalRecycle Waste Diversion and Recycling Mandate

Fleet Mix - Revised fleet mix percentages

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	3.00	10.00
tblFleetMix	HHD	0.03	1.0000e-003
tblFleetMix	LDA	0.58	0.62
tblFleetMix	LHD2	5.3580e-003	5.0000e-003
tblFleetMix	MHD	0.02	1.0000e-003
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	AcresOfGrading	15.00	4.50
tblLandUse	LandUseSquareFeet	217,800.00	100,000.00
tblLandUse	LotAcreage	1.35	0.67
tblLandUse	LotAcreage	5.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	33.82	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2216	1.8453	1.5716	3.4700e-003	0.0967	0.0804	0.1772	0.0340	0.0767	0.1107	0.0000	300.8552	300.8552	0.0460	0.0000	302.0041
2022	0.5888	0.4433	0.4394	9.4000e-004	0.0171	0.0189	0.0359	4.6300e-003	0.0180	0.0226	0.0000	81.5612	81.5612	0.0125	0.0000	81.8735
Maximum	**0.5888**	**1.8453**	**1.5716**	**3.4700e-003**	**0.0967**	**0.0804**	**0.1772**	**0.0340**	**0.0767**	**0.1107**	**0.0000**	**300.8552**	**300.8552**	**0.0460**	**0.0000**	**302.0041**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2216	1.8453	1.5716	3.4700e-003	0.0780	0.0804	0.1584	0.0247	0.0767	0.1014	0.0000	300.8549	300.8549	0.0460	0.0000	302.0039
2022	0.5888	0.4433	0.4394	9.4000e-004	0.0171	0.0189	0.0359	4.6300e-003	0.0180	0.0226	0.0000	81.5611	81.5611	0.0125	0.0000	81.8734
Maximum	**0.5888**	**1.8453**	**1.5716**	**3.4700e-003**	**0.0780**	**0.0804**	**0.1584**	**0.0247**	**0.0767**	**0.1014**	**0.0000**	**300.8549**	**300.8549**	**0.0460**	**0.0000**	**302.0039**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.48**	**0.00**	**8.80**	**24.18**	**0.00**	**7.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-5-2021	7-4-2021	0.6565	0.6565
2	7-5-2021	10-4-2021	0.6962	0.6962
3	10-5-2021	1-4-2022	0.6959	0.6959
4	1-5-2022	4-4-2022	0.9201	0.9201
		Highest	0.9201	0.9201

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4481	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003
Energy	0.0197	0.1790	0.1503	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	319.8116	319.8116	0.0148	5.8500e-003	321.9246
Mobile	0.2747	0.4929	2.9218	8.6500e-003	0.8790	8.2700e-003	0.8873	0.2350	7.7000e-003	0.2427	0.0000	784.8445	784.8445	0.0257	0.0000	785.4876
Waste						0.0000	0.0000		0.0000	0.0000	17.7130	0.0000	17.7130	1.0468	0.0000	43.8832
Water						0.0000	0.0000		0.0000	0.0000	1.2240	3.3513	4.5754	0.1260	3.0300e-003	8.6286
Total	**0.7425**	**0.6719**	**3.0749**	**9.7200e-003**	**0.8790**	**0.0219**	**0.9009**	**0.2350**	**0.0213**	**0.2564**	**18.9370**	**1,108.0128**	**1,126.9498**	**1.2133**	**8.8800e-003**	**1,159.9298**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4481	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003
Energy	0.0149	0.1358	0.1140	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	262.9781	262.9781	0.0130	4.8100e-003	264.7367
Mobile	0.2651	0.4496	2.6781	7.6800e-003	0.7753	7.4300e-003	0.7827	0.2073	6.9200e-003	0.2142	0.0000	696.1747	696.1747	0.0233	0.0000	696.7563
Waste						0.0000	0.0000		0.0000	0.0000	13.2847	0.0000	13.2847	0.7851	0.0000	32.9124
Water						0.0000	0.0000		0.0000	0.0000	1.2240	3.3513	4.5754	0.1260	3.0300e-003	8.6286
Total	**0.7281**	**0.5854**	**2.7949**	**8.4900e-003**	**0.7753**	**0.0178**	**0.7930**	**0.2073**	**0.0173**	**0.2246**	**14.5088**	**962.5096**	**977.0183**	**0.9474**	**7.8400e-003**	**1,003.0398**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.93**	**12.88**	**9.11**	**12.65**	**11.80**	**18.83**	**11.97**	**11.80**	**19.05**	**12.40**	**23.38**	**13.13**	**13.30**	**21.92**	**11.71**	**13.53**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/5/2021	4/16/2021	5	10	
2	Grading	Grading	4/19/2021	4/30/2021	5	10	
3	Building Construction	Building Construction	5/3/2021	3/4/2022	5	220	
4	Paving	Paving	3/7/2022	3/18/2022	5	10	
5	Architectural Coating	Architectural Coating	3/21/2022	4/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.67

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 3,600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.0914	0.0538	1.2000e-004		3.5100e-003	3.5100e-003		3.2300e-003	3.2300e-003	0.0000	10.7632	10.7632	3.4800e-003	0.0000	10.8502
Total	**7.7300e-003**	**0.0914**	**0.0538**	**1.2000e-004**	**2.3900e-003**	**3.5100e-003**	**5.9000e-003**	**2.6000e-004**	**3.2300e-003**	**3.4900e-003**	**0.0000**	**10.7632**	**10.7632**	**3.4800e-003**	**0.0000**	**10.8502**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.0000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2672	0.2672	1.0000e-005	0.0000	0.2674
Total	**1.2000e-004**	**8.0000e-005**	**9.0000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2672**	**0.2672**	**1.0000e-005**	**0.0000**	**0.2674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.0914	0.0538	1.2000e-004		3.5100e-003	3.5100e-003		3.2300e-003	3.2300e-003	0.0000	10.7632	10.7632	3.4800e-003	0.0000	10.8502
Total	**7.7300e-003**	**0.0914**	**0.0538**	**1.2000e-004**	**1.0700e-003**	**3.5100e-003**	**4.5800e-003**	**1.2000e-004**	**3.2300e-003**	**3.3500e-003**	**0.0000**	**10.7632**	**10.7632**	**3.4800e-003**	**0.0000**	**10.8502**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.0000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2672	0.2672	1.0000e-005	0.0000	0.2674
Total	**1.2000e-004**	**8.0000e-005**	**9.0000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2672**	**0.2672**	**1.0000e-005**	**0.0000**	**0.2674**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0317	0.0000	0.0317	0.0167	0.0000	0.0167	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1400e-003	0.1011	0.0488	1.0000e-004		4.5800e-003	4.5800e-003		4.2100e-003	4.2100e-003	0.0000	9.0519	9.0519	2.9300e-003	0.0000	9.1251
Total	**9.1400e-003**	**0.1011**	**0.0488**	**1.0000e-004**	**0.0317**	**4.5800e-003**	**0.0363**	**0.0167**	**4.2100e-003**	**0.0209**	**0.0000**	**9.0519**	**9.0519**	**2.9300e-003**	**0.0000**	**9.1251**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3340	0.3340	1.0000e-005	0.0000	0.3342
Total	**1.5000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3340**	**0.3340**	**1.0000e-005**	**0.0000**	**0.3342**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0143	0.0000	0.0143	7.5300e-003	0.0000	7.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1400e-003	0.1011	0.0488	1.0000e-004		4.5800e-003	4.5800e-003		4.2100e-003	4.2100e-003	0.0000	9.0519	9.0519	2.9300e-003	0.0000	9.1251
Total	**9.1400e-003**	**0.1011**	**0.0488**	**1.0000e-004**	**0.0143**	**4.5800e-003**	**0.0189**	**7.5300e-003**	**4.2100e-003**	**0.0117**	**0.0000**	**9.0519**	**9.0519**	**2.9300e-003**	**0.0000**	**9.1251**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3340	0.3340	1.0000e-005	0.0000	0.3342
Total	**1.5000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3340**	**0.3340**	**1.0000e-005**	**0.0000**	**0.3342**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1789	1.4024	1.2743	2.1900e-003		0.0715	0.0715		0.0685	0.0685	0.0000	181.6927	181.6927	0.0358	0.0000	182.5863
Total	**0.1789**	**1.4024**	**1.2743**	**2.1900e-003**		**0.0715**	**0.0715**		**0.0685**	**0.0685**	**0.0000**	**181.6927**	**181.6927**	**0.0358**	**0.0000**	**182.5863**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2200e-003	0.2376	0.0593	6.1000e-004	0.0149	5.2000e-004	0.0154	4.3100e-003	4.9000e-004	4.8100e-003	0.0000	59.0008	59.0008	2.9000e-003	0.0000	59.0733
Worker	0.0183	0.0126	0.1335	4.4000e-004	0.0470	3.1000e-004	0.0473	0.0125	2.8000e-004	0.0128	0.0000	39.7454	39.7454	8.9000e-004	0.0000	39.7677
Total	**0.0255**	**0.2502**	**0.1928**	**1.0500e-003**	**0.0619**	**8.3000e-004**	**0.0628**	**0.0168**	**7.7000e-004**	**0.0176**	**0.0000**	**98.7462**	**98.7462**	**3.7900e-003**	**0.0000**	**98.8410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1789	1.4024	1.2743	2.1900e-003		0.0715	0.0715		0.0685	0.0685	0.0000	181.6924	181.6924	0.0358	0.0000	182.5861
Total	**0.1789**	**1.4024**	**1.2743**	**2.1900e-003**		**0.0715**	**0.0715**		**0.0685**	**0.0685**	**0.0000**	**181.6924**	**181.6924**	**0.0358**	**0.0000**	**182.5861**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2200e-003	0.2376	0.0593	6.1000e-004	0.0149	5.2000e-004	0.0154	4.3100e-003	4.9000e-004	4.8100e-003	0.0000	59.0008	59.0008	2.9000e-003	0.0000	59.0733
Worker	0.0183	0.0126	0.1335	4.4000e-004	0.0470	3.1000e-004	0.0473	0.0125	2.8000e-004	0.0128	0.0000	39.7454	39.7454	8.9000e-004	0.0000	39.7677
Total	**0.0255**	**0.2502**	**0.1928**	**1.0500e-003**	**0.0619**	**8.3000e-004**	**0.0628**	**0.0168**	**7.7000e-004**	**0.0176**	**0.0000**	**98.7462**	**98.7462**	**3.7900e-003**	**0.0000**	**98.8410**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0418	0.3286	0.3230	5.6000e-004		0.0158	0.0158		0.0151	0.0151	0.0000	46.7280	46.7280	9.0200e-003	0.0000	46.9534
Total	**0.0418**	**0.3286**	**0.3230**	**5.6000e-004**		**0.0158**	**0.0158**		**0.0151**	**0.0151**	**0.0000**	**46.7280**	**46.7280**	**9.0200e-003**	**0.0000**	**46.9534**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7300e-003	0.0579	0.0143	1.6000e-004	3.8400e-003	1.2000e-004	3.9500e-003	1.1100e-003	1.1000e-004	1.2200e-003	0.0000	15.0229	15.0229	7.1000e-004	0.0000	15.0407
Worker	4.3800e-003	2.9000e-003	0.0315	1.1000e-004	0.0121	8.0000e-005	0.0122	3.2200e-003	7.0000e-005	3.2900e-003	0.0000	9.8456	9.8456	2.1000e-004	0.0000	9.8507
Total	**6.1100e-003**	**0.0608**	**0.0459**	**2.7000e-004**	**0.0159**	**2.0000e-004**	**0.0161**	**4.3300e-003**	**1.8000e-004**	**4.5100e-003**	**0.0000**	**24.8684**	**24.8684**	**9.2000e-004**	**0.0000**	**24.8914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0418	0.3286	0.3230	5.6000e-004		0.0158	0.0158		0.0151	0.0151	0.0000	46.7280	46.7280	9.0200e-003	0.0000	46.9534
Total	**0.0418**	**0.3286**	**0.3230**	**5.6000e-004**		**0.0158**	**0.0158**		**0.0151**	**0.0151**	**0.0000**	**46.7280**	**46.7280**	**9.0200e-003**	**0.0000**	**46.9534**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7300e-003	0.0579	0.0143	1.6000e-004	3.8400e-003	1.2000e-004	3.9500e-003	1.1100e-003	1.1000e-004	1.2200e-003	0.0000	15.0229	15.0229	7.1000e-004	0.0000	15.0407
Worker	4.3800e-003	2.9000e-003	0.0315	1.1000e-004	0.0121	8.0000e-005	0.0122	3.2200e-003	7.0000e-005	3.2900e-003	0.0000	9.8456	9.8456	2.1000e-004	0.0000	9.8507
Total	**6.1100e-003**	**0.0608**	**0.0459**	**2.7000e-004**	**0.0159**	**2.0000e-004**	**0.0161**	**4.3300e-003**	**1.8000e-004**	**4.5100e-003**	**0.0000**	**24.8684**	**24.8684**	**9.2000e-004**	**0.0000**	**24.8914**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	8.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.5900e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
Total	**2.1000e-004**	**1.4000e-004**	**1.5500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4826**	**0.4826**	**1.0000e-005**	**0.0000**	**0.4829**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	8.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.5900e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
Total	**2.1000e-004**	**1.4000e-004**	**1.5500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4826**	**0.4826**	**1.0000e-005**	**0.0000**	**0.4829**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.5350**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.4400e-003	0.0000	5.5000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4505	0.4505	1.0000e-005	0.0000	0.4507
Total	**2.0000e-004**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4505**	**0.4505**	**1.0000e-005**	**0.0000**	**0.4507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.5350**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.4400e-003	0.0000	5.5000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4505	0.4505	1.0000e-005	0.0000	0.4507
Total	**2.0000e-004**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4505**	**0.4505**	**1.0000e-005**	**0.0000**	**0.4507**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2651	0.4496	2.6781	7.6800e-003	0.7753	7.4300e-003	0.7827	0.2073	6.9200e-003	0.2142	0.0000	696.1747	696.1747	0.0233	0.0000	696.7563
Unmitigated	0.2747	0.4929	2.9218	8.6500e-003	0.8790	8.2700e-003	0.8873	0.2350	7.7000e-003	0.2427	0.0000	784.8445	784.8445	0.0257	0.0000	785.4876

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,254.00	1,254.00	1254.00	2,382,513	2,101,377
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,254.00	1,254.00	1,254.00	2,382,513	2,101,377

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.619098	0.039376	0.193723	0.112069	0.016317	0.005000	0.001000	0.001000	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Recreational Swimming Pool	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	115.1817	115.1817	0.0102	2.1000e-003	116.0621
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.9803	124.9803	0.0110	2.2800e-003	125.9355
NaturalGas Mitigated	0.0149	0.1358	0.1140	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.7964	147.7964	2.8300e-003	2.7100e-003	148.6747
NaturalGas Unmitigated	0.0197	0.1790	0.1503	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	194.8313	194.8313	3.7300e-003	3.5700e-003	195.9891

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	3.651e+006	0.0197	0.1790	0.1503	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	194.8313	194.8313	3.7300e-003	3.5700e-003	195.9891
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0197**	**0.1790**	**0.1503**	**1.0700e-003**		**0.0136**	**0.0136**		**0.0136**	**0.0136**	**0.0000**	**194.8313**	**194.8313**	**3.7300e-003**	**3.5700e-003**	**195.9891**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.7696e+006	0.0149	0.1358	0.1140	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.7964	147.7964	2.8300e-003	2.7100e-003	148.6747
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0149**	**0.1358**	**0.1140**	**8.1000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.7964**	**147.7964**	**2.8300e-003**	**2.7100e-003**	**148.6747**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	817000	121.8483	0.0108	2.2200e-003	122.7796
Parking Lot	21000	3.1320	2.8000e-004	6.0000e-005	3.1559
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**124.9803**	**0.0110**	**2.2800e-003**	**125.9355**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	751300	112.0498	9.8800e-003	2.0400e-003	112.9062
Parking Lot	21000	3.1320	2.8000e-004	6.0000e-005	3.1559
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**115.1817**	**0.0102**	**2.1000e-003**	**116.0621**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4481	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003
Unmitigated	0.4481	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3944					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003
Total	**0.4481**	**3.0000e-005**	**2.7700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.3800e-003**	**5.3800e-003**	**1.0000e-005**	**0.0000**	**5.7300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3944					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.7700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.3800e-003	5.3800e-003	1.0000e-005	0.0000	5.7300e-003
Total	**0.4481**	**3.0000e-005**	**2.7700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.3800e-003**	**5.3800e-003**	**1.0000e-005**	**0.0000**	**5.7300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.5754	0.1260	3.0300e-003	8.6286
Unmitigated	4.5754	0.1260	3.0300e-003	8.6286

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	3.80502 / 0.422779	4.4985	0.1243	2.9900e-003	8.4957
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0532288 / 0.0326241	0.0769	1.7400e-003	4.0000e-005	0.1329
Total		**4.5754**	**0.1260**	**3.0300e-003**	**8.6286**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	3.80502 / 0.422779	4.4985	0.1243	2.9900e-003	8.4957
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0532288 / 0.0326241	0.0769	1.7400e-003	4.0000e-005	0.1329
Total		**4.5754**	**0.1260**	**3.0300e-003**	**8.6286**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.2847	0.7851	0.0000	32.9124
Unmitigated	17.7130	1.0468	0.0000	43.8832

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	82.13	16.6717	0.9853	0.0000	41.3033
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	5.13	1.0413	0.0615	0.0000	2.5799
Total		**17.7130**	**1.0468**	**0.0000**	**43.8832**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	61.5975	12.5037	0.7390	0.0000	30.9775
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	3.8475	0.7810	0.0462	0.0000	1.9349
Total		**13.2848**	**0.7851**	**0.0000**	**32.9124**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Route 238 Property Development – Apple Avenue/Oak Street (Parcel Group 9)

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	150.00	Space	0.67	60,000.00	0
Hotel	150.00	Room	2.00	100,000.00	0
Recreational Swimming Pool	0.90	1000sqft	0.02	900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E 2015)

Land Use - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking and outdoor pool.

Construction Phase - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking

Vehicle Trips - Based on the Transportation Impact Analysis prepared for the proposed project

Construction Off-road Equipment Mitigation - assuming compliance with BAAQMD Basic Construction Mitigation Measures

Mobile Land Use Mitigation -

Energy Mitigation - Compliance with 2019 Title 24 improvements

Waste Mitigation - Assuming 25 percent reduction in waste disposed, consistent with the CalRecycle Waste Diversion and Recycling Mandate

Fleet Mix - Revised fleet mix percentages

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	3.00	10.00
tblFleetMix	HHD	0.03	1.0000e-003
tblFleetMix	LDA	0.58	0.62
tblFleetMix	LHD2	5.3580e-003	5.0000e-003
tblFleetMix	MHD	0.02	1.0000e-003
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	AcresOfGrading	15.00	4.50
tblLandUse	LandUseSquareFeet	217,800.00	100,000.00
tblLandUse	LotAcreage	1.35	0.67
tblLandUse	LotAcreage	5.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	33.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3443	20.2323	16.8668	0.0375	6.4224	0.9163	7.3387	3.3664	0.8430	4.2093	0.0000	3,578.7602	3,578.7602	0.7689	0.0000	3,591.2007
2022	107.0368	17.2651	16.4882	0.0372	0.7346	0.7107	1.4453	0.1988	0.6811	0.8799	0.0000	3,552.0258	3,552.0258	0.5442	0.0000	3,564.1807
Maximum	**107.0368**	**20.2323**	**16.8668**	**0.0375**	**6.4224**	**0.9163**	**7.3387**	**3.3664**	**0.8430**	**4.2093**	**0.0000**	**3,578.7602**	**3,578.7602**	**0.7689**	**0.0000**	**3,591.2007**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3443	20.2323	16.8668	0.0375	2.9353	0.9163	3.8515	1.5269	0.8430	2.3698	0.0000	3,578.7602	3,578.7602	0.7689	0.0000	3,591.2007
2022	107.0368	17.2651	16.4882	0.0372	0.7346	0.7107	1.4453	0.1988	0.6811	0.8799	0.0000	3,552.0258	3,552.0258	0.5442	0.0000	3,564.1807
Maximum	**107.0368**	**20.2323**	**16.8668**	**0.0375**	**2.9353**	**0.9163**	**3.8515**	**1.5269**	**0.8430**	**2.3698**	**0.0000**	**3,578.7602**	**3,578.7602**	**0.7689**	**0.0000**	**3,591.2007**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.72**	**0.00**	**39.70**	**51.60**	**0.00**	**36.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Energy	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860
Mobile	1.7684	2.5177	16.5996	0.0508	5.0192	0.0455	5.0647	1.3380	0.0424	1.3803		5,080.1908	5,080.1908	0.1585		5,084.1541
Total	**4.3330**	**3.4986**	**17.4541**	**0.0567**	**5.0192**	**0.1201**	**5.1393**	**1.3380**	**0.1170**	**1.4550**		**6,257.0495**	**6,257.0495**	**0.1813**	**0.0216**	**6,268.0103**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Energy	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
Mobile	1.7145	2.2977	15.0803	0.0451	4.4270	0.0409	4.4678	1.1801	0.0381	1.2182		4,504.7465	4,504.7465	0.1428		4,508.3161
Total	**4.2530**	**3.0419**	**15.7359**	**0.0495**	**4.4270**	**0.0975**	**4.5245**	**1.1801**	**0.0947**	**1.2748**		**5,397.5118**	**5,397.5118**	**0.1601**	**0.0164**	**5,406.3906**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.85**	**13.05**	**9.84**	**12.65**	**11.80**	**18.81**	**11.96**	**11.80**	**19.04**	**12.38**	**0.00**	**13.74**	**13.74**	**11.70**	**24.11**	**13.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/5/2021	4/16/2021	5	10	
2	Grading	Grading	4/19/2021	4/30/2021	5	10	
3	Building Construction	Building Construction	5/3/2021	3/4/2022	5	220	
4	Paving	Paving	3/7/2022	3/18/2022	5	10	
5	Architectural Coating	Architectural Coating	3/21/2022	4/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.67

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 3,600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.4772**	**0.7019**	**1.1791**	**0.0515**	**0.6457**	**0.6973**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0257	0.0150	0.1965	6.4000e-004	0.0657	4.1000e-004	0.0661	0.0174	3.8000e-004	0.0178		63.3568	63.3568	1.4200e-003		63.3922
Total	**0.0257**	**0.0150**	**0.1965**	**6.4000e-004**	**0.0657**	**4.1000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**63.3568**	**63.3568**	**1.4200e-003**		**63.3922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2148	0.0000	0.2148	0.0232	0.0000	0.0232			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.2148**	**0.7019**	**0.9166**	**0.0232**	**0.6457**	**0.6689**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0257	0.0150	0.1965	6.4000e-004	0.0657	4.1000e-004	0.0661	0.0174	3.8000e-004	0.0178		63.3568	63.3568	1.4200e-003		63.3922
Total	**0.0257**	**0.0150**	**0.1965**	**6.4000e-004**	**0.0657**	**4.1000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**63.3568**	**63.3568**	**1.4200e-003**		**63.3922**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3402	0.0000	6.3402	3.3446	0.0000	3.3446			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.3402**	**0.9158**	**7.2560**	**3.3446**	**0.8425**	**4.1871**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0322	0.0188	0.2456	7.9000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		79.1960	79.1960	1.7700e-003		79.2402
Total	**0.0322**	**0.0188**	**0.2456**	**7.9000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**79.1960**	**79.1960**	**1.7700e-003**		**79.2402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8531	0.0000	2.8531	1.5051	0.0000	1.5051			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.8531**	**0.9158**	**3.7689**	**1.5051**	**0.8425**	**2.3476**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0322	0.0188	0.2456	7.9000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		79.1960	79.1960	1.7700e-003		79.2402
Total	**0.0322**	**0.0188**	**0.2456**	**7.9000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**79.1960**	**79.1960**	**1.7700e-003**		**79.2402**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0806	2.6869	0.6336	7.0900e-003	0.1760	5.8200e-003	0.1818	0.0507	5.5700e-003	0.0562		751.2922	751.2922	0.0353		752.1737
Worker	0.2187	0.1278	1.6703	5.4000e-003	0.5586	3.5100e-003	0.5621	0.1482	3.2400e-003	0.1514		538.5325	538.5325	0.0120		538.8334
Total	**0.2993**	**2.8147**	**2.3039**	**0.0125**	**0.7346**	**9.3300e-003**	**0.7439**	**0.1988**	**8.8100e-003**	**0.2076**		**1,289.8247**	**1,289.8247**	**0.0473**		**1,291.0072**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0806	2.6869	0.6336	7.0900e-003	0.1760	5.8200e-003	0.1818	0.0507	5.5700e-003	0.0562		751.2922	751.2922	0.0353		752.1737
Worker	0.2187	0.1278	1.6703	5.4000e-003	0.5586	3.5100e-003	0.5621	0.1482	3.2400e-003	0.1514		538.5325	538.5325	0.0120		538.8334
Total	**0.2993**	**2.8147**	**2.3039**	**0.0125**	**0.7346**	**9.3300e-003**	**0.7439**	**0.1988**	**8.8100e-003**	**0.2076**		**1,289.8247**	**1,289.8247**	**0.0473**		**1,291.0072**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0752	2.5465	0.5959	7.0200e-003	0.1760	5.0500e-003	0.1811	0.0507	4.8300e-003	0.0555		743.9757	743.9757	0.0337		744.8186
Worker	0.2035	0.1146	1.5391	5.2000e-003	0.5586	3.4300e-003	0.5620	0.1482	3.1600e-003	0.1513		518.7689	518.7689	0.0108		519.0391
Total	**0.2787**	**2.6611**	**2.1350**	**0.0122**	**0.7346**	**8.4800e-003**	**0.7431**	**0.1988**	**7.9900e-003**	**0.2068**		**1,262.7446**	**1,262.7446**	**0.0445**		**1,263.8577**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0752	2.5465	0.5959	7.0200e-003	0.1760	5.0500e-003	0.1811	0.0507	4.8300e-003	0.0555		743.9757	743.9757	0.0337		744.8186
Worker	0.2035	0.1146	1.5391	5.2000e-003	0.5586	3.4300e-003	0.5620	0.1482	3.1600e-003	0.1513		518.7689	518.7689	0.0108		519.0391
Total	**0.2787**	**2.6611**	**2.1350**	**0.0122**	**0.7346**	**8.4800e-003**	**0.7431**	**0.1988**	**7.9900e-003**	**0.2068**		**1,262.7446**	**1,262.7446**	**0.0445**		**1,263.8577**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1167**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	**0.0449**	**0.0253**	**0.3395**	**1.1500e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**114.4343**	**114.4343**	**2.3800e-003**		**114.4939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1167**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	**0.0449**	**0.0253**	**0.3395**	**1.1500e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**114.4343**	**114.4343**	**2.3800e-003**		**114.4939**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	106.7904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**106.9949**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0236	0.3169	1.0700e-003	0.1150	7.1000e-004	0.1157	0.0305	6.5000e-004	0.0312		106.8054	106.8054	2.2300e-003		106.8610
Total	**0.0419**	**0.0236**	**0.3169**	**1.0700e-003**	**0.1150**	**7.1000e-004**	**0.1157**	**0.0305**	**6.5000e-004**	**0.0312**		**106.8054**	**106.8054**	**2.2300e-003**		**106.8610**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	106.7904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**106.9949**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0236	0.3169	1.0700e-003	0.1150	7.1000e-004	0.1157	0.0305	6.5000e-004	0.0312		106.8054	106.8054	2.2300e-003		106.8610
Total	**0.0419**	**0.0236**	**0.3169**	**1.0700e-003**	**0.1150**	**7.1000e-004**	**0.1157**	**0.0305**	**6.5000e-004**	**0.0312**		**106.8054**	**106.8054**	**2.2300e-003**		**106.8610**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7145	2.2977	15.0803	0.0451	4.4270	0.0409	4.4678	1.1801	0.0381	1.2182		4,504.7465	4,504.7465	0.1428		4,508.3161
Unmitigated	1.7684	2.5177	16.5996	0.0508	5.0192	0.0455	5.0647	1.3380	0.0424	1.3803		5,080.1908	5,080.1908	0.1585		5,084.1541

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,254.00	1,254.00	1254.00	2,382,513	2,101,377
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,254.00	1,254.00	1,254.00	2,382,513	2,101,377

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.619098	0.039376	0.193723	0.112069	0.016317	0.005000	0.001000	0.001000	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Recreational Swimming Pool	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
NaturalGas Unmitigated	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	10002.7	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1079**	**0.9807**	**0.8238**	**5.8800e-003**		**0.0745**	**0.0745**		**0.0745**	**0.0745**		**1,176.7929**	**1,176.7929**	**0.0226**	**0.0216**	**1,183.7860**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.58795	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0818**	**0.7439**	**0.6249**	**4.4600e-003**		**0.0565**	**0.0565**		**0.0565**	**0.0565**		**892.6994**	**892.6994**	**0.0171**	**0.0164**	**898.0043**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Unmitigated	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Total	**2.4567**	**2.8000e-004**	**0.0308**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0659**	**0.0659**	**1.7000e-004**		**0.0702**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Total	**2.4567**	**2.8000e-004**	**0.0308**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0659**	**0.0659**	**1.7000e-004**		**0.0702**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Route 238 Property Development – Apple Avenue/Oak Street (Parcel Group 9)

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	150.00	Space	0.67	60,000.00	0
Hotel	150.00	Room	2.00	100,000.00	0
Recreational Swimming Pool	0.90	1000sqft	0.02	900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E 2015)

Land Use - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking and outdoor pool.

Construction Phase - The Parcel Group 9 Project would consist of an up to 150-room hotel and associated parking

Vehicle Trips - Based on the Transportation Impact Analysis prepared for the proposed project

Construction Off-road Equipment Mitigation - assuming compliance with BAAQMD Basic Construction Mitigation Measures

Mobile Land Use Mitigation -

Energy Mitigation - Compliance with 2019 Title 24 improvements

Waste Mitigation - Assuming 25 percent reduction in waste disposed, consistent with the CalRecycle Waste Diversion and Recycling Mandate

Fleet Mix - Revised fleet mix percentages

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	3.00	10.00
tblFleetMix	HHD	0.03	1.0000e-003
tblFleetMix	LDA	0.58	0.62
tblFleetMix	LHD2	5.3580e-003	5.0000e-003
tblFleetMix	MHD	0.02	1.0000e-003
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	AcresOfGrading	15.00	4.50
tblLandUse	LandUseSquareFeet	217,800.00	100,000.00
tblLandUse	LotAcreage	1.35	0.67
tblLandUse	LotAcreage	5.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	33.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3621	20.2367	16.8539	0.0369	6.4224	0.9163	7.3387	3.3664	0.8430	4.2093	0.0000	3,517.2510	3,517.2510	0.7688	0.0000	3,529.7434
2022	107.0395	17.3112	16.4719	0.0367	0.7346	0.7109	1.4455	0.1988	0.6813	0.8801	0.0000	3,492.1610	3,492.1610	0.5441	0.0000	3,504.3650
Maximum	**107.0395**	**20.2367**	**16.8539**	**0.0369**	**6.4224**	**0.9163**	**7.3387**	**3.3664**	**0.8430**	**4.2093**	**0.0000**	**3,517.2510**	**3,517.2510**	**0.7688**	**0.0000**	**3,529.7434**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3621	20.2367	16.8539	0.0369	2.9353	0.9163	3.8515	1.5269	0.8430	2.3698	0.0000	3,517.2510	3,517.2510	0.7688	0.0000	3,529.7434
2022	107.0395	17.3112	16.4719	0.0367	0.7346	0.7109	1.4455	0.1988	0.6813	0.8801	0.0000	3,492.1610	3,492.1610	0.5441	0.0000	3,504.3650
Maximum	**107.0395**	**20.2367**	**16.8539**	**0.0369**	**2.9353**	**0.9163**	**3.8515**	**1.5269**	**0.8430**	**2.3698**	**0.0000**	**3,517.2510**	**3,517.2510**	**0.7688**	**0.0000**	**3,529.7434**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.72**	**0.00**	**39.70**	**51.60**	**0.00**	**36.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Energy	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860
Mobile	1.4887	2.8533	16.8836	0.0472	5.0192	0.0455	5.0647	1.3380	0.0424	1.3804		4,718.4482	4,718.4482	0.1591		4,722.4260
Total	**4.0533**	**3.8342**	**17.7381**	**0.0531**	**5.0192**	**0.1201**	**5.1394**	**1.3380**	**0.1170**	**1.4550**		**5,895.3070**	**5,895.3070**	**0.1818**	**0.0216**	**5,906.2822**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Energy	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
Mobile	1.4357	2.6013	15.5394	0.0419	4.4270	0.0409	4.4679	1.1801	0.0381	1.2182		4,185.4155	4,185.4155	0.1442		4,189.0212
Total	**3.9742**	**3.3455**	**16.1950**	**0.0463**	**4.4270**	**0.0976**	**4.5245**	**1.1801**	**0.0948**	**1.2748**		**5,078.1808**	**5,078.1808**	**0.1615**	**0.0164**	**5,087.0957**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.95**	**12.75**	**8.70**	**12.70**	**11.80**	**18.80**	**11.96**	**11.80**	**19.04**	**12.38**	**0.00**	**13.86**	**13.86**	**11.19**	**24.11**	**13.87**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/5/2021	4/16/2021	5	10	
2	Grading	Grading	4/19/2021	4/30/2021	5	10	
3	Building Construction	Building Construction	5/3/2021	3/4/2022	5	220	
4	Paving	Paving	3/7/2022	3/18/2022	5	10	
5	Architectural Coating	Architectural Coating	3/21/2022	4/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.67

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 3,600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.4772**	**0.7019**	**1.1791**	**0.0515**	**0.6457**	**0.6973**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0186	0.1839	5.9000e-004	0.0657	4.1000e-004	0.0661	0.0174	3.8000e-004	0.0178		58.3629	58.3629	1.3200e-003		58.3960
Total	**0.0273**	**0.0186**	**0.1839**	**5.9000e-004**	**0.0657**	**4.1000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**58.3629**	**58.3629**	**1.3200e-003**		**58.3960**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2148	0.0000	0.2148	0.0232	0.0000	0.0232			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.2148**	**0.7019**	**0.9166**	**0.0232**	**0.6457**	**0.6689**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0186	0.1839	5.9000e-004	0.0657	4.1000e-004	0.0661	0.0174	3.8000e-004	0.0178		58.3629	58.3629	1.3200e-003		58.3960
Total	**0.0273**	**0.0186**	**0.1839**	**5.9000e-004**	**0.0657**	**4.1000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**58.3629**	**58.3629**	**1.3200e-003**		**58.3960**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3402	0.0000	6.3402	3.3446	0.0000	3.3446			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.3402**	**0.9158**	**7.2560**	**3.3446**	**0.8425**	**4.1871**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0232	0.2298	7.3000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		72.9537	72.9537	1.6500e-003		72.9949
Total	**0.0341**	**0.0232**	**0.2298**	**7.3000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**72.9537**	**72.9537**	**1.6500e-003**		**72.9949**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8531	0.0000	2.8531	1.5051	0.0000	1.5051			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.8531**	**0.9158**	**3.7689**	**1.5051**	**0.8425**	**2.3476**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0232	0.2298	7.3000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		72.9537	72.9537	1.6500e-003		72.9949
Total	**0.0341**	**0.0232**	**0.2298**	**7.3000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**72.9537**	**72.9537**	**1.6500e-003**		**72.9949**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0854	2.7100	0.7282	6.9100e-003	0.1760	6.0200e-003	0.1820	0.0507	5.7600e-003	0.0564		732.2306	732.2306	0.0382		733.1843
Worker	0.2316	0.1578	1.5627	4.9800e-003	0.5586	3.5100e-003	0.5621	0.1482	3.2400e-003	0.1514		496.0849	496.0849	0.0112		496.3655
Total	**0.3170**	**2.8678**	**2.2910**	**0.0119**	**0.7346**	**9.5300e-003**	**0.7441**	**0.1988**	**9.0000e-003**	**0.2078**		**1,228.3155**	**1,228.3155**	**0.0494**		**1,229.5498**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0854	2.7100	0.7282	6.9100e-003	0.1760	6.0200e-003	0.1820	0.0507	5.7600e-003	0.0564		732.2306	732.2306	0.0382		733.1843
Worker	0.2316	0.1578	1.5627	4.9800e-003	0.5586	3.5100e-003	0.5621	0.1482	3.2400e-003	0.1514		496.0849	496.0849	0.0112		496.3655
Total	**0.3170**	**2.8678**	**2.2910**	**0.0119**	**0.7346**	**9.5300e-003**	**0.7441**	**0.1988**	**9.0000e-003**	**0.2078**		**1,228.3155**	**1,228.3155**	**0.0494**		**1,229.5498**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0797	2.5657	0.6846	6.8400e-003	0.1760	5.2300e-003	0.1812	0.0507	5.0000e-003	0.0557		724.9812	724.9812	0.0364		725.8922
Worker	0.2162	0.1415	1.4340	4.7900e-003	0.5586	3.4300e-003	0.5620	0.1482	3.1600e-003	0.1513		477.8986	477.8986	0.0101		478.1498
Total	**0.2958**	**2.7072**	**2.1186**	**0.0116**	**0.7346**	**8.6600e-003**	**0.7433**	**0.1988**	**8.1600e-003**	**0.2070**		**1,202.8797**	**1,202.8797**	**0.0465**		**1,204.0420**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0797	2.5657	0.6846	6.8400e-003	0.1760	5.2300e-003	0.1812	0.0507	5.0000e-003	0.0557		724.9812	724.9812	0.0364		725.8922
Worker	0.2162	0.1415	1.4340	4.7900e-003	0.5586	3.4300e-003	0.5620	0.1482	3.1600e-003	0.1513		477.8986	477.8986	0.0101		478.1498
Total	**0.2958**	**2.7072**	**2.1186**	**0.0116**	**0.7346**	**8.6600e-003**	**0.7433**	**0.1988**	**8.1600e-003**	**0.2070**		**1,202.8797**	**1,202.8797**	**0.0465**		**1,204.0420**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1167**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	**0.0477**	**0.0312**	**0.3163**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4188**	**105.4188**	**2.2200e-003**		**105.4742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1167**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	**0.0477**	**0.0312**	**0.3163**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4188**	**105.4188**	**2.2200e-003**		**105.4742**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	106.7904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**106.9949**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0291	0.2952	9.9000e-004	0.1150	7.1000e-004	0.1157	0.0305	6.5000e-004	0.0312		98.3909	98.3909	2.0700e-003		98.4426
Total	**0.0445**	**0.0291**	**0.2952**	**9.9000e-004**	**0.1150**	**7.1000e-004**	**0.1157**	**0.0305**	**6.5000e-004**	**0.0312**		**98.3909**	**98.3909**	**2.0700e-003**		**98.4426**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	106.7904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**106.9949**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0291	0.2952	9.9000e-004	0.1150	7.1000e-004	0.1157	0.0305	6.5000e-004	0.0312		98.3909	98.3909	2.0700e-003		98.4426
Total	**0.0445**	**0.0291**	**0.2952**	**9.9000e-004**	**0.1150**	**7.1000e-004**	**0.1157**	**0.0305**	**6.5000e-004**	**0.0312**		**98.3909**	**98.3909**	**2.0700e-003**		**98.4426**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4357	2.6013	15.5394	0.0419	4.4270	0.0409	4.4679	1.1801	0.0381	1.2182		4,185.4155	4,185.4155	0.1442		4,189.0212
Unmitigated	1.4887	2.8533	16.8836	0.0472	5.0192	0.0455	5.0647	1.3380	0.0424	1.3804		4,718.4482	4,718.4482	0.1591		4,722.4260

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,254.00	1,254.00	1254.00	2,382,513	2,101,377
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,254.00	1,254.00	1,254.00	2,382,513	2,101,377

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.619098	0.039376	0.193723	0.112069	0.016317	0.005000	0.001000	0.001000	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Recreational Swimming Pool	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
NaturalGas Unmitigated	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	10002.7	0.1079	0.9807	0.8238	5.8800e-003		0.0745	0.0745		0.0745	0.0745		1,176.7929	1,176.7929	0.0226	0.0216	1,183.7860
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1079**	**0.9807**	**0.8238**	**5.8800e-003**		**0.0745**	**0.0745**		**0.0745**	**0.0745**		**1,176.7929**	**1,176.7929**	**0.0226**	**0.0216**	**1,183.7860**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.58795	0.0818	0.7439	0.6249	4.4600e-003		0.0565	0.0565		0.0565	0.0565		892.6994	892.6994	0.0171	0.0164	898.0043
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0818**	**0.7439**	**0.6249**	**4.4600e-003**		**0.0565**	**0.0565**		**0.0565**	**0.0565**		**892.6994**	**892.6994**	**0.0171**	**0.0164**	**898.0043**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Unmitigated	2.4567	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Total	**2.4567**	**2.8000e-004**	**0.0308**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0659**	**0.0659**	**1.7000e-004**		**0.0702**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0308	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0659	0.0659	1.7000e-004		0.0702
Total	**2.4567**	**2.8000e-004**	**0.0308**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0659**	**0.0659**	**1.7000e-004**		**0.0702**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation