



Pilgrim Baptist Church Project

Initial Study – Mitigated Negative Declaration

prepared by

City of Hayward

777 B Street

Hayward, California 94541

Contact: Edgar Maravilla, Associate Planner

prepared with the assistance of

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

October 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Appendix F	Phase I Environmental Site Assessment
Appendix G	Noise Data
Appendix H	Transportation Impact Analysis
Appendix I	Assembly Bill 52 Correspondence

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Initial Study

1. Project Title

Pilgrim Baptist Church Project

2. Lead Agency Name and Address

City of Hayward
Planning Division
777 B Street
Hayward, California 94541

3. Contact Person, Phone Number, and Email Address

Edgar Maravilla, Associate Planner
City of Hayward, Development Services Department
(510) 583-4207
edgar.maravilla@hayward-ca.gov

4. Project Location

The project site is located near the southeastern edge of the City of Hayward. The project site encompasses one assessor's parcel of approximately 6.2 acres at 29831 Clearbrook Circle, north of its intersection with Garin Avenue, in the City of Hayward (Assessor's Parcel Number 083-0254-00206). Figure 1 shows the location of the project site in the regional context. Figure 2 shows an aerial view of the project site and immediate surroundings.

5. Project Sponsor's Name, Address, and Email Address

Abdul Esmail
Archcon Development & Construction Group
192 Singer Lane
Folsom, California 95630
aesmail@archcondcgroup.com

6. General Plan Designation

The project site is within the Limited Medium Density Residential (LMDR) land use designation in the Hayward 2040 General Plan.

Figure 1 Regional Location



Figure 2 Project Site Location



7. Zoning

Most of the project site is zoned Limited Medium Density Residential (RMB3.5), and the remaining portion at the rear (eastern part) of the site is zoned Planned Development (PD). The site is also within the Mission-Garin Area Special Design (SD-5) District. The proposed project would be subject to the Hayward Hillside Urban Design and Urban/Wildland Interface Guidelines.

8. Surrounding Land Uses and Setting

The project site is located near the southeastern edge of the City of Hayward approximately 0.5 miles east of Mission Boulevard. The site is bounded by Clearbrook Circle and single-family residences to the east, Woodland Avenue and multi-family residences to the north, Garin Avenue and undeveloped land to the South, and single-family residences to the west. Single-family and multi-family residential buildings that range from one to three stories are to the east and west of the site. In addition, vacant undeveloped land is located north and south of the site, across Woodland Avenue and Garin Avenue. (This adjacent parcel has been graded for redevelopment, but no entitlement application has been approved.) Open land continues further northeast into unincorporated Alameda County.

The site is currently vacant and undeveloped. The existing PD zoning district at the site was approved with a Preliminary Development Plan that included a new residential development; however, that plan was never finalized, and no new uses were constructed. The site currently supports grassland vegetation and scattered trees. According to an Arborist Report prepared for the project, there are 25 existing trees within the project site, mostly concentrated near its northwestern corner (Arborwell, Inc. 2019, Appendix B). The site is moderately to steeply sloped downward from the east and north to the west and south. The Hayward Fault crosses the project site at its eastern edge.

Figure 3 and Figure 4 include photographs of the project area and surrounding site.

9. Description of Project

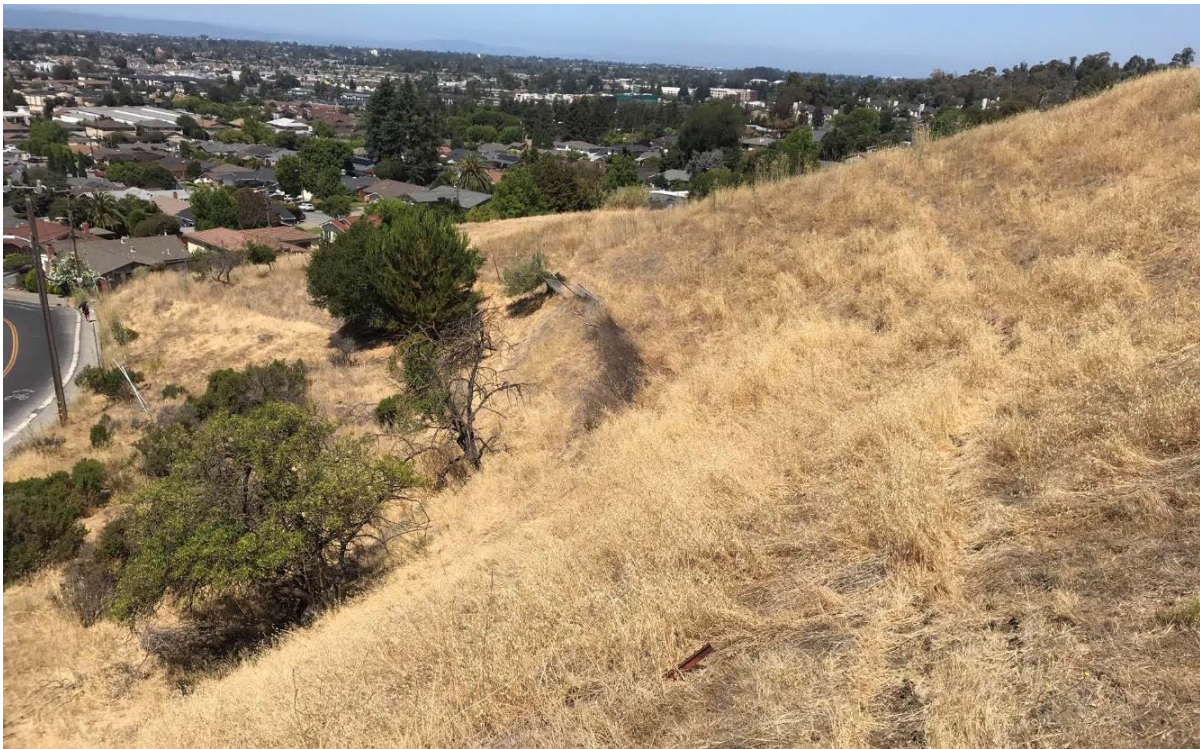
The proposed project would involve rezoning the portion of the site that is currently zoned RMB3.5 to the PD zoning district and the construction of three buildings that would together operate as a religious facility and associated offices. The three new buildings would include a one-story, 3,380 square-foot office building, a two-story 7,128 square-foot multi-purpose room building, and a two-story 20,470 square-foot 600-seat church and sanctuary building. The buildings would be used for church services, Sunday school classes, and community events. After construction is complete, the congregation would relocate from its current location at 31123 Mission Boulevard in Hayward.

The buildings would be constructed near the middle of the site and would be connected via covered breezeways. The church building would be constructed between the other two buildings; the office building would be constructed north of the church building and the multi-purpose building would be constructed to the south. The church building would include a main sanctuary space, a library, a coffee shop (open to parishioners during services and special events), and offices and conference rooms. The multi-purpose building would include a kitchen and several multi-purpose rooms, and the office building would include office spaces and an additional conference room.

Figure 3 Site Photographs – Photographs 1 and 2



Photograph 1. View of rear (eastern) portion of the site, looking east



Photograph 2. View of front (western) portion of the site and Garin Avenue, looking west

Figure 4 Site Photographs – Photographs 3 and 4



Photograph 3. View of abutting residential development near the site's southwest corner, looking west



Photograph 4. View of site from Woodland Avenue, looking northeast

The buildings would be accessed from a surface 135-space parking lot that would span across the western portion of the site. The parking lot would be accessed from two new driveways at either end of the lot. The driveway at the southern portion of the site would connect to Garin Avenue and the driveway at the northern portion of the site would connect to Woodland Avenue. Table 1 provides a summary of the proposed project, Figure 5 shows the proposed site plan, and Figure 6 and Figure 7 show proposed renderings of the site and new buildings.

Open Space and Landscaping

The project would involve removal of 12 of the existing trees to accommodate the new construction and provision of approximately 42,590 square feet of landscaped open space. The Preliminary Planting Plan (Michael P. Scheele, Landscape Architect, October 2019) includes proposed replacement for the removal of protected trees in the form of planting 219 new trees, including street, parking lot, and screening trees.

New outdoor areas would be designed as gathering and play spaces surrounded by new landscaping, including new trees. The area north of the buildings would include a basketball court, a fenced play structure, and a community garden, and other areas between and around the buildings would be landscaped as outdoor meeting and play areas. The surface parking lot would be covered with a pervious paving system. In addition, two bioretention treatment basins would be installed at the northern and southern edges of the site.

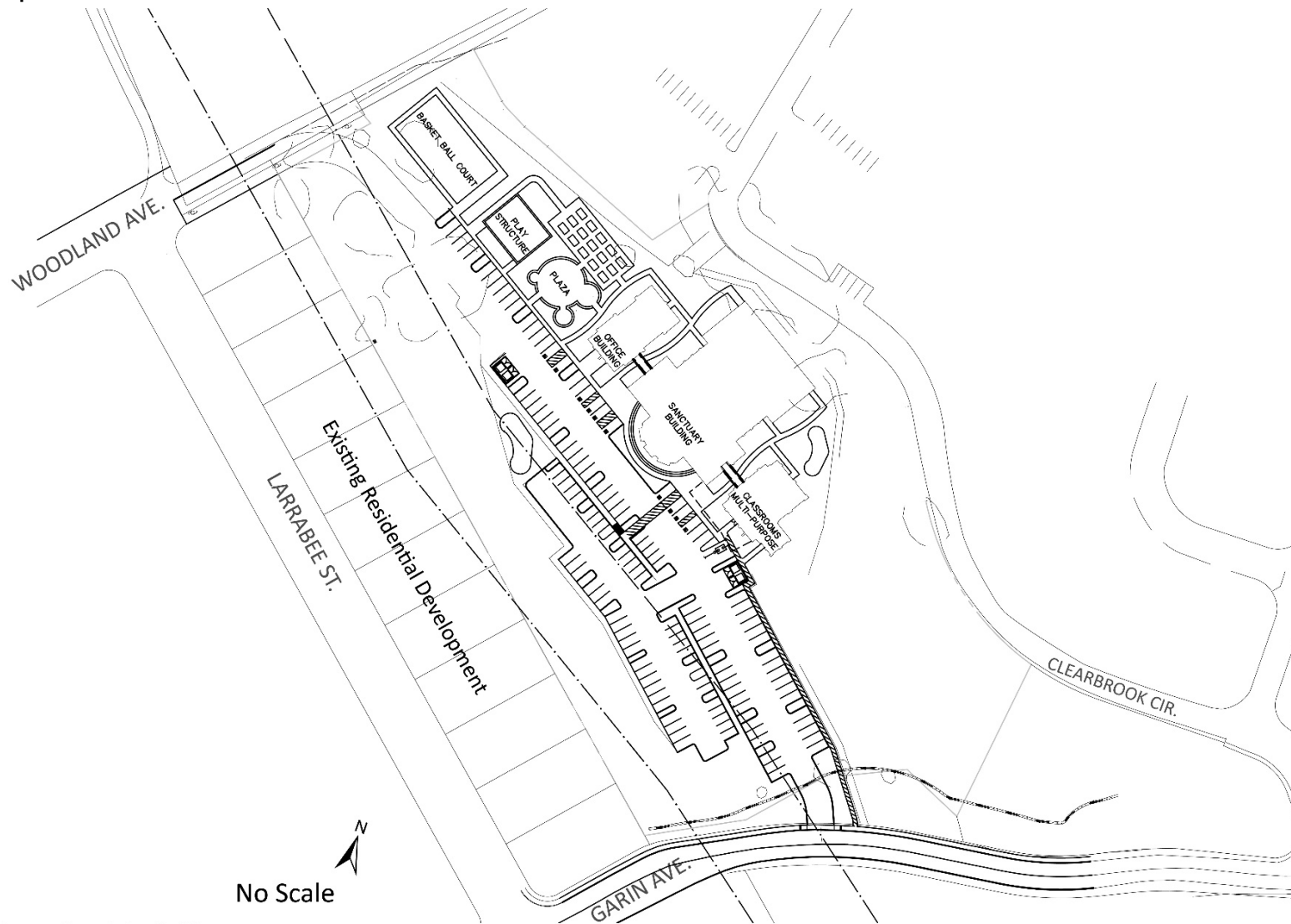
Construction and Grading

The project has been designed so that new construction would avoid larger slopes and the Hayward fault zone. While the project site includes slopes that exceed 20 percent, most of the new construction would occur on the flattest portion of the site with slopes below 20 percent. Project-related ground disturbance would involve cut and fill activities to flatten the site's existing topography, with ground-disturbing activities impacting sediments to depths of approximately 20 feet below ground surface. Grading for the three building foundations are anticipated to impact depths of six feet below ground surface. While retaining walls and a portion of the proposed parking lot are proposed within the earthquake fault zone, the proposed buildings would be located outside the designated fault zone. Excavations for several retaining walls are anticipated to involve six-foot-cut by six-foot-bench terraces. In addition, the project sponsor anticipates that most excavated soil would be used to balance areas with fill. To complete the construction of the project, including grading for the surface parking lot and new buildings, approximately 800 cubic yards of soil would be imported. Including grading, site preparation, and construction, project implementation would take approximately 18 months.

Table 1 Project Summary

Project site	
Lot Size	270, 943 sf (6.22 acres)
Building Floor Area	
Church Building	20,470 sf
Multi-purpose Building	7,128 sf
Office Building	3,380 sf
Total	30,978 sf
Parking Spaces	
Compact	34 spaces
Accessible	10 spaces
Standard	92 spaces
Van Shuttle	2 spaces
Total	135 spaces
Open Space	
Open Space Area	42,590 square feet
Notes: sf = square feet	

Figure 5 Proposed Site Plan



Source: Archcon Development and Construction Group, Inc., 2019.

Figure 6 Proposed Rendering – Entire Project Site, Looking Southeast



Figure 7 Proposed Rendering – New Buildings, Looking Northeast



10. Required Approvals

The following approvals and permits from the City of Hayward would be required for the proposed project:

- Zone change from RMB3.5 (Medium Density Residential) and PD (Planned Development) to a new PD District
- Preliminary Development Plan and Precise Development Plan (as a part of the newly established PD district)
- Grading, Encroachment, Tree Removal, and Building Permits

11. Other Public Agencies Whose Approval is Required

The City of Hayward is the lead agency with responsibility for approving the proposed project. No other public agency's approval is required.

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On April 3, 2020, the City of Hayward sent the Lone Band of Miwok Indians an Assembly Bill (AB) 52 notification letter via certified mail. Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. The City did not receive a request for formal consultation under AB 52. Copies of AB 52 correspondence for this project are included in Appendix H.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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



Signature

Edgar Maravilla

Printed Name

October 21, 2020

Date

Associate Planner

Title

Environmental Checklist

1 Aesthetics

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

a. *Would the project have a substantial adverse effect on a scenic vista?*

The aesthetic quality in the City of Hayward is generally characterized by a relatively urban, dense development pattern that can restrict scenic views. However, locations in the hills and some points on the shoreline provide scenic vistas of San Francisco Bay and the East Bay Hills, respectively. The Hayward 2040 General Plan characterizes the City's scenic vistas as views of natural topography, open grassland vegetation, the East Bay hills, and the San Francisco Bay shoreline. In addition, portions of Interstate 580 (I-580), Interstate 880 (I-880), and State Route 92 within the City are designated as Alameda County scenic highways (City of Hayward 2014a). Moreover, Policy LU-7.2 of the Hayward General Plan calls for the City to "discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside."

As Figure 3 and Figure 4 show, the project site is an open vegetated area in the hills, and the proposed project would replace the open area with church and office buildings and outdoor recreation areas. Therefore, the project would result in a reduction of the open land near the City's

hills and could result in impacts to views. The site slopes southwestward and provides westward views towards the development at lower elevations. Given these existing conditions, the proposed development could obstruct views available from the areas east of the site. However, existing residential development abuts the project site at the east and west; the proposed project would fill a gap in development instead of encroaching on larger undeveloped open space areas. Further, the proposed height and location of the new buildings would ensure that views from and near the site would be generally preserved. The new buildings would be relatively low (between 18 and 30 feet tall) and constructed at the lowest and flattest portion of the site, near the north edge of the site. Given the slope of the terrain at the southeastern portion of the site, which would remain undeveloped, the new buildings would be located at a lower elevation than the existing development to the east and would therefore not substantially obstruct westward views available from the buildings and roads east of the site. In addition, given the proposed location and height of the new structures, eastward views of the hills from nearby public viewpoints, including Garin Avenue and Larrabee Street, would not be obstructed. Accordingly, existing lines of sight from or to the hills would not be substantially affected and the project would comply with General Plan policies related to protection of scenic vistas. Impacts related to scenic vistas would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The designated state scenic highway closest to the project site is a portion of I-580 at the northern edge of the city, approximately 4.75 miles north of the project site (California Department of Transportation [Caltrans] 2019). The project site is not visible from I-580 and therefore the proposed project would not damage scenic resources within view of a state scenic highway. No impact would occur.

NO IMPACT

- c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is in an urbanized area. Development of the project would require a zone change to apply a new Planned Development (PD) designation to the site. Approval of the proposed PD would be subject to the review of the Planning Commission and City Council to ensure compliance with applicable zoning standards and guidelines. In addition, approval of the PD would be subject to several findings in HMC Section 10-1.2535, including the following related to scenic quality:

1. The development is in substantial harmony with the surrounding area and conforms to the General Plan and applicable City policies.
2. In the case of nonresidential uses, that such development will be in conformity with applicable performance standards, will be appropriate in size, location, and overall planning for the purpose intended, will create an environment of sustained desirability and stability through the design and development standards, and will have no substantial adverse effect upon surrounding development.

The proposed project is expected to be consistent with the existing development pattern in the surrounding area because, as described under question (a), it would fill a gap in development between existing residential neighborhoods. Moreover, the proposed heights, massing, and building separations would not be a substantial change for the existing neighborhood. Prior to approval of the project, the Hayward Planning Commission and City Council would review the development plans submitted for the project to ensure that the above findings could be made, including that proposed design would be harmonious with surrounding development. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project site is in an urbanized area with low to moderate levels of existing light typical of a low to medium density residential neighborhood. The surrounding residential and roadway uses generate light and glare along all sides of the property. Primary sources of light adjacent to the project site include interior and exterior lighting associated with the existing residential and commercial buildings, vehicle headlights, and streetlights. The primary source of glare adjacent to the project site is the sun's reflection from metallic, glass and light-colored surfaces on buildings and on vehicles parked on adjacent streets and in adjacent parking areas.

The proposed project would introduce additional sources of lighting and glare as the project site is currently not developed. The proposed project would not include streetlights on roadways, but it would involve installation of exterior lighting to illuminate driveways, surface parking areas, and outdoor recreation areas. The proposed project would also introduce light and glare from headlights from vehicles entering and exiting the project driveway on Woodland Avenue and Garin Avenue. Sources of glare associated with the project site would include vehicles parked in the parking lot. These sources of light and glare would be similar to existing sources surrounding the site, particularly multi-family development to the northeast, and would be consistent with other uses in the area. No highly reflective glass or metallic elements are proposed as part of the proposed project. In addition, the project would be subject to the following City of Hayward Standard Conditions of Approval:

- Lighting within the parking area(s) shall be provided and be maintained at a minimum of one foot-candle. Exterior lighting and parking lot lighting shall be provided in accordance with the Security Standards Ordinance (No. 90-26 C.S.) and be designed by a qualified lighting designer and erected and maintained so that light is confined to the property and will not cast direct light or glare upon adjacent properties or public rights-of-way. Such lighting shall also be designed such that it is decorative and in keeping with the design of the development.
- Plans submitted for building permit shall include a photometric site lighting plan that includes fixtures, mounting heights, light wattage and that demonstrates adequate site lighting without excessive glare, off-site impacts or "hot spots." All lighting shall be reviewed and approved by the City Engineer, Planning Division and Hayward Police Department prior to Building Permit issuance.
- All lighting fixtures shall incorporate a shield to allow for downward illumination. No spillover lighting to adjacent properties is permitted and all exterior lighting on walls, patios or balconies shall be recessed/shielded to minimize visual impacts.

Compliance with the above Conditions of Approval would ensure that the project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

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

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- c. *Would the project 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. *Would the project 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?*

The project site is in an urbanized area of Hayward. The site is designated as LMDR (Limited Medium Density Residential) in the City's General Plan and zoned RMB3.5 (Medium Density Residential) and PD (Planned Development). The California Department of Conservation (DOC) identifies Grazing Land southeast of the project site, across Garin Avenue and further east into Garin Regional Park (DOC 2016). However, the DOC identifies the project site as "Urban and Built-Up Land," and the site is not identified as any of the farmland types under the Farmland Mapping and Monitoring Program. The site is not enrolled in Williamson Act contracts and does not support forest land or resources (DOC 2016). The proposed project would fill in a gap between developed areas east and west of the areas and would not result in the loss of farmland or forest land. For these reasons, the proposed project would have no impact with respect to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contract; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Air Quality Standards and Attainment

The project site is located within the San Francisco Bay Area Air Basin (the Basin), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the Basin is classified as being in "attainment" or "nonattainment." Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. BAAQMD is in non-attainment for the state and federal ozone standards, the state and federal PM_{2.5} (particulate matter 2.5 microns in size or less) standards and the state PM₁₀ (particulate matter 10 microns in size or less) standards and is required to prepare a plan for improvement (BAAQMD 2017a).

The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table 2.

Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ^a

¹ More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: United States Environmental Protection Agency, Air Quality Criteria for Particulate Matter, October 2004.

Source: USEPA 2018

Air Quality Management

The Bay Area 2017 Clean Air Plan (the 2017 Plan) provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the 2017 Plan is to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with state air quality planning requirements as codified in the California Health & Safety Code. Although steady progress in reducing ozone levels in the Basin has been made, the region continues to be designated as non-attainment for both the one-hour and eight-hour state ozone standards. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, state law requires the 2017 Plan to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins (BAAQMD 2017b).

In 2006, the U.S. Environmental Protection Agency (USEPA) reduced the national 24-hour PM_{2.5} standard regarding short-term exposure to fine particulate matter from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³. Based on air quality monitoring data for the 2006-2008 cycle showing that the region was slightly above the standard, the USEPA designated the Basin as non-attainment for the 24-hour national standard in December 2008. This triggered the requirement for the BAAQMD to prepare a State Implementation Plan (SIP) submittal to demonstrate how the region would attain the standard. However, data for both the 2008-2010 and the 2009-2011 cycles showed that PM_{2.5} levels in the Basin currently meet the standard. On October 29, 2012, the USEPA issued a proposed rule-making to determine that the Basin now attains the 24-hour PM_{2.5} national standard. Based on this, the Basin is required to prepare an abbreviated SIP submittal, which includes an emission inventory for primary (directly-emitted) PM_{2.5}, as well as precursor pollutants that contribute to formation of secondary PM in the atmosphere; and amendments to BAAQMD New Source Review (NSR) to address PM_{2.5} (adopted December 2012). However, key SIP requirements to

demonstrate how a region will achieve the standard (i.e., the requirement to develop a plan to attain the standard) will be suspended as long as monitoring data continues to show that the Basin attains the standard.

In addition to preparing the “abbreviated” SIP submittal, the BAAQMD has prepared a report entitled “Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area” (BAAQMD 2012). The report helps guide the BAAQMD’s on-going efforts to analyze and reduce PM in the Bay Area in order to better protect public health.¹ The Basin will continue to be designated as nonattainment for the federal 24-hour PM_{2.5} standard until such time as the BAAQMD elects to submit a “redesignation request” and a “maintenance plan” to the USEPA, and the USEPA approves the proposed redesignation.

Air Emission Thresholds

This analysis uses BAAQMD’s 2017 CEQA Air Quality Guidelines (2017c) to evaluate air quality impacts for construction and operation. The BAAQMD developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. If all of the screening criteria are met by a project, then the lead agency or applicant does not need to perform a detailed air quality assessment of their project’s air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration (BAAQMD 2017c).

Construction

For places of worship such as the proposed project, BAAQMD’s construction-related screening size is 277,000 square feet. The proposed project would involve 30,978 square feet of new buildings associated with a church and is therefore well below the construction screening criteria. However, if a project includes simultaneous occurrence of two or more construction phases (e.g., paving and building construction occurring simultaneously), the screening criteria for construction may not be used to preclude evaluation of the project’s construction-related criteria pollutant emissions. Therefore, because the project construction schedule includes simultaneous occurrence of two or more construction phases, the screening criteria for construction cannot be used. As a result, the BAAQMD significance thresholds for criteria air pollutants were analyzed.

BAAQMD provides numeric thresholds for evaluating the significance of criteria pollutants for projects that exceed the screening criteria or for projects where the screening criteria do not apply. Table 3 presents the numeric significance thresholds for construction-related criteria air pollutant and precursor emissions adopted by BAAQMD. These represent the levels at which a project’s individual emissions of criteria air pollutants or precursors during construction would result in a cumulatively considerable contribution to the Basin’s existing air quality conditions. If the project’s construction-related criteria pollutant emissions exceed the thresholds shown Table 3, the proposed project would result in a significant construction-related air quality impact.

¹ PM is made up of particles that are emitted directly, such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from chemical reactions involving precursor pollutants such as oxides of nitrogen, sulfur oxides, volatile organic compounds, and ammonia.

Table 3 Criteria Air Pollutant Significance Thresholds for Construction

Pollutant	Average Daily Emissions (lbs/day)
ROG	54
NO _x	54
PM ₁₀	82 (exhaust)
PM _{2.5}	54 (exhaust)
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices

Source: BAAQMD 2017c

Operation

The operational criteria pollutant screening size for places of worship is 439,000 square feet. Because the proposed project would include construction of approximately 30,978 square feet for a place of worship, the project falls below the screening size. Therefore, per BAAQMD guidance, a detailed air quality assessment of the project's criteria air pollutant emissions in comparison to numeric thresholds is not necessary (BAAQMD 2017c).

Methodology

The project's construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., place of worship, office building, parking lot), and location, to model a project's emissions.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the applicant-provided construction schedule and construction equipment list. It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with the 2019 CALGreen, and the 2019 Building Energy Efficiency Standards.

Impact Analysis

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

The California Clean Air Act requires that air districts create an air quality plan that describes how the jurisdiction will meet air quality standards. These plans must be updated every three years. The most recently adopted air quality plan in the Basin is the 2017 Plan. As described under *Air Quality Management*, the 2017 Plan updates the most recent ozone plan - the 2010 Clean Air Plan - pursuant to air quality planning requirements defined in the California Health & Safety Code. To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors (reactive organic gases and nitrogen oxides) and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Plan builds upon and enhances the air district's efforts to reduce emissions of fine particulate matter and toxic air contaminants. The 2017 Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes measures related to stationary sources,

transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-greenhouse gas (GHG) pollutants.

The 2017 Plan focuses on two paramount goals (BAAQMD 2017b):

- Protect air quality and health at the regional and local scale by attaining all state and national air quality standards and eliminating disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Protect the climate by reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050

Under BAAQMD's methodology, a determination of consistency with the 2017 Plan should demonstrate that a project (BAAQMD 2017c):

- Supports the primary goals of the 2017 Clean Air Plan;
- Includes applicable control measures from the 2017 Clean Air Plan; and
- Would not disrupt or hinder implementation of any control measures in the 2017 Clean Air Plan.

A project that would not support the 2017 Plan's goals would not be considered consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the 2017 Plan's goals. As shown in the discussion under checklist items b and c (see below), the project would not result in exceedances of BAAQMD thresholds for criteria air pollutants and thus would not conflict with the 2017 Plan's goal to attain air quality standards. Furthermore, as shown in Table 4, the proposed project would include applicable control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of such control measures. Therefore, the proposed project would result in a less than significant impact related to consistency with the 2017 Plan.

Table 4 Project Consistency with Applicable Control Strategies of 2017 Clean Air Plan

Control Strategy	Evaluation
Direct new development to areas that are well served by transit, and conducive to bicycling and walking.	Consistent. The project would involve construction of a new church on a vacant lot within an existing residential neighborhood. The church would be within walking distance of many Hayward residents. In addition, the site is approximately 1.5 miles from the South Hayward Bart station and approximately 125 feet from a bus stop served by the AC transit 99 bus line.
Reduce demand for vehicle travel, and high-carbon goods and services.	Consistent. As described below in Section 17, <i>Transportation</i> , the project would result in reduced vehicle miles traveled (VMT) compared to its current location.
Promote energy and water efficiency in both new and existing buildings.	Consistent. The proposed church would be required to comply with 2019 CALGreen standards, which include measures for energy and water efficiency.

Source: BAAQMD 2017b

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project 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?*

The proposed project would result in temporary construction emissions and long-term operational emissions. Construction activities such as the operation of construction vehicles and equipment over unpaved areas, grading, trenching, and disturbance of stockpiled soils have the potential to generate fugitive dust (PM₁₀) through the exposure of soil to wind erosion and dust entrainment. In addition, exhaust emissions associated with heavy construction equipment would generate criteria air pollutant emissions. Long-term emissions associated with operational impacts would include emissions from vehicle trips (mobile sources), natural gas use (energy sources), and landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources).

Construction Emissions

Criteria Air Pollutant Emissions

As described in the project description, construction would occur over approximately 18 months. Table 5 summarizes the estimated maximum daily emissions of criteria air pollutants during construction on the project site. As shown in the table, construction emissions would not exceed BAAQMD thresholds. Therefore, impacts would be less than significant.

Table 5 Construction Emissions

Year	Daily Emissions (lbs/day)					
	ROG	NO _x	CO	PM ₁₀ (exhaust)	PM _{2.5} (exhaust)	SO _x
Maximum Daily Emissions ¹	19.0	28.1	32.0	1.4	1.3	<0.1
BAAQMD Thresholds (average daily emissions)	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

¹ See Table 2.1 "Overall Construction-Unmitigated" emissions. CalEEMod worksheets in Appendix A. Emission data presented is the highest of winter or summer outputs.

N/A = not adopted (The BAAQMD has not adopted thresholds for construction emissions of CO or SO_x); lbs/day = pounds per day; ROG = reactive organic gases; NO_x = oxides of nitrogen; CO = carbon monoxide; PM_{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; SO_x = oxides of sulfur

Fugitive Dust

Site preparation and grading may cause wind-blown dust that could contribute particulate matter into the local atmosphere. The BAAQMD has not established a quantitative threshold for fugitive dust emissions but rather states that projects that incorporate best management practices (BMPs) for fugitive dust control during construction would have a less than significant impact related to fugitive dust emissions. The project would be required to implement dust control measures during grading and clearing activities per HMC Section 10-8.32, which includes requirements to use watering or dust palliative to contain dust and to immediately remove any earth material spilling or

accumulating on a public street. Therefore, construction-related fugitive dust emissions would be less than significant.

Operational Emissions

As described under *Air Emission Thresholds* above, the proposed project would involve a 30,978 square-foot church, which is below BAAQMD's operational criteria pollutant screening size for places of worship of 439,000 square feet. As a result, per BAAQMD guidance, a detailed air quality assessment of their project's criteria air pollutant emissions is not necessary, and project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as population groups that are more susceptible to exposure to pollutants and examples include health care facilities, retirement homes, school and playground facilities, and residential areas. The nearest sensitive land uses are multi-family residential buildings approximately 50 feet northeast of the project site and single-family residential buildings approximately 50 feet west of the project site, along Larrabee Street. These uses could be exposed to toxic air contaminant (TAC) emissions, which are defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.

Construction Impacts

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 18 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 18 months) is approximately 2 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017c). Therefore, this analysis qualitatively discusses potential health risks associated with construction-related emissions

of TACs, focusing on construction activities most likely to generate substantial TAC emissions and the duration of such activities relative to established, longer-term health risk exposure periods.

The maximum PM₁₀ and PM_{2.5} emissions would occur during grading activities. These activities would last for approximately five months. PM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less construction equipment. While the maximum DPM emissions associated with site preparation and grading activities would only occur for a portion of the overall construction period, these activities represent the maximum exposure condition for the total construction period. The duration of site preparation and grading activities would represent less than one percent of the total exposure period for a 70-year health risk calculation. Therefore, DPM generated by project construction would not create conditions where the probability is greater than 10 in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. This impact would be less than significant.

Operational Impacts

In the Bay Area, a number of urban or industrialized communities exist where the exposure to TACs is relatively high compared to other communities. However, according to the BAAQMD CEQA Guidelines, the project site is not located in an impacted community (BAAQMD 2017b). Sources of TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The project does not include construction of new gas stations, dry cleaners, highways, roadways, or other sources that could be considered new permitted or non-permitted source of TAC or PM_{2.5} in proximity to receptors. In addition, the project would not introduce a new stationary source of emissions and would not result in particulate matter greater than BAAQMD thresholds (see response under questions a and b). Therefore, it would not expose nearby sensitive receptors to substantial pollutant concentrations, and a Health Risk Assessment was not performed for this project. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Table 3-3 in the BAAQMD's 2017 CEQA Guidelines provides odor screening distances for land uses that have the potential to generate substantial odor complaints. The odor-generating uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017c). The proposed project involves church and office uses and does not include any of the uses identified by the BAAQMD as odor-generating uses. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Setting

The project site is located in a residential area on a west-facing slope, with elevation of the site ranging from approximately 120 to 240 feet above mean sea level. The project site is within a vacant parcel with trees and ruderal grassland vegetation that has been recently mowed and is partially enclosed by a barbed-wire fence. An erosional drainage occurs under a stand of trees at the northwest corner of the parcel. The project site is located 0.35 mile southwest of Garin Regional Park and 0.25 mile north of State Route 238. The site is mostly surrounded by urban and suburban development, including Clearbrook Circle and single- and multi-family residences to the northeast and east, Garin Avenue to the south, and single-family residences to the west. The undeveloped hillside to the north is graded, but, as described above in the *Project Description*, no entitlement has been granted for the parcel. Information contained in this section comes from background literature, resource agency database reviews, and a biological reconnaissance survey of the project site conducted on July 14, 2020 by Rincon Consultants, Inc. biologist Anastasia Ennis.

The majority of the site consists of ruderal vegetation, ornamental trees, and non-native annual grasses. Trees on-site include coast live oak (*Quercus agrifolia*), weeping bottlebrush (*Melaleuca viminalis*), California bay (*Umbellularia californica*), scrub oak (*Quercus berberidifolia*), blue gum eucalyptus (*Eucalyptus globulus*), native plum (*Prunus americana*), and pin oak (*Quercus palustris*). Non-native annual grassland communities observed in the project site are dominated by weedy herbaceous plants such as wild oats (*Avena* spp.), Harding grass (*Phalaris aquatica*), wild fennel (*Foeniculum vulgare*), pampas grass (*Cortaderia selloana*), mustards (*Brassica* spp.), and wild radish (*Raphanus sativus*) with scattered coyote brush (*Baccharis pilularis*). Escaped ornamentals, including palms and pride of madeira (*Echium candicans*), are also present. Western fence lizard (*Sceloporus occidentalis*), black-tailed deer (*Odocoileus hemionus columbarius*), Eurasian collared dove (*Streptopelia decaocto*), Anna's hummingbird (*Calypte anna*), California scrub jay (*Aphelocoma californica*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), and black phoebe (*Sayornis nigricans*) were observed within the site during the reconnaissance survey.

Regulatory Setting

Federal and State

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Hayward).

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under the California Environmental Quality Act (CEQA) and has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS), respectively, have direct regulatory authority over species formally listed as threatened or endangered (and listed as rare for CDFW). Native and/or migratory bird species are protected under the CFGF Sections 3503, 3503.5, and 3511.

Statutes within the Clean Water Act (CWA), CFGF, and California Code of Regulations (CCR) protect wetlands and riparian habitat. The U.S. Army Corps of Engineers (USACE) has regulatory authority over wetlands and waters of the United States under Section 404 of the CWA. The State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) ensure

water quality protection in California pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Water Quality Control Act. The CDFW regulates waters of the State under the CFGC Section 1600 et seq.

Special status species are those plants and animals: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and the National Marine Fisheries Service (NMFS) under the FESA; 2) listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the CESA; 3) recognized as California Species of Special Concern (CSSC) by the CDFW; 4) afforded protection under MBTA or CFGC; and 5) occurring on Lists 1 and 2 of the CDFW California Rare Plant Rank (CRPR) system.

City of Hayward

The City of Hayward Municipal Code (HMC) Chapter 10, Article 15, Tree Preservation, requires a permit for the removal, destruction, or cutting of branches over one inch in diameter, or disfigurement of any Protected Tree. It also requires that all removed or disfigured trees be replaced with like-size, like-kind trees or equivalent value of trees as determined by the City's landscape architect. Protected Trees are defined as:

- Trees having a minimum trunk diameter of eight inches measured 54" 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 (*Arbutus menziesii*)
 - Western Dogwood (*Cornus nuttallii*)
 - California Sycamore (*Platanus racemosa*)
 - Coast Live Oak (*Quercus agrifolia*)
 - Canyon Live Oak (*Quercus chrysolepis*)
 - Blue Oak (*Quercus douglasii*)
 - Oregon White Oak (*Quercus garryana*)
 - California Black Oak (*Quercus kelloggii*)
 - Valley Oak (*Quercus lobata*)
 - Interior Live Oak (*Quercus wislizenii*)
 - California Bay (*Umbellularia californica*)
- A tree or trees of any size planted as a replacement for a Protected Tree.

Additional conditions of approval under the HMC may include, but are not limited to:

- Monitoring of all pruning (including roots), trimming or relocation of Protected Trees by a certified arborist.

- Root zone protection measures including non-movable fencing to establish and maintain protection zones prior to and through completion of construction.
- Maintenance of Protected Trees throughout construction.

Methods

Literature Review

Rincon biologists reviewed agency databases and relevant literature for baseline information on special status species and other sensitive biological resources occurring or potentially occurring at the project site and in the immediate surrounding area. The following sources were reviewed for background information:

- CDFW California Natural Diversity Database (CNDDDB) (CDFW 2020a) and Biogeographic Information and Observation System (BIOS) (CDFW 2020b)
- CDFW Special Animals List (CDFW 2019) and Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020c)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2020)
- USFWS Information for Planning and Consultation (IPaC; USFWS 2019a)
- USFWS Critical Habitat Portal (USFWS 2020b)
- USFWS National Wetlands Inventory (NWI; USFWS 2020c)
- United States Geological Survey (USGS National Hydrography Dataset (NHD, USGS 2020)
- United States Department of Agriculture (USDA) Natural Resources Conservation Services (NRCS) Web Soil Survey (NRCS 2019)

Rincon biologists conducted a review of the CNDDDB (CDFW 2020a) for recorded occurrences of special status plant and wildlife taxa in the region prior to conducting a reconnaissance-level field survey. For this review, the search included all occurrences within the United States Geological Survey (USGS) 7.5-minute topographic quadrangle encompassing the project site (*Hayward*), and the eight surrounding quadrangles (*Oakland East*, *Las Trampas Ridge*, *Diablo*, *San Leandro*, *Dublin*, *Redwood Point*, *Newark*, and *Niles*). Strictly marine, estuarine, and aquatic species were excluded from further analysis given the upland terrestrial nature of the project site. Plant species with specific habitat requirements not present at the site such as vernal pools, alkali or serpentine soils, or higher elevation ranges were also excluded from this analysis.

Rincon compiled the results of the background literature review into a list of regionally occurring special status plants and animals and evaluated each species for potential to occur based on habitat conditions and proximity to known occurrences. Rincon also reviewed the NWI (USFWS 2019c) and the National Hydrography Datasets (USGS 2019) for potential aquatic resources, including jurisdictional waters of the United States or waters of the State.

The arborist report prepared by Arborwell, Inc. (Appendix B) evaluated 25 trees (17 off-site), representing 8 species, the majority of which were typical of those found in Bay Area landscapes, such as coast live oak, weeping bottlebrush, California bay, and several other ornamental and fruit tree species (Arborwell, Inc. 2019).

Biological Survey

On July 14, 2020, Rincon conducted a reconnaissance-level survey of the project site to document site conditions, assess the presence of on-site habitat, and evaluate the potential for special status species and other sensitive biological resources to occur on the project site.

Impact Analysis

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special Status Plants

A review of agency databases for known special status plant occurrences within the nine USGS quadrangles containing and surrounding the project site identified 51 special status plant species (CDFW 2020a; CNPS 2020; USFWS 2020a). All the reported species have specific habitat requirements including such factors as soil type, elevation and aspect among others. The highly disturbed existing conditions and the lack of appropriate soils and native vegetation communities on the site preclude the potential for most rare plants to occur on the site. Rincon biologists determined that of these 51 special status species, only one, Diablo helianthella (*Helianthella castanea*), has the potential to occur within or adjacent to the project site.

Diablo helianthella has a low potential to occur on site. It has a state rank of S2 (imperiled in California) and a CNPS CRPR of 1B.2 (moderately threatened throughout its range in California). It was observed in 2003 within Garin Regional Park, approximately 0.35-mile northeast of the project site (CDFW 2020a). This plant occurs in open, grassy areas with partial shade from trees and shrubs and well-draining soils. The project site occurs within the range of this species and marginally suitable habitat does occur on site; however, due to the disturbed nature of the project site and its location in a developed area, impacts to this species are not expected.

Special Status Wildlife

Forty-seven special status animal species were identified with known occurrence records within the nine USGS quadrangles containing and surrounding the project site (CDFW 2020a; USFWS 2020a). This list was reviewed and refined according to the potential for species to occur on the project site based on the presence and quality of habitats within the project site. Of these, two species have the potential to occur within the site: Western bumble bee (*Bombus occidentalis*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*).

The western bumble bee (state candidate for listing) has a low potential to occur on site. This bee was once widespread in the northwestern United States but is in decline from Central California to southern British Columbia. In California, it has been lost from 53 percent of its historic range and has had an 84 percent decline in relative abundance (Xerces Society et al. 2018). Habitat loss and alteration, pathogens, urban development and fragmentation, and other factors have contributed to its decline. The most recent of the three occurrence records within five miles of the project site is from 1954 (CDFW 2020a). Four unconfirmed sightings have been reported between 5 and 9 miles northwest of the project site within the last two years (Xerces Society et al. 2020); however, confirmed populations are thought to be restricted to higher elevations in the Sierra Nevada since 2012 (Xerces Society et al. 2018). A generalist forager, the western bumble bee nests underground

in cavities or rodent burrows. It requires limited ground disturbance and an abundance of floral resources, as well as suitable overwintering sites for queens. Given the precipitous decline in bumblebees over the last two decades, absence of recent confirmed sightings in the project vicinity, and the disturbed nature of vegetation communities on-site, there is a very low likelihood that the project site provides suitable habitat for this species.

The Alameda whipsnake (a state and federally threatened species) has a low potential to occur on site. USFWS-designated critical habitat for this species occurs 0.5-mile east of the project site, and there are 17 CNDDDB occurrence records within five miles of the project site (CDFW 2020a). This species is found in scrub or chaparral habitat, or in oak woodlands or annual grassland near scrub habitats with rock outcroppings. While marginal habitat (ruderal/disturbed grassland, Coast live oak and California bay woodland) is present, the project site is surrounded on all sides by developed and disturbed areas, does not contain rock outcrops or chaparral habitat, and has no connectivity to chaparral or scrub habitat. As such, there is a very low likelihood that the project provides suitable habitat for this species. Therefore, overall, because the western bumble bee and Alameda whipsnake are not expected to be present, impacts to these species would not occur.

Despite the lack of robust native vegetation communities, the site could be used by species of migratory birds that utilize trees, shrubs, or sparse ground cover as nesting habitat. Native bird nests are protected by CFGC Section 3503. The nesting season generally extends from February 1st through August 31st in California but can vary based upon annual climatic conditions. Construction activities could result in the mortality of, or injury to birds from construction activity, or disturbance-related nest abandonment as a result of tree removal, construction activity and noise. Impacts to most non-listed bird species through nest destruction or abandonment would not be considered a significant impact under CEQA; however, loss of active nests or mortality would be a violation of CFGC code. Impacts to special status birds may be considered significant under CEQA if those impacts would jeopardize the viability of a local or regional population.

Mitigation Measures

The following mitigation measure would be required to avoid or reduce the proposed project's potentially significant impacts to nesting birds and special status wildlife.

BIO-1 Nesting Bird Avoidance and Minimization Efforts

If project construction activities occur during the nesting season (between February 1st and August 31st) a qualified biologist shall conduct a pre-construction survey for nesting birds no more than 14 days prior to construction. The survey shall include the entire project site and a 300-foot buffer to account for nesting raptors. If nests are found the qualified biologist shall establish an appropriate species-specific avoidance buffer of sufficient size to prevent disturbance by project activity to the nest (up to 300 feet for raptors, up to 150 feet for all other birds).

During construction, active nests identified during the preconstruction survey shall be monitored by the qualified biologist to determine if construction activities are causing any disturbance to the bird and shall increase the buffer if it is determined the birds are showing signs of unusual or distressed behavior associated with project activities. Atypical nesting behaviors that may cause nest abandonment include, but are not limited to, defensive flights, vocalizations directed towards project personnel/activities, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority, through the construction manager, to order the cessation of all project activities if the nesting birds exhibit atypical behavior that may cause nest failure (nest abandonment and loss of eggs and/or young) until a refined appropriate buffer is

established. To prevent encroachment, the established buffer(s) should be clearly marked by high visibility material. The established buffer(s) should remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. The monitoring biologist, in consultation with the resident engineer and project manager shall determine the appropriate protection for active nests on a case by case basis using the criteria described above. The qualified biologist shall prepare a nest monitoring report at the time monitoring has been completed. The report will document the methods and results of the monitoring, and the final status of the nest (i.e., successful fledging of the nest, nest depredation, nest failure due to construction activity).

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would ensure protection of nesting birds that may be on-site during construction activities. These measures would reduce the potentially significant impact to special-status species to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Based on a review of information on biological resources within the project region and data collected during the reconnaissance site visit, no riparian habitats or sensitive natural communities are present in the project area. No impacts would occur as a result of project activities.

NO IMPACT

- c. *Would the project 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?*

No federally protected wetlands as defined by Section 404 of the Clean Water Act occur at the project site. Therefore, the project would not have an adverse effect on federally protected wetlands, and no impact would occur.

Based on a review of information on biological resources within the project region and data collected during the reconnaissance site visit, no vegetated wetlands or potentially jurisdictional features occur within the project area. Both NWI and NHD show an ephemeral stream that enters the project site from the center of the eastern edge, along Clearbrook Circle, and extends approximately 175 feet into the project site. No evidence of a stream (bed and bank) was observed at this location during the site survey; however, an erosional feature was observed under a stand of coast live oak and California bay in the northwest corner of the site. A pipe was exposed within this erosional feature suggesting that this pipe was formerly buried and the soil has eroded around it. A storm drain at the bottom of the slope likely diverts flows to the municipal sewer system. This eroded feature does not fall under state jurisdiction, therefore, no impacts to jurisdictional wetlands or waters would occur.

NO IMPACT

- d. *Would the project 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?*

The project site consists of developed and disturbed areas with primarily ornamental vegetation and weedy species dispersed throughout. Land use in the vicinity is primarily residential with no connectivity to natural habitats and is therefore not expected to support wildlife movement. No impacts to wildlife movement corridors would occur as a result of project activities.

NO IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Under regulatory setting, HMC Chapter 10, Article 15, Tree Preservation, requires a permit for the removal, destruction, or cutting of branches over one inch in diameter, or disfigurement of any Protected Tree, among other requirements. An arborist report was prepared by Arborwell in August 2019 for submission to the City (Arborwell 2019, see Appendix B of this report). All 25 trees assessed in the report qualified as Protected Trees. The proposed project would involve the removal of 12 of the 25 Protected Trees according to the preliminary development plan/arborist report. The remaining 13 Protected Trees evaluated in the arborist report would be preserved. The total estimated value of the 12 trees to be removed is \$65,140.88 (Arborwell 2019).

The current Preliminary Planting Plan (Michael P. Scheele, Landscape Architect, October 2019) includes proposed mitigation for the removal of protected trees in the form of planting 219 new trees, including street, parking lot, and screening trees, for a total proposed mitigation cost of \$80,600. This meets the HMC requirement for replacement with an equal value tree or trees as those trees planned for removal. Therefore, the proposed project would not conflict with Chapter 10, Article 15, Tree Preservation of the HMC. However, another goal of tree preservation is maintenance of tree health over many years. Trees retained on or adjacent to the project site that are injured during construction or are inadequately maintained may decline or die. Measures to protect trees during and after construction are required to ensure long-term health and sustainability of preserved and replacement trees. Mitigation measures BIO-2 and BIO-3 are required to reduce impacts to less than significant levels.

Mitigation Measures

The following mitigation measures would be required to ensure that the proposed project is consistent with the tree preservation requirements included in HMC Chapter 10, Article 15, Tree Preservation. The following measures would help to reduce impacts to trees from development and maintain and improve their health and vitality over time. With implementation of the measures below, the proposed project would not conflict with a local or regional ordinance.

BIO-2 Tree Preservation Measures

Tree Preservation measures are required to protect trees that will be preserved in place and replacement trees that will be planted as required by HMC Chapter 10, Article 15. Recommendations to maintain health of protected trees that will be preserved, including crown cleans and trimming measures, are outlined in the arborist report (Arborwell 2019):

PRE-CONSTRUCTION AND DEMOLITION MEASURES

1. Establish a Tree Protection Zone around each tree to be preserved. The Tree Protection Zone, as defined by HMC, shall be an additional foot from the center point of the tree beyond the farthest point of the dripline of the tree. No grading, excavation, construction or storage of materials shall occur within that zone.
2. Install protection around all trees to be preserved. Use a substantial construction fence, such as a non-moveable chain link fence. No entry is permitted into a Tree Protection Zone without permission of the Project Arborist.
3. Trees to be removed shall be felled so as to fall away from the Tree Protection Zones and avoid pulling and breaking of roots of trees to remain. If roots are entwined, the consultant may require first severing the major woody root mass before extracting the trees or grinding the stump below ground.
4. Trees to be retained may require pruning to provide clearance and/or correct defects in structure as outlined in the arborist report (Arborwell 2019). All pruning is to be performed by an ISA Certified Arborist or Certified Tree Worker and shall adhere to the latest editions of the ANSI Z133 and A300 standards as well as the ISA Best Management Practices for Tree Pruning. Pruning contractor shall have the C25/D61 license specification.
5. All tree work shall comply with the California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season (see Mitigation Measure BIO-1).

TREE PROTECTION DURING CONSTRUCTION

1. Any grading, construction, demolition or other work that may encounter tree roots shall be monitored by the Project Arborist.
2. If injury should occur to any tree during construction, it shall be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.
3. Fences will be erected to protect trees to be preserved. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Project Arborist.
4. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.

BIO-3 Tree Replacement and Maintenance

Replacement trees shall be planted with sufficient space to accommodate the mature size of the species and maintained sufficiently to ensure establishment. Preserved trees shall also be maintained to ensure the continued long-term health of the tree. Trees onsite will require monitoring and routine maintenance by a landscape specialist such as occasional pruning, fertilization, mulch, pest management, replanting and irrigation.

Significance After Mitigation

Implementation of mitigation measures BIO-2 and BIO-3 would ensure preservation, replacement, and maintenance of Protected Trees during and after construction activities. These measures would follow the local tree ordinance and would reduce the potentially significant impact to Protected Trees to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

There are no habitat conservation plans, natural community conservation plans, or other similar plans that govern activities on the project site. As described in the *Project Description*, the project is located within the Mission-Garin Area Special Design (SD-5) District, which is regulated by the Mission Garin Neighborhood Plan. The Plan includes the following Policy and Strategy related to biological conservation:

Policy: The aesthetic, ecological and recreational resources of the hills will be conserved.

Strategy: Seek clustering of development which maintains continuity of open space.

The proposed project would fill a gap of development between existing residential uses and, as described under question d, the site has no significant connectivity to natural habitats and is not expected to support wildlife movement or disrupt the continuity of open space. The project would therefore be consistent with the Mission Garin Neighborhood Plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

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

Regulations

The California Environmental Quality Act (CEQA) requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a] [1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Historical and Archaeological Resources Investigation

Rincon Consultants prepared an archaeological resources study for the proposed project in July 2020; it is included as Appendix C. This study was comprised of a records search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC), a pedestrian survey, a search of the Sacred Lands File (SLF), and a review of historic aerial maps.

Rincon requested a records search of CHRIS at the NWIC, located at Sonoma State University, on March 26, 2020. The search was performed to identify previously recorded archaeological resources, as well as previously conducted cultural resources studies within the project site and a 1.6 -kilometer (0.5-mile) radius surrounding it. The CHRIS search included a review of available records at the NWIC, as well as the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list.

The NWIC responded with relevant results on April 30, 2020 identifying 58 cultural resources studies conducted within a 0.5-mile radius of the project site. None of these studies were located within the project site. Four previously recorded resources are located within 0.5 miles of the project site, all of which are historic buildings and none of which are located within the project site.

On March 26, 2020, Rincon contacted the Native American Heritage Commission (NAHC) and requested a search of the SLF. The NAHC emailed a response on March 27, 2020 stating that the SLF search was returned with positive results. Rincon emailed the seven Native American contacts listed on March 30, 2020 requesting information. Andrew Galvan of the Ohlone Indian Tribe knew of a previously destroyed archaeological site in the area, but Mr. Galvan did not identify any resources or sensitivity within the current project site.

Historic aerial maps showed that the project site has largely been unused and undeveloped with surrounding land having been utilized for orchards and later residential development. Between 1992 and 2002, a drainage system was added to the southern edge of the project site, adjacent to Garin Avenue. No other development appears to have taken place within the project site.

Rincon Archaeologist Elaine Foster conducted a pedestrian field survey of the project site on July 13, 2020. Ground visibility within the project site was poor due to thick vegetation. Exposed soils consisted of a brown loamy soil. Modern refuse was noted throughout the project site. No cultural resources were identified during the survey. The project site has two steep hillsides which would likely have been undesirable for prehistoric habitation.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The project would involve construction of a new church building with associated recreation areas on a vacant parcel. No historic built environment resources are located within the project site. Therefore, there would be no impact to historical resources.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

The results of the cultural resources records search, informal Native American scoping, and pedestrian field survey concluded that no known archaeological resources exist within the project site. Historic aerial map review concluded that the project site has been largely undeveloped and unused, with the exception of a drainage system installed between 1992 and 2002. The lack of development or indication of habitation is likely due to the steep hills that make up a large portion of the project site. Based on the findings of the cultural resources study prepared for the project, the project site is not considered archaeologically sensitive. Nevertheless, the unanticipated discovery of archaeological resources is always a possibility during ground disturbing activities. If resources are identified during construction, impacts would be potentially significant.

Mitigation Measures

The following mitigation measure is required in the event an unanticipated discovery of cultural resources occurs during project construction.

CR-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources (CRHR) eligibility. If the discovery proves to be eligible for listing in the CRHR and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation and archaeological monitoring may be warranted to mitigate significant impacts to cultural resources.

Significance After Mitigation

Mitigation Measures CR-1 would ensure that cultural resources are preserved in the event they are uncovered during construction and would reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

While the project site is unlikely to contain human remains, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state no further disturbance may occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD must complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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6 Energy

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

Electricity and Natural Gas

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which 31 percent was generated by renewable resources (California Energy Commission [CEC] 2019a). California also consumed approximately 12,666 million U.S. therms (MMthm) of natural gas in 2018. Electricity and natural gas service would be provided to the project by Pacific Gas and Electric (PG&E). Table 6 and Table 7 show the electricity and natural gas consumption by sector and total for PG&E.

Table 6 Electricity Consumption in the PG&E Service Area in 2018

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
5,831.5	30,148.4	4,265.6	10,518.6	1,593.7	27,700.3	310.6	80,368.7

Notes: All usage expressed in GWh

Source: CEC 2018a

Table 7 Natural Gas Consumption in PG&E Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
37.4	899.1	59.0	1,776.0	190.2	1,832.8	4,794.4

Notes: All usage expressed in millions of therms

Source: CEC 2018b

East Bay Community Energy

East Bay Community Energy (EBCE) supplies electricity to the City of Hayward using transmission infrastructure operated and maintained by Pacific Gas and Electric (PG&E). EBCE is a community-governed, local power supplier that provides cleaner electricity to Alameda County residents and businesses. As of 2018, EBCE's energy intensity factor for its base plan (Bright Choice) consists of 41

percent eligible renewable energy resources (EBCE 2020). PG&E is one of the nation's largest electric and gas utility companies, and it maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2020). According to PG&E's 2018 Integrated Resource Plan, PG&E anticipates meeting a 2030 energy load demand of between 36,922 gigawatt-hours and 37,370 gigawatt-hours (PG&E 2018).

City of Hayward

Hayward's Energy Reach Code in HMC Section 9-1.02 requires all new low-rise residential buildings (three stories and less) to be all-electric and encourages all-electric construction in high-rise residential and non-residential buildings. The ordinance also requires electric vehicle charging infrastructure beyond that required in the 2019 California Green Building Standards Code. Although not required by this ordinance, the proposed project would be designed as an all-electric building to meet the standards of the reach code.

Petroleum

In 2016, approximately 40 percent of the state's energy consumption was associated with transportation activities (United States Energy Information Administration [EIA] 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2019a). Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2019b).

Methodology

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during project construction, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the project site. Operational energy demand accounts for the anticipated energy consumption during project operation, such as fuel consumed by cars, trucks, and public transit; natural gas consumed for on-site power generation, heating building space, and cooking needs; and electricity consumed for building power needs, including, but not limited to lighting, water conveyance, and air conditioning.

The CalEEMod outputs for the air quality and GHG modeling (Appendix A) and the Vehicle Miles Traveled (VMT) calculations in the traffic study completed for the project (Kittelsohn 2020; included in Appendix H) were used to estimate energy consumption associated with the remainder of the proposed project. The CalEEMod results provide the average travel distance, vehicle trip numbers, and vehicle fleet mix during construction and operation of the proposed project. The CalEEMod results also provide the estimated gross electricity and natural gas consumption by land use during operation of the proposed project.

Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The proposed project would require site preparation and grading, including hauling soil on-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping.

As shown in Table 8 below, construction of the project would require approximately 5,564 gallons of gasoline and 61,546 gallons of diesel fuel. Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, the project would utilize construction contractors who demonstrate compliance with applicable CARB regulations that restrict the idling of heavy-duty diesel motor vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Electrical power would be consumed to construct the project, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area. Overall, construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. Construction activities would utilize fuel-efficient equipment consistent with state and federal regulations and would comply with state measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. In addition, per applicable regulatory requirements, the project would comply with construction waste management practices to divert construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

Table 8 Proposed Project Construction Energy Usage

Source	Fuel Consumption (Gallons)	
	Gasoline	Diesel
Construction Equipment & Hauling Trips	—	61,546
Construction Worker Vehicle Trips	5,564	—

See Attachment A for CalEEMod default values for fleet mix and average distance of travel, and Attachment D for energy calculation sheets.

Operational Energy Demand

Operation of the proposed project would require energy use in the form of electricity and gasoline consumption. Electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project. Gasoline consumption would be attributed to vehicular travel from staff and congregation members traveling to and from the project site. Table 9

shows the project's estimated total annual gasoline and diesel fuel consumption, as well as electricity use.

Table 9 Proposed Project Operational Energy Usage

Source	Energy Consumption	
Vehicle Trips		
Gasoline	21,272 gallons	2,335 MMBtu ¹
Diesel	4,716 gallons	601 MMBtu ¹
Built Environment		
Electricity	0.26 GWh	872 MMBtu
Source: Appendix D		

As shown in Table 9, project operation would consume approximately 0.26 GWh of electricity. The project would comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. CALGreen (as codified in CCR Title 24, Part 11) requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to achieve energy efficient performance. The standards are updated every three years, and each iteration increases energy efficiency standards. For example, according to the CEC, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018c). Furthermore, the project would continue to reduce its use of nonrenewable energy resources as the percentage of electricity generated by renewable resources provided by PG&E continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

In addition, vehicle trips associated with the project would require approximately 21,272 gallons of gasoline and 4,716 gallons of diesel fuel, or 1,620 MMBtu annually. The proposed project would introduce new church and office uses to vacant lot. However, implementation of the proposed project would allow an existing congregation within the City of Hayward to relocate to the proposed church at the project site. Moreover, as described in Section 17, *Transportation*, the project would result in reduced VMT compared to the VMT associated with the church's current location. In other words, operation of the proposed project would result in a reduction of the miles traveled by the church's staff and congregation. Therefore, vehicle fuel consumption resulting from the proposed project would not be wasteful, inefficient, or unnecessary.

Project operation would increase energy use on the site compared to existing conditions. However, energy use would be in conformance with the latest version of CALGreen and the Building Energy Efficiency Standards. Additionally, the electricity use would not result in a significant increase for PG&E. Moreover, the project would not result in wasteful use of vehicle fuel. Therefore, the project would not result in wasteful or unnecessary energy consumption, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Hayward's Climate Action Plan (CAP) was adopted by the Hayward City Council on July 28, 2009 and incorporated into the City's General Plan in 2014. The purpose of the CAP is to make Hayward a more environmentally and socially sustainable community.

As demonstrated further in Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with policies from the City's CAP. Those policies specifically pertaining to energy efficiency include NR-4.1 through NR-4.11 and NR-4.13 through NR-4.15 relating to energy performance in new construction and energy efficient design in new development. Although not required by Hayward's Energy Reach Code (the proposed use is not residential) the proposed project would be designed as an all-electric building to meet the standards of HMC Section 9-1.02, which would reduce consumption of nonrenewable energy resources. Therefore, the proposed project would not interfere with the energy-related measures of the CAP and therefore would not conflict with or obstruct the state plan for renewable energy. As such, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Much of the analysis in this section is based on the information in two geotechnical investigations prepared for the proposed project. Earth Systems Pacific prepared a Preliminary Geotechnical Report for the project site in September 2017. In addition, after the scope of the project was changed, Earth Systems Pacific prepared a Supplement to the Geotechnical Report in June 2019. Both reports are included in Appendix E. The purpose of these investigations was to determine the nature of the surface and subsurface soil conditions at the project site through field investigations and laboratory testing. Both geotechnical investigations present an explanation of investigative procedures, results of the testing program, conclusions regarding soil conditions, and recommendations for earthwork and foundation design to adapt the proposed development to the existing soil conditions.

Seismic Setting

Similar to much of California, the site is located in a seismically active region. The United States Geological Survey (USGS) defines active faults as those that have had surface displacement within the Holocene period (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are those that have had surface displacement during the last 1.6 million years, and inactive faults have not had surface displacement within that period. Several faults are within and near the site, including the San Andreas Fault and the Hayward Fault. The Hayward Fault, one of ten major faults that make up the San Andreas Fault Zone, crosses through the City of Hayward near Mission Boulevard. As a result of its location and geologic setting, the city of Hayward is subject to a variety of seismic and geologic hazards, including fault rupture, strong ground shaking, liquefaction, and landslides (City of Hayward 2014a). The Hayward Fault crosses the project site at its eastern edge.

Ground Shaking

Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. The USGS and Associated Bay Area Governments (ABAG) have worked together to map the likely intensity of ground-shaking throughout the Bay Area under various earthquake scenarios. The most intense ground-shaking scenario mapped in the Bay Area assumes a 6.9 magnitude earthquake on the Hayward Fault system. The predicted ground-shaking from such an earthquake would be “very violent” or “violent” throughout the City of Hayward (ABAG 2016).

Liquefaction and Seismically Induced Settlement

Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to ground water, degree of seismic shaking, and the relative density of the soil. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture. Figure 9-2 of the 2040 General Plan Background Report shows that the project site is not in an area of high or very high liquefaction potential (City of Hayward 2014b).

Landslides

Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development that occurs on a slope can substantially increase the frequency and extent of potential slope stability hazards.

Areas susceptible to landslides are typically characterized by steep, unstable slopes in weak soil/bedrock units which have a record of previous slope failure. There are numerous factors that affect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, ground water level, and level of seismic shaking. The project site is located in a sloped area and is at the western edge of the City's Landslide Zone, as shown in Figure 9.2-3 of the 2040 General Plan Background Report (City of Hayward 2014b).

Expansive Soils

Expansive soils can change dramatically in volume depending on moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soil can develop wide cracks in the dry season, and changes in soil volume have the potential to damage concrete slabs, foundations, and pavement. Special building/structure design or soil treatment are often needed in areas with expansive soils. The geotechnical investigations identify the presence of expansive soils as a potential hazard at the project site.

Erosion

Erosion is the wearing away of the soil mantle by running water, wind or geologic forces. It is a naturally occurring phenomenon and ordinarily is not hazardous. However, excessive erosion can contribute to landslides, siltation of streams, undermining of foundations, and ultimately the loss of structures. Removal of vegetation tends to heighten erosion hazards. The City of Hayward enforces grading and erosion control ordinances to reduce these hazards.

Paleontological Setting

In order to assess potential impacts to paleontological resources, the project's potential to disturb paleontologically sensitive geologic units was evaluated. The analysis involved a review of pertinent geologic maps and geologic literature, and a paleontological locality search to identify any known fossil localities from the project site, or from geologic units mapped at the project site. Fossil collections records from the University of California Museum of Paleontology (UCMP) online database were reviewed to identify known fossil localities in Alameda County (UCMP 2020). Following the geologic map review, literature review, and UCMP database search, a paleontological sensitivity was assigned to the geologic units within the project site based on Society of Vertebrate Paleontology (SVP) guidelines (SVP 2010). The SVP has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources (SVP 2010). This system is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for

impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

The project is located within the Coast Ranges geomorphic province of California, which extends approximately 600 miles from the Oregon border south to the Santa Ynez River in Santa Barbara County (California Geological Survey 2002; Norris and Webb 1990). Locally, the project site is within the Front Hills, comprised of a northwest-trending linear ridge 1 to 1.5 miles wide which is separated from the Bay Plains to the west by the active trace of the Hayward Fault (Earth Systems Pacific 2017, 2019). The project area includes four mapped geologic units: Holocene to late Pleistocene landslide rubble (Qls), Early Cretaceous and Late Jurassic Knoxville Formation (JKk, JKkc), and Early Cretaceous and Late Jurassic Franciscan Assemblage (fg) (Dibblee and Minch 2005).

Landslide rubble (Qls) consists of coarse-grained igneous rock clasts transported during structural failure at local shear zones and deposited along the bases of hillsides. The thickness of the landslide rubble (Qls) deposits varies across the site but is reported to be approximately four to five feet thick (Earth Systems Pacific 2017, 2019).

The Knoxville Formation (JKk, JKkc) consists of marine clastic sedimentary rocks, including a clay shale subunit and an underlying conglomerate subunit. The clay shale subunit is dark brownish gray, bedded, and micaceous, with interbedded olive brown, fine-grained graywacke, sandstone, and dolomite. The conglomerate subunit is a darker brownish-gray color in comparison to the clay shale subunit and is only vaguely bedded.

The Franciscan Assemblage (fg) consists of submetamorphosed eugeosynclinal marine sedimentary and mafic igneous rocks, including metabasalt greenstone, which is dark gray to black, massive, and aphanitic. The results of site-specific geotechnical investigations suggest the project area is partially underlain by undocumented artificial fill overlying colluvium and alluvium, which subsequently overlie weathered Knoxville Formation and Franciscan Assemblage mélange (Earth Systems Pacific 2017, 2019).

Undocumented artificial fill was encountered during geotechnical investigations throughout the central and northern portions of the project area and varies in thickness from absent to 25 feet in an old drainage swale (Earth Systems Pacific 2017, 2019).

Paleontological Sensitivity

Undocumented artificial fill has low paleontological resource potential because any fossil recovered from these disturbed deposits have lost their stratigraphic and geographic context (i.e., provenance), and therefore are considered to have a low paleontological sensitivity.

Late to middle Holocene deposits are typically too young (i.e., less than 5,000 years old) to preserve paleontological resources and are determined to have a low paleontological resource potential according to SVP (2010) standards; however, late to middle Holocene deposits may grade into early Holocene to late Pleistocene deposits that could preserve fossil remains at shallow or unknown depths. In particular, fine-grained alluvial and some colluvial deposits of this age have yielded numerous paleontological resources throughout California, but landslide rubble (Qls) deposits are usually very coarse-grained and deposited as the result of sudden, high-energy shear failure and/or debris flow; rapid, high-energy depositional environments in terrestrial settings typically preclude fossil preservation due to the steep slopes and physical forces that occur in these depositional environments preventing in-tact preservation. Therefore, landslide rubble (Qls) deposits have a **low paleontological sensitivity** (SVP 2020).

Early Cretaceous and Late Jurassic Knoxville Formation (JKk, JKkc) has yielded some paleontological resources throughout California. From Alameda County, the Knoxville Formation (JKk, JKkc) has yielded fossil marine invertebrates, including bivalves and ammonites, and plants (UCMP 2020). Throughout northern California, the Knoxville Formation (JKk, JKkc) has yielded very rare indeterminant mammals; common marine invertebrates, such as bivalves, gastropods, ammonites, and echinoids; plants; and foraminiferans (Case 1968; Paleobiology Database 2020; Stanton 1931; UCMP 2020). Fossils from the Knoxville Formation (JKk, JKkc) have come from the clay shale subunit, with no fossils reported from the conglomerate subunit (Case 1968; Stanton 1931). The Knoxville Formation (JKk, JKkc) is considered to have a **high paleontological sensitivity**; however, only within clay shale subunit (SVP 2010).

Early Cretaceous and Late Jurassic Franciscan Assemblage (fg) formed from the cooling of molten rock that was subsequently metamorphosed. The high-heat and high-pressure conditions in which these rocks formed are not suitable for life or fossilization. Therefore, Franciscan Assemblage (fg) have **no paleontological sensitivity** (SVP 2020).

Impact Analysis

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

As described in the *Seismic Setting* Section above, the project site is located in a seismically active region of California and is subject to potential ground shaking associated with seismic activities. Specifically, the Hayward Fault runs along the eastern portion of the site, and as described in the geotechnical investigations, the site is located entirely within a State Earthquake Fault Zone (Appendix E). The Hayward fault system has been assessed to have a 31 percent probability of generating an earthquake with a magnitude greater than or equal to 6.7 on the Mercalli Richter Scale in the next 30 years (Alameda County 2013). A seismic event with magnitude 6.7 or greater would be substantial and would have potential to damage structures and result in loss of property and risk to human health and safety. These risks exist throughout the City of Hayward, regardless of development proposed.

Under the Alquist-Priolo Earthquake Fault Zone Act, development of a building for human occupancy is generally restricted within 50 feet of an identified fault. The geotechnical investigations for the project site conclude that while the potential for surface fault rupture to affect the proposed structures is low, the possibility cannot be entirely discounted. Therefore, the reports recommend that the proposed habitable buildings maintain the 50-foot setback under the Alquist-Priolo Earthquake Fault Zone Act. The reports also confirm that the proposed site plan meets this recommendation (see Figure 2 of the Preliminary Geotechnical Investigation). The reports also note that portions of the proposed parking lot, retaining walls, and utility connections would be within the 50-foot setback, where traces of the Hayward fault occur, and that distress to the parking lot pavements and retaining walls crossing the traces is likely. Moreover, the reports conclude that from a geotechnical viewpoint, the project is feasible provided that maintenance and design recommendations are incorporated into the portions of the site within the 50-foot setback. Therefore, Mitigation Measure GEO-1 below would be required to reduce impacts.

Mitigation Measure

The following mitigation measure shall be implemented prior to and during project construction:

GEO-1 Geotechnical Considerations

The project applicant shall implement all measures and recommendations set forth in the Preliminary Geotechnical Report and Supplemental Geotechnical Report prepared by Earth Systems Pacific in September 2017 and June 2019, respectively (included in Appendix E and on file with the City of Hayward). Recommendations include but are not limited to the following topic areas:

- Ground Rupture (50-foot setback on either side of the Hayward Fault for habitable structures, maintenance and repair of parking lot and retaining walls to address creep and distress, and design of utility connections, including emergency shutoffs)
- Grading (demolition and stripping, existing fill removal, selection of materials, differential fill thickness, fill placement)
- Excavation
- Foundation design criteria (including concrete slab-on-grade or mat slab options)
- Building code seismic design
- Retaining walls
- Drainage
- On-site utility trenching
- Pavement design

Significance After Mitigation

Implementation of Mitigation Measure GEO-1, specifically the requirements related to ground rupture, would reduce impacts related to rupture of a known earthquake fault to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.2. Would the project directly or indirectly cause substantial potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

As described under question (a) above, the project site is subject to potential ground shaking associated with seismic activities. However, the project would be required to be constructed to current seismic standards in the 2019 California Building Code (CBC) intended to ensure buildings can withstand the adverse effects of strong ground shaking. The City of Hayward has adopted the CBC by reference pursuant to Chapter 9 Article 1 of the Hayward Municipal Code. Chapter 38 of the CBC contains specific requirements for structural design, including seismic loads and Article 8 of the Municipal Code includes requirements for soil testing, excavation and grading, and foundation design. The CBC requires that structures be designed and constructed to resist seismic hazards, including through foundation design and the completion of soil investigations prior to construction. The City would ensure that project would be designed and constructed consistent with the current CBC, thereby ensuring that appropriate investigations and design measures have been employed to effectively minimize or avoid potential hazards associated with redevelopment and/or new building construction. Proper engineering, including compliance with the CBC, would minimize the risk to life and property associated with potential seismic activity in the area. The geotechnical reports

prepared for the project site conclude that the project would be feasible given compliance the CBC requirements related to ground shaking (Appendix E). Impacts related to seismic shaking would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving ground failure, including liquefaction?*
- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*
- c. Would the project 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?*

As described in the *Seismic Setting* Section above, the project site is not in an area of high or very high liquefaction potential (City of Hayward 2014b). The Preliminary Geotechnical Report concluded that the risk of liquefaction at the project site is low. However, the site is also located within the City's Landslide Zone. In addition, the Geotechnical Report identifies several geologic hazards at the project site, including seismically induced landslides, the presence of expansive soils, the presence of undocumented fills, and potentially leaking underground drainage infrastructure (Earth Systems Pacific 2017, Appendix E). Therefore, impacts related to seismic-related ground failure, unstable and expansive soils, and landslides would be potentially significant.

In order to address the hazards present at the project site, the two geotechnical reports prepared by Earth Systems Pacific for the proposed project provide a comprehensive list of design recommendations. Those recommendations cover several design considerations, including foundation design, site preparation and grading, retaining walls, pavement design, utility trenches, and drainage. Moreover, the reports conclude that from a geotechnical viewpoint, the project is feasible provided the design recommendations are incorporated into the proposed project. Therefore, Mitigation Measure GEO-1 above would be required to reduce impacts.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce impacts related to seismic hazards, including ground failure, unstable and expansive soils, and landslides to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

Construction of the proposed project would require earthwork activities to prepare the site for the construction of new structures and open space. As the proposed project would disturb over one acre of land, the applicant would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ or 2009-0009-DWQ General Permit) to comply with Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) requirements. Compliance with these requirements would include preparation of a Storm Water Pollution Prevention Plan (SWPPP), which would specify Best Management Practices (BMP) to quickly contain and clean up accidental spills or leaks. In accordance with HMC Section 10-3.705, the project applicant would also be required to prepare and implement an Erosion and Sediment Control Plan to prevent illicit

discharge. Appropriate erosion control and permanent site surface drainage elements per the latest California Building Code would also be implemented. With required implementation of these plans, permits, and BMPs, substantial erosion or the loss of topsoil would not occur at the project site. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Based on the laboratory testing results included in the Preliminary Geotechnical Report (Earth Systems Pacific 2017, Appendix E), the native surface soil at the project site was found to have a high expansion potential when subjected to fluctuations in moisture. These soils can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations, resulting in a potentially significant impact. Nonetheless, the report concluded that from a geotechnical viewpoint, the project is feasible provided the considerations included in Mitigation Measure GEO-1 above are addressed in the project design. Given compliance with the mitigation measure, impacts related to expansive soil would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not include components that would require the use of septic tanks. The proposed project would connect to the City of Hayward municipal sewer system. There would be no impact.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Project-related ground disturbance would involve cut and fill activities to flatten the site's existing topography, with ground-disturbing activities impacting sediments to depths of approximately 20 feet below ground surface. Grading for the three building foundations and excavations for retaining walls are anticipated to impact depths of six feet below ground surface. Because the project site is underlain by geologic units with a high paleontological sensitivity, paleontological resources may be encountered during ground-disturbing activities associated with project construction (e.g., grading, excavation, or any other activity that disturbs the surface of the site). Construction activities may result in the destruction, damage, or loss of undiscovered, scientifically important paleontological resources. Therefore, impacts to paleontological resources would be potentially significant under CEQA. Implementation of Mitigation Measure GEO-2, GEO-3, and GEO-4 during project construction would reduce potential impacts related to paleontological resources to a less than significant level by providing for the recovery, identification, and curation of previously unrecovered fossils.

Mitigation Measures

GEO-2 Retaining of a Qualified Paleontologist

Prior to the commencement of project construction, a Qualified Paleontologist shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching). The Qualified Paleontologist shall have at least a master's degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques.

GEO-3 Paleontological Resources Monitoring

Ground-disturbing activities within the project site shall be monitored on a full-time basis when impacting sediments mapped at the surface as Early Cretaceous and Late Jurassic Knoxville Formation clay shale subunit. Full-time monitoring shall be conducted in areas mapped as landslide rubble deposits when ground-disturbing activities impact sediments greater than five feet below ground surface; monitoring shall be required in areas mapped as landslide rubble deposits when ground-disturbing activities impact sediments less than five feet below ground surface.

Monitoring during ground-disturbing activities is not required in areas mapped as Early Cretaceous and Late Jurassic Knoxville Formation conglomerate subunit and Early Cretaceous and Late Jurassic Franciscan Assemblage. Monitoring is also not required in artificial fill or previously disturbed sediments. Monitoring shall be supervised by the Qualified Paleontologist and shall be conducted by a qualified paleontological monitor, defined as an individual who meets the minimum qualifications per standards set forth by the SVP (2010), which includes a Bachelor's Degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Such a recommendation shall be reviewed by the City of Hayward for approval. Monitoring shall be reinstated if new ground disturbances are required that have the potential to impact geologic units of high paleontological sensitivity, and reduction or suspension shall be reconsidered by the Qualified Paleontologist and approved by the City at that time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until the City has been notified and the resource is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology). Curation fees are the responsibility of the project owner.

GEO-4 Final Reporting

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City of Hayward. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Significance After Mitigation

Implementation of mitigation measures GEO-2, GEO-3, and GEO-4 would reduce potential impacts to significant paleontological resources to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

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

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it more broadly encompasses other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. According to the United Nations Intergovernmental Panel on Climate Change (IPCC), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater) that the global average net effect of human activities has been the dominant cause of warming and that the rate of increase is unprecedented over decades to millennia since the mid-twentieth century (IPCC 2014).

GHGs are gases that absorb and re-emit infrared radiation in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is 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.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off gassing associated with agricultural practices and landfills. Observations of CO₂ concentrations, globally averaged temperature, and sea-level rise are generally well within the range of the extent of the earlier IPCC projections. The recently

observed increases in CH₄ and N₂O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as “carbon dioxide equivalent” (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2015). Emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Regulatory Setting

In response to an increase in man-made GHG concentrations over the past 150 years, California implemented AB 32, the “California Global Warming Solutions Act of 2006.” AB 32 codified the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and adopted regulations to require reporting and verification of statewide GHG emissions.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, which extends AB 32 and requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. In response, on December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not give project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalents (CO₂e) by 2030 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level) but not for individual projects because they include all emissions sectors in the state.

Most individual projects do not generate enough GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Methodology

GHG emissions for project construction and operation were calculated using CalEEMod version 2016.3.2. CalEEMod calculates emissions of CO₂, CH₄, and N₂O associated with construction activities, energy use, area sources, waste generation, and water use and conveyance as well as emissions of CO₂ and CH₄ associated with project-generated vehicle trips (i.e. mobile sources). Operational emissions were modeled for the year 2030 to be consistent with the State’s next GHG

emission reduction milestone target of achieving 40 percent reduction in 1990 GHG emission levels by 2030. Emissions of all GHGs are converted into their equivalent global warming potential in terms of CO₂ (i.e., CO₂e).

Mobile source emissions were calculated based on the project's VMT Memorandum prepared for the project by Kittelson & Associates, Inc. (Kittelson & Associates, Inc. 2020). Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the BAAQMD region for year 2030 (the next GHG emission reduction target milestone year) using the EMFAC2011 categories (Appendix A).

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2017). The project would be served by East Bay Community Energy (EBCE). Therefore, EBCE's specific energy intensity factors (i.e., the amount of CO₂e per megawatt-hour) are used in the calculations of GHG emissions. As of 2018, EBCE's energy intensity factor for its base plan (Bright Choice), which consists of 41 percent eligible renewable energy resources, was 101 pounds of CO₂e per megawatt-hour (EBCE 2019 and 2020). Per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030 and 100 percent by 2045. To account for the continuing effects of the RPS, the carbon intensity factor included in CalEEMod were reduced based on the percentage of renewables reported by EBCE. EBCE carbon intensity factors that include this reduction are shown in Table 10.

Table 10 EBCE Energy Intensity Factors

	2018 (lbs/MWh)	2030 (lbs/MWh)
Percent procurement	41% ¹	60% ³
Carbon dioxide equivalents (CO ₂ e)	101 ²	68.47

¹ Source: EBCE 2020

² Source: EBCE 2019

³ RPS goal established by SB 100

Because project construction would begin in January 2021, the project would be constructed in accordance with the 2019 Building Energy Efficiency Standards. Nonresidential buildings built in accordance with the 2019 Building Energy Efficiency Standards will use approximately 30 percent less energy than those constructed under the 2016 standards (California Energy Commission 2018). Therefore, electricity usage was reduced by 30 percent to account for the requirements of 2019 Title 24 standards. Although not required (the proposed use is not residential), the project would also be designed as an all-electric building to meet the standards of Hayward's Energy Reach Code. Therefore, no natural gas usage was included in the CalEEMod calculations for the project. In addition, modeling of GHG emissions from water consumption and wastewater generation includes a 20 percent reduction in indoor water use to account for compliance with CALGreen, use of low-flow fixtures, and installation of a water-efficient irrigation system.

Significance Thresholds

To evaluate whether a project would generate a quantity of GHG emissions that may have a significant impact on the environment, state agencies have developed a number of operational

bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. Projects that attain the significance target, with or without mitigation, would result in less than significant GHG emissions. Many significance thresholds have been developed to reflect a 90 percent capture rate tied to the 2020 reduction target established in AB 32.

According to the CEQA Guidelines, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). The City of Hayward has developed a CAP, which has been adopted as a part of the City's General Plan. However, the CAP does not demonstrate a pathway for the City to achieve the 40 percent reduction target by 2030 required by SB 32. Therefore, the CAP does not qualify as a GHG reduction plan and thus cannot be used for project tiering. In its 2017 CEQA Air Quality Guidelines, the BAAQMD outlines an approach to determine the significance of GHG emissions associated with land use development projects. For residential, commercial, industrial, and public projects, the thresholds of significance for operational-related GHG emissions are as follows:

- Compliance with a qualified GHG Reduction Strategy
- Annual emissions less than 1,100 metric tons (MT) per year (MT/yr) of carbon dioxide equivalent (CO₂e)
- Service person threshold of 4.6 MT CO₂e/SP/yr (residents + employees)

As discussed above, the City has not adopted a qualified GHG Reduction Strategy; therefore, it is not appropriate to use the first recommended threshold of significance. The BAAQMD mass emissions threshold of 1,100 MT of CO₂e per year was designed to capture 90 percent of all emissions associated with projects in the Basin and require implementation of mitigation so that a considerable reduction in emissions from new projects would be achieved. According to the California Air Pollution Control Officers Association (CAPCOA) white paper, *CEQA & Climate Change*, a quantitative threshold based on a 90 percent market capture rate is generally consistent with AB 32 (CAPCOA 2008). SB 32, codified in 2016, sets a more stringent emission reduction target of 40 percent below the 1990 level by 2030. Because the previously established threshold of 1,100 MT of CO₂e was not developed to meet the targets established by SB 32, it must be adjusted to meet the new, more stringent emission reduction target of a 40 percent reduction below the 1990 level by 2030. Because BAAQMD has not adopted a threshold for 2030 yet, this analysis uses a "substantial progress" bright-line threshold of 660 MT of CO₂e per year (equivalent to a 40 percent reduction of the 1,100 MT of CO₂e per year threshold based on the State's 2030 target). The bright-line threshold applies best to the proposed project because the City of Hayward does not have a qualified GHG reduction plan and the project is not a residential or mixed-use project for which impacts would be more appropriately evaluated using a service population threshold to reflect per-person emission efficiency.

Impact Analysis

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction vehicles and in the commute vehicles of construction workers. Smaller amounts of GHGs are also emitted indirectly through the energy use embodied in any water use for fugitive dust control and lighting for construction activity. Table 11 summarizes GHG emissions generated by project construction activities. As shown therein, project construction would generate approximately 597 MT of CO₂e, or approximately 20 MT of CO₂e per year when amortized over a 30-year period (the assumed life of the project).

Table 11 Estimated Construction GHG Emissions

Year	Project Emissions (MT of CO ₂ e)
2021	375.2
2022	221.7
Total	596.9
Amortized over 30 Years	19.9

See Appendix A for CalEEMod worksheets.

Combined Construction and Operational Emissions

Table 12 summarizes long-term GHG emissions generated by the project from area sources, energy use, solid waste, water use, and mobile sources and combines construction and operational GHG emissions. As shown therein, the project would generate approximately 270 MT of CO₂e per year, which would not exceed the threshold of 660 MT of CO₂e per year. Therefore, the proposed project would have a less than significant impact related to GHG emissions.

Table 12 Combined Annual Emissions of GHGs

Emission Source	Annual Emissions (MT of CO ₂ e)
Construction	19.9
Operational	
Area	<0.1
Energy	7.9
Solid Waste	80.7
Water	2.0

Emission Source	Annual Emissions (MT of CO ₂ e)
Mobile	
CO ₂ and CH ₄ ¹	153.8
N ₂ O	4.9
Total	269.2
Threshold	660
Threshold Exceeded?	No

¹ Average vehicle distance was calculated using the Vehicle Miles Traveled (VMT) calculations in the traffic study completed for the project (Attachment H). The VMT calculated in CalEEMod may not match the VMT in the traffic study due to rounding.

See Appendix A for CalEEMod worksheets.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

City of Hayward Climate Action Plan

Hayward's CAP was adopted by the Hayward City Council on July 28, 2009 and updated and incorporated into the City's General Plan in 2014. The purpose of the CAP is to make Hayward a more environmentally and socially sustainable community. The overall objective of the CAP is to reduce Hayward's GHG emissions by:

- 20 percent below 2005 baseline levels by 2020,
- 62.7 percent below 2005 baseline levels by 2040, and
- 82.5 percent below 2005 baseline levels by 2050.

In June 2020, these goals were revised to reflect California's goal of achieving economy-wide carbon neutrality by 2045. The City's current goals are to reduce GHG emissions by:

- 30 percent below 2005 levels by 2025
- 55 percent below 2005 levels by 2030
- 100 percent below 2005 levels (i.e., carbon neutrality) by 2045

The CAP includes GHG reduction strategies and actions relating to transportation, land use, energy, solid waste, carbon sequestration, climate change adaptation, and community engagement. The proposed project includes several design features that are consistent with strategies and actions from the City's CAP. Policy NR-4.3, *Efficient Construction and Development Practices*, calls for the City to 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*, requires that newly constructed buildings meet energy efficiency design and operations standards. The proposed project would comply with CALGreen and other green building requirements. Moreover, as described in Section 6, *Energy*, construction and operation of the project would not involve wasteful use of energy. Operation of the project would be fully electric in order to be consistent with the Hayward Energy Reach Code. All-electric operation would reduce GHG emissions associated with energy usage. Therefore, the project would be consistent with these policies. In addition, Policy NR-2.6, *Greenhouse Gas*

Reduction in New Development, calls for the City to reduce potential greenhouse gas emissions, including by discouraging new development that is primarily dependent on the private automobile, and promoting new development that is compact, mixed use, pedestrian friendly. As described in Section 17, *Transportation*, the project would result in reduced VMT compared to the VMT associated with the church's current location.

The proposed project would support and implement some strategies contained in the City's CAP. Additionally, the project would not conflict with the Climate Change Scoping Plan developed per SB 32, the land use assumptions in the Plan Bay Area, or regulations adopted by the City of Hayward to reduce greenhouse gas emissions. Therefore, the proposed project would have a less than significant impact related to GHG emissions.

Plan Bay Area 2040

SB 375, signed in August 2008, requires the inclusion of Sustainable Communities' Strategies in Regional Transportation Plans to reduce GHG emissions. The Metropolitan Transportation Commission and ABAG adopted a Sustainable Communities' Strategies that meets the GHG reduction targets set forth by CARB. Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use, and housing plan that supports a growing economy, provides more housing and transportation choices and reduces transportation-related pollution in the nine-county San Francisco Bay Area (ABAG 2017). Plan Bay Area 2040 builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2040 will be updated every four years to reflect new priorities. The goals of Plan Bay Area 2040 related to GHG emissions include (ABAG 2017):

1. **Climate Protection.** Reduce per capita CO₂ emissions.
2. **Healthy and Safe Communities.** Reduce adverse health impacts.
3. **Open Space and Agricultural Preservation.** Direct development within urban footprint.
4. **Transportation.** Increase non-auto mode share.

The proposed project would introduce new church and office uses to currently vacant lot. Operation of the project would involve new energy use and vehicle trips to and from the project site. However, operation of the project would be fully electric, consistent with Hayward's Energy Reach Code, which would reduce GHG emissions associated with energy use. In addition, implementation of the proposed project would allow an existing congregation within the City of Hayward to relocate to the proposed church at the project site. Moreover, as described in Section 17, *Transportation*, the project would result in reduced VMT compared to the VMT associated with the church's current location. In other words, operation of the proposed project would result in a reduction of the miles traveled by the church's staff and congregation. Therefore, the project would reduce transportation-related pollution in the City of Hayward, and impacts related to GHG emissions would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was prepared for the project site by Archcon Development & Construction Group, Inc. in July 2016 and included in Appendix F to this Initial Study. As part of the Phase I ESA, Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred for the project site and surrounding area. Federal, state, and county lists were reviewed as part of the research effort.

NEARBY PROPERTIES

The Phase I ESA found that 17 sites within 1 mile of the project site were listed by EDR. None of those sites are adjacent to the property, and they are primarily located along or near Mission Boulevard, at least 0.25 miles from the site. The Phase I concludes that the available information does not indicate that any of the nearby listed sites pose a significant threat to the environmental integrity of the project site.

PROJECT SITE

The Phase I ESA finds that the project site is not listed on a database maintained by EDR. In addition, site visits and a review of historical uses and permits provided no evidence of contamination conditions, improper hazardous substance produces use or storage, environmentally suspicious dumping or discharge, or significant staining. The report finds that the site has never been significantly developed and histrionically was vacant land. The site was graded in the 1960s and the existing drainage system was realigned.

The Phase I ESA concludes that there is no evidence of existing, controlled, or historical recognized environmental conditions in connections with the property.

Impact Analysis

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Construction Activities

The proposed project would involve construction of three buildings and associated structures that would together operate as a religious facility, multipurpose facility, and related offices. Construction activities may include the temporary transport, storage, use, or disposal of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, or contaminated soils. If spilled, these substances could pose a risk to the environment and to human health. However, the transport, storage, use, or disposal of hazardous materials is subject to various federal, state, and local regulations designed to reduce risks associated with hazardous materials, including potential risks associated with upset or accident conditions. Hazardous materials would be required to be transported under U.S. Department of Transportation (DOT) regulations (U.S. DOT Hazardous

Materials Transport Act, 49 Code of Federal Regulations), which stipulate the types of containers, labeling, and other restrictions to be used in the movement of such material on interstate highways. In addition, the use, storage, and disposal of hazardous materials are regulated through the Resources Conservation and Recovery Act (RCRA). The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program, as well as California's own hazardous waste laws. DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. It does this primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). DTSC also oversees permitting, inspection, compliance, and corrective action programs to ensure that hazardous waste managers follow federal and State requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. Compliance with existing regulations would reduce the risk of potential release of hazardous materials during construction. In addition, hazardous materials used during construction would be required to transport such materials along designated truck routes in the city in accordance with the City's General Plan policy HAZ-6.8, thereby limiting risk of upset (City of Hayward 2014a).

As the proposed project would disturb over one acre of land, the applicant would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) to comply with CWA NPDES requirements. Compliance with these requirements would include preparation of a SWPPP, which would specify BMPs to quickly contain and clean up accidental spills or leaks. Therefore, the potential for an accidental release of hazardous materials to harm the public or the environment would be minor. Impacts related to hazardous materials during construction would be less than significant.

Project Operation

The proposed project would involve construction of a church building and associated uses, including offices and gathering spaces. Such uses typically do not use or store large quantities of hazardous materials other than those typically used for household cleaning, maintenance, and landscaping. Therefore, operation of the proposed project would not involve the use, storage, transportation, or disposal of hazardous materials and would not result in the release of such materials into the environment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

There are no schools located within 0.25 mile of the project site. However, two sites are near the site: Valle Vista is approximately 0.27 mile west of the site, and Treeview Elementary School is approximately 0.27 mile southeast of the site. As described under questions (a) and (b), construction activities may involve the use, storage, or transport of hazardous materials. However, the transport, use, storage, and disposal of hazardous materials associated with construction are subject to applicable federal, state, and local regulations to minimize the release of hazardous materials into the environment.

Operation of the proposed church use would not involve the handling of hazardous materials, substances, or wastes other than those typically used for household cleaning, maintenance, and

landscaping. Handling of hazardous materials is subject to applicable federal, state, and local regulations to reduce emissions of hazardous materials into the environment. Therefore, through adherence to applicable regulations, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

California Government Code Section 65962.5 requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized release from underground storage tanks, contaminated drinking water wells, and solid waste facilities from which there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis. According to the Phase 1 Environmental Site Assessment prepared in July 2016, the project site is not listed as a known hazardous cleanup site, does not contain a hazardous waste facility, and has no record of known contamination (Appendix F). Moreover, as described in the *Setting* Section above, the Phase I concludes that contamination from other nearby sites is not expected to have migrated such that the project site is affected by off-site contamination. Therefore, the proposed project would not create a significant hazard to the public or environment and there would be no impact.

NO IMPACT

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

The nearest airport to the project site is the Hayward Executive Airport, located approximately six miles to the northwest of the project site. The project site is not located within the Hayward Executive Airport Influence Area and is located outside the existing noise level contours for the airport (Alameda County Airport Land Use Commission [ALUC] 2012). The proposed project would not subject persons working at the site to safety hazards, and there would be no impact from potential air traffic safety risks.

NO IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction of the proposed project would occur within the boundary of the project site and no street closures would occur. The proposed project does not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including the Hayward Local Hazard Mitigation Plan, which was adopted in 2016 (City of Hayward 2016a). No streets or property access points would be closed, rerouted, or substantially altered during or after construction. There would be no impact.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As described below in Section 20, *Wildfire*, the project site is in a developed urban area and is not within or adjacent to a designated very high wildland fire hazard area. Therefore, the project would not expose people or structures to a significant loss, injury or death involving wildland fires. There would be no impact.

NO IMPACT

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10 Hydrology and Water Quality

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

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Construction Impacts

During grading activities, the project site's soils would be exposed to wind and water erosion that could transport sediments into local stormwater drainages. Also, accidental spills of fluids or fuels from construction vehicles and equipment, or miscellaneous construction materials and debris, could be mobilized and transported off-site in overland flow. These contaminant sources could degrade the water quality of receiving water bodies (i.e., San Francisco Bay), potentially resulting in a violation of water quality standards.

As part of Section 402 of the CWA, the USEPA has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control both construction and operation (occupancy) stormwater discharges. The federal CWA was first adopted in 1972 and is intended to protect and preserve water supply and quality in the "waters of the nation." In the Bay Area, the San Francisco Regional Water Quality Control Board (RWQCB) administers the NPDES permitting program and is responsible for developing permitting requirements. The proposed project would be subject to the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) – NPDES Permit Order No. R2-2015-0049, and the provisions set forth in Section C.3 *New Development and Redevelopment*. Under the conditions of the permitting program, the applicant would be required to eliminate or reduce non-stormwater discharges to waters of the nation, develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities, and perform inspections of the stormwater pollution prevention measures and control practices to ensure conformance with the site SWPPP. Because the proposed project would disturb at least one acre of land, the project must provide stormwater treatment and would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ or 2009-0009-DWQ General Permit).

Further, in accordance with HMC Chapter 10, Article 8 (Grading and Clearing), all grading activities must be conducted in a manner that will minimize the potential for erosion from the site. If requested by the City engineer, the project applicant would be required to prepare and implement an Erosion and Sediment Control Plan that specifies control techniques that would prevent erosion during construction. Therefore, with compliance with construction-related water quality and erosion control requirements, construction of the proposed project would not violate water quality standards, substantially alter the drainage pattern of the area such that substantial erosion or siltation would occur and would not degrade water quality. Impacts during construction would be less than significant.

Operational Impacts

According to the stormwater treatment plan, which is included in the project plans dated July 8, 2019, the proposed project would increase the total area of impervious surfaces on the project site by approximately 30,182 square feet. An increase in the total area of impervious surfaces can result in a greater potential to introduce pollutants to receiving waters. Urban runoff can carry a variety of pollutants, including oil and grease, metals, sediment, and pesticide residues from roadways,

parking lots, rooftops, and landscaped areas depositing them into adjacent waterways via the storm drain system.

Stormwater discharge during operation is regulated by the Municipal Separate Storm Sewer System (MS4) Permit, issued by the RWQCB, pursuant to NPDES regulations. Water quality in stormwater runoff is regulated locally by the Alameda County Clean Water Program, which includes the C.3 provisions set by the San Francisco Bay RWQCB. Provision C.3 of the MRP addresses post-construction stormwater requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area. Because the proposed project would replace in excess of 10,000 square feet of the impervious surface of the project site, it must comply with the C.3 provisions set by the RWQCB. Therefore, the proposed project must meet certain criteria including: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) minimize increases in runoff flows as compared to pre-development conditions. A Stormwater Control Plan (SCP) that details the site control, source control, and stormwater measures that would be implemented at the site must be submitted to the City. In addition, Low Impact Development (LID) requirements apply. The Alameda County Clean Water Program's C.3 Technical Guidance document (2016) provides guidance on how to meet the C.3 requirements.

The proposed project would increase the amount of impervious surfaces on the site. In accordance with the C.3 requirements, the project is designed to direct runoff from roofs and sidewalks into vegetated areas and would include landscaped bioretention areas to treat runoff before entering the stormwater system.

Given required compliance to the provisions of NPDES Section C.3, the SWPPP, and the stormwater control plan, the proposed project would not result in adverse effects on water quality and or in the violation of water quality standards or waste discharge requirements during construction or operation. Therefore, the proposed project would have a less than significant impact on water quality. With implementation of the measures contained in these plans, excessive stormwater runoff, substantial erosion or siltation on- or off-site would not occur and the potential for the project to violate water quality standards and substantially degrade water quality would be reduced. Additionally, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

As discussed in Section 19, *Utilities and Service Systems*, the proposed project would receive its water from the City of Hayward. Hayward receives its water from the Hetch Hetchy system, owned and operated by the San Francisco Public Utilities Commission (SFPUC). Hayward does not currently, nor does it plan to, use groundwater to meet the City's water demand (City of Hayward 2016b). Therefore, the proposed project would not rely on groundwater for its water supply and would not increase groundwater usage such that a net deficit in aquifer volume would occur.

Development under the proposed project would not include installation of new groundwater wells or use of groundwater from existing wells. The proposed project would increase the total area of

impervious surfaces on the project site by approximately 30,182 square feet. However, the construction of stormwater management bio-retention areas, which are shown on the proposed Stormwater Treatment Plan included in the project plans, would allow much of the stormwater runoff from the project site to infiltrate into the ground surface and would not substantially interfere with groundwater recharge of water supply aquifers. Therefore, the proposed project would not substantially interfere with groundwater recharge. Impacts related to groundwater would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project 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?*

Dry Creek, located approximately 0.5 miles east of the project boundary, is the nearest watercourse and does not flow through the site. Construction of the proposed project would not alter the course of this creek or other stream or river (no other surface water features are identified in the project area).

As described above under questions (a and e) the proposed project would involve a substantial increase in impervious surfaces, including for the proposed parking lot and building foundations, which would alter the existing drainage pattern of the site. For example, as described in Section 4, *Biological Resources*, there is currently an existing drain near the northwest corner of the site; this drain would likely be removed as part of the project. Therefore, the project could result in an increase in erosion or siltation in the area. However, the C.3 provisions set by the RWQCB would reduce impacts related to drainage changes. Specifically, the project would be required to implement a Stormwater Control Plan (SCP), including measures to minimize increases in drainage and stormwater runoff on and off the site. Therefore, while the project would alter the existing drainage system, the amount and direction of drainage flow from the site would be controlled by the measures outlined in the SCP. Moreover, while the stormwater on the site would be diverted through new drains and pipes, those new pipes would connect to the existing municipal stormwater drainage system in the area. The project would therefore not result in a substantial increase in erosion or siltation and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project 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 that would 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?*
- c.(iv) Would the project 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 impede or redirect flood flows?*

As described above under question (c.(i)), construction of the proposed project would not alter the course of Dry Creek or other stream or river. Project runoff would maintain pre-project drainage patterns by connecting to existing storm drain facilities and would not be directed to the banks of a creek. No impacts to bank stability would occur.

The proposed project would include bio-retention basins to treat roof, sidewalk, and driveway water runoff, and permeable pavers on driveways and parking areas. As described under questions (a, and e) proposed project would involve an increase in impervious area of approximately 30,182 square feet. In accordance with Alameda County C.3 requirements, the proposed project would provide two treatment areas within the project site. Thus, the proposed project would not substantially increase stormwater discharge, substantially alter drainage patterns on-site or the surrounding area, and would not contribute runoff that would result in flooding on- or off-site or exceed the capacity of the existing on-site or offsite stormwater drainage system. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The Federal Emergency Management Agency (FEMA) is responsible for the preparation of Flood Insurance Rate Maps (FIRMs). These maps present flood hazard, expressed as areas that are subject to inundation in a storm with either a 1 percent Annual Exceedance Probability (AEP), also referred to as a 100-year flood, or a 0.2 percent AEP (500-year flood). The project site is located in Flood Zone X, which is considered an area of minimal flood hazard and is outside of FEMA designated flood zones (FEMA FIRM # 06001C0289G, effective August 3, 2009). Therefore, the proposed project is not located within a flood zone and impacts concerning flood hazards would be less than significant. Since the project site is not near a large body of water and is approximately four miles inland from the San Francisco Bay, the project site would not risk release of pollutants due to inundation by seiche, tsunami. Impacts would be less than significant.

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11 Land Use and Planning

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

a. Would the project physically divide an established community?

The proposed project would involve development of church and associated structures on a 6.22-acre undeveloped parcel. The project would not separate connected neighborhoods or land uses from each other. No new roads, linear infrastructure, or other development features are proposed that would divide an established community or limit movement, travel, or social interaction between established land uses. No impacts would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project's consistency with the City of Hayward's General Plan land use designation and key Zoning Ordinance provisions is discussed below.

Hayward 2040 General Plan

The project site has a land use designation of LMDR (Limited Medium Density Residential). As described in the City's General Plan, the LMDR designation generally applies to suburban areas that contain a mix of housing types, including single-family homes, second units, duplexes, triplexes, fourplexes, townhomes, apartment and condominium buildings and ancillary structures. Other allowed uses include recreation facilities, community gardens, and compatible neighborhood commercial and neighborhood mixed-use. Development standards under the LMDR designation include a maximum floor area ratio (FAR) of 0.5. The maximum FAR of 0.5 only applies to public and quasi-public uses, neighborhood commercial uses, neighborhood mixed-use, and compatible public and quasi-public uses. The proposed project would involve the development of a new church, a compatible quasi-public use, with a FAR of 0.08. Therefore, the project would be consistent with the parcel's General Plan designation.

The City's General Plan identifies goals policies to guide land use patterns to strategically accommodate future growth while preserving and enhancing the city as a whole. The proposed project's consistency with selected applicable City goals and policies is described in Table 13.

Table 13 General Plan Consistency

General Plan Goal or Policy	Proposed Project Consistency
Policy NR-1.1 Native Wildlife Habitat Protection. The City shall limit or avoid new development that encroaches into important native wildlife habitats; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.	Consistent. As described in Section 4, <i>Biological Resources</i> , the proposed project would not encroach into native wildlife habitats or result in significant impacts related to protected or special-status species.
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 (NOX), and particulate matter (PM10 and PM2.5) through project location and design.	Consistent. As described in Section 3, <i>Air Quality</i> , the proposed project would result in less than significant impacts related to air quality emissions during construction and operation.
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.	Consistent. As described in Section 10, <i>Hydrology and Water Quality</i> , the proposed project would implement LID techniques and would result in less than significant impacts related to stormwater.
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.	Consistent. As described in Section 7, <i>Geology and Soils</i> , the project would result in less than significant impacts with the incorporation of mitigation to protect discovered paleontological 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.	Consistent. The proposed project is an infill project that would involve construction of a new church on an existing vacant parcel within limits of the City of Hayward.
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.	Consistent. The proposed project would be consistent with the General Plan designation of LMDR and the surrounding character of the neighborhood. The project would involve construction of a new religious institution within an existing residential neighborhood. The project would also provide public access to open landscaped and recreational space.

The proposed project would be consistent with these General Plan policies and with the land use designation.

Mission-Garin Neighborhood Plan

The project site is located within the boundaries of the Mission-Garin Neighborhood Plan, which was adopted by the Hayward City Council in 1987 and is intended to provide a bridge between the General Plan and specific development in the Mission-Garin Neighborhood Plan Area. The Plan

identifies considerations that, like the policies in the General Plan, are intended to guide land use patterns to accommodate future growth. The proposed project's consistency with the considerations in the Plan is described in Table 14.

Table 14 Mission-Garin Neighborhood Plan Consistency

Considerations	Proposed Project Consistency
Land Use Consideration 7. In order to maximize the open space qualities of the study area, encourage future development to be clustered.	Consistent. The proposed project would involve development of a church, which would fill a gap created by a vacant lot between existing residential developments.
Land Use Consideration 10. Development approvals will be evaluated based on the impact of additional traffic on key intersections in the study area and surrounding areas.	Consistent. As described in Section 17, <i>Transportation</i> , the project would not result in a significant impact related to the circulation system in the area, including existing roadways.
Land Use Consideration 18. During the environmental review of future development in the hill area, require archaeological/historic resource component which contains research specific to each site.	Consistent. As described in Section 5, <i>Cultural Resources</i> , the project would not result in impacts to historic resources and impacts related to archaeological resources would be less than significant with mitigation measures incorporated.
Public Services and Facilities Consideration 28. Consider the ability of police and fire departments to provide services to the study area when reviewing development proposals.	Consistent. As described in Section 15, <i>Public Services</i> , the proposed project would be adequately served by existing fire and police services.

The proposed project would be consistent with these considerations in the Mission-Garin Neighborhood Plan.

City of Hayward Zoning Ordinance

Most of the project site is zoned Limited Medium Density Residential (RMB3.5), and the remaining portion at the rear (eastern) portion of the site is zoned Planned Development (PD). However, the project would involve a zone change to apply a new PD to the site. The purpose of the PD District is to "encourage development, redevelopment, and rehabilitation" and "foster well designed residential and nonresidential development, encouraging projects incorporating a variety of housing types" (HMC Section 10-1.2505). Land uses permitted in any other district may be permitted in the PD District provided such use or uses are in harmony with each other and serve to fulfill the function of the planned unit development while complying with the General Plan (HMC Section 10-1.2510). Approval of the proposed PD would be subject to the review of the Planning Commission and City Council to ensure compliance with applicable zoning standards and guidelines. In addition, the Planning Commission and City Council would be required to make the required findings of fact in HMC Section 10-1.2535.

With approval of the requested zone change, the project would not conflict with the City's General Plan or zoning ordinance. Therefore, impacts of the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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. *Would the project 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?*

Hayward's principal mineral resources are stone, limestone, clay, fire clay, halite, and salt (City of Hayward 2014a). The city currently has no active mineral extraction operations (DOC 1987). The proposed project would include involve the construction of new church facilities in a developed area and would not result in a loss of available minerals. There would be no impact.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fundamentals of Noise

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called “A-weighting” is used to filter noise frequencies that are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the “A-weighted” levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and “dBA” is understood to identify the A-weighted decibel.

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, whether an increase or decrease; that a change of 5 dBA

is readily perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud (Caltrans 2013a).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}), the community noise equivalent level (CNEL) and the day-night average noise level (DNL).

- The L_{eq} is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8h)}$ is the equivalent noise level over an 8-hour period. $L_{eq(1h)}$ is a common metric for limiting nuisance noise whereas $L_{eq(8h)}$ is a common metric for evaluating construction noise.
- The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dBA penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dBA penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.
- The DNL (or L_{dn}) is another 24-hour equivalent sound level, which applies an additional 10 dBA penalty to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. (U.S. HUD 2009).

Propagation

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is

sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2013b). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2013b).

Caltrans has published applicable guidelines for vibration annoyance caused by transient and intermittent sources, as shown in in Table 15.

Table 15 Caltrans Criteria for Vibration Annoyance

Human Response	Maximum PPV (in/sec)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources ¹
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

¹ Caltrans defines transient sources as those that create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources can include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2013b

In addition, Caltrans has published guidelines for structural damage from vibration, as shown in Table 16.

Table 16 Caltrans Criteria for Vibration Damage

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013b

Regulatory Setting

The goals and policies contained in the *Hayward 2040 General Plan Hazards Element* focus on minimizing human exposure to excessive noise by evaluating noise exposure risks and incorporating appropriate noise reduction measures. In support of these goals, the General Plan contains a table of exterior noise compatibility standards for various land uses (shown in Table 17) to determine potential noise exposure impacts, noise compatibility thresholds, and the need for mitigation. According to the City's noise standards showing in Table 17 the highest level of exterior noise exposure regarded as "normally acceptable" for churches is 70 L_{dn}. In addition, consistent with State noise insulation standards (California Building Code Title 24), the City's General Plan policy HAZ-8.7 states the maximum acceptable interior noise level for "offices and similar uses" is 45 L_{dn} (City of Hayward 2014a).

Table 17 City of Hayward Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	Highest Level of Exterior Noise Exposure that is Regarded as "Normally Acceptable" ¹ (L _{dn} or CNEL)
Residential: Single-Family Homes, Duplex, Mobile Home	60
Residential: Townhomes and Multi-Family Apartments and Condominiums	65
Urban Residential Infill ² and Mixed-Use Projects ³	70
Lodging: Motels and Hotels	65
Schools, Libraries, Churches, Hospitals, Nursing Homes	70
Auditoriums, Concert Hall, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75
Office Buildings: Business, Commercial, and Professional	70
Industrial Manufacturing, Utilities, Agriculture	75

¹ "Normally Acceptable" means that the specified land uses is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise mitigation.

² 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).

³ Mixed-Use Projects would include all mixed-use developments throughout the City of Hayward.

Source: City of Hayward 2014a

HMC Section 4-1 sets the City's noise regulations as amended by Ordinance 11-03, adopted March 22, 2011. While the project would not include residential uses, HMC Section 4-1.03.1b requires that nonresidential properties that abut residential properties comply with noise limits set for residential properties. Therefore, since the project site abuts several residential properties, it is subject to the HMC's noise limits for residential properties. Section 4-1.03.1 establishes noise limits for residential properties, prohibiting the generation of noise as measured outside the property plane in excess of

70 dBA L_{eq} between the hours of 7:00 a.m. and 9:00 p.m. 60 dBA L_{eq} between the hours of 9:00 p.m. and 7:00 a.m..

Section 4-1.03.4 of the HMC states that during construction no individual piece of equipment shall produce a noise level exceeding 83 dBA at 25 feet from the source. In addition, construction noise may not exceed 86 dBA at any point outside of the property plane. This section, consistent with General Plan policy HAZ-8.21, also limits construction, alteration, or repair of structures and any landscaping activities to the hours below:

- Sundays and holidays between 10:00 a.m. and 6:00 p.m.
- Monday through Saturday between 7:00 a.m. and 7:00 p.m.

Finally, the City's General Plan policy HAZ-8.22 requires a vibration impact assessment for proposed projects in which heavy-duty equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City requires all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur. The City of Hayward has not adopted a significance threshold to assess vibration impacts during construction and operation. Therefore, the Caltrans guidelines described above are used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance.

Existing Setting

The acoustic environment on and near the project site is dominated by noises typical of residential neighborhoods, including vehicular traffic, pedestrian conversations, and doors slamming. On July 20, 2020, Rincon Consultants, Inc. performed two 15-minute weekday noise measurements using an ANSI Type II integrating sound level meter. The measurements were taken during a.m. (morning) peak hours on a weekday, and results are summarized in Table 18. Figure 8 shows the noise measurement locations.

Table 18 Noise Measurement Results

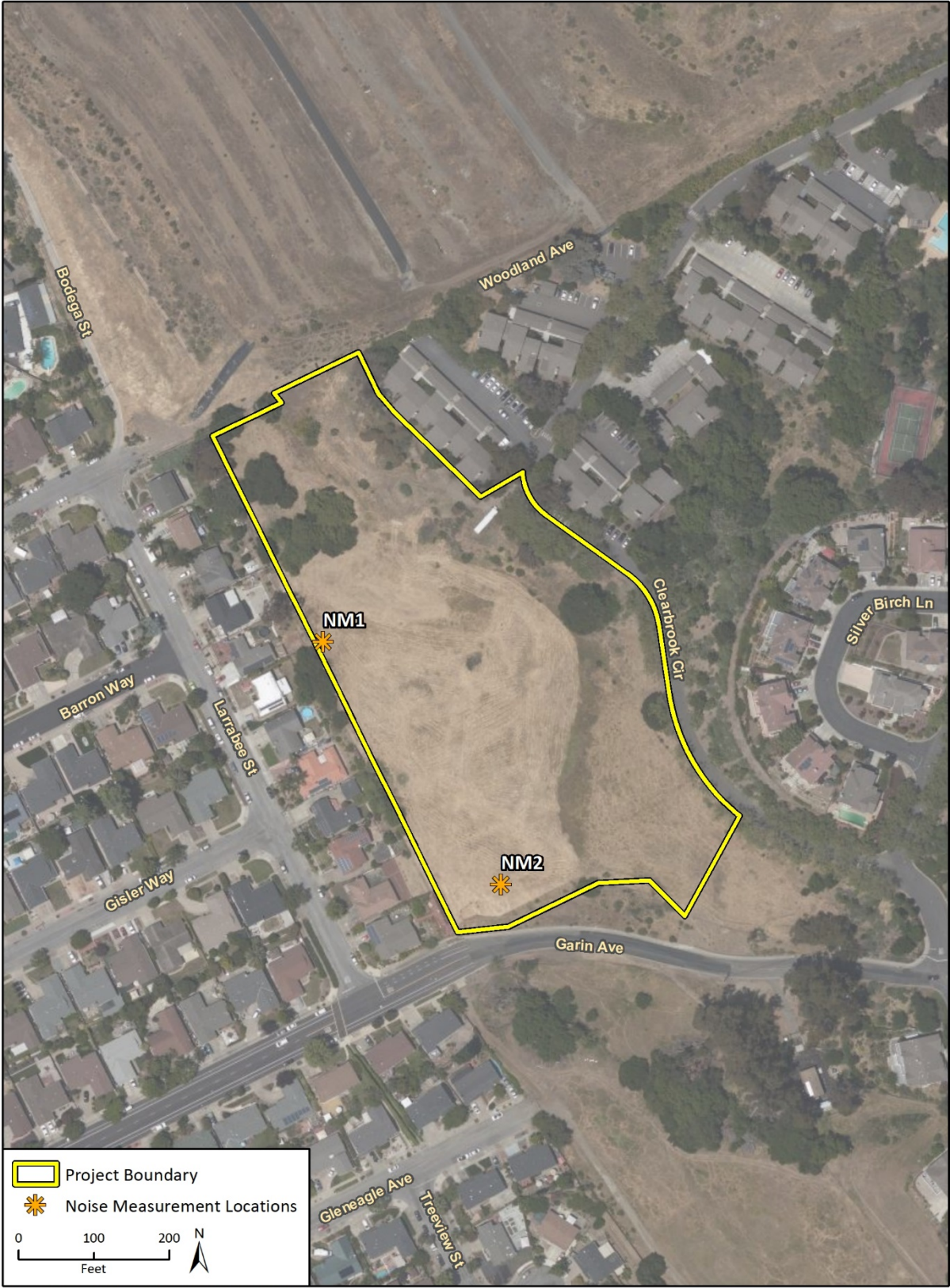
Measurement Location	Sample Time	Primary Noise Source	L_{eq} [15] (dBA) ¹
Western property line, near abutting residences	8:14 a.m. – 8:29 a.m.	Vehicles on Garin Avenue	44.6
Garin Avenue, near proposed driveway	8:24 a.m. – 8:49 a.m.	Vehicles on Garin Avenue	55.0

See Figure 8 for a map of the noise measurement location.

¹ The equivalent noise level (L_{eq}) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement, the L_{eq} was over a 15-minute period (L_{eq} [15]).

Source: Rincon Consultants, field measurements conducted on July 30, 2020, using ANSI Type II Integrating sound level meter. See Appendix G for noise measurement results.

Figure 8 Noise Measurement Locations



Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive receptors generally include single- and multi-family residences, hotels, motels, schools, libraries, places of worship, hospitals, and nursing homes. The predominant noise-sensitive land uses in the project vicinity are residences located adjacent to the project site to the east and west. The nearest sensitive receptors to the project site are the single-family residences along Larrabee Street located approximately 50 feet to the west and the multi-family residences located approximately 50 feet to the northeast of the project site.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The proposed project would generate temporary noise increases during construction and long-term increases associated with project operation; however, as discussed below, both construction-related and operational noise impacts would be less than significant.

Construction Noise

Construction noise was estimated using the Roadway Construction Noise Model (RCNM) provided by the Federal Highway Administration (FHWA). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Because a specific construction equipment list is not yet available for the project, the construction equipment list used in RCNM was generated using the CalEEMod analysis for air quality and GHG emissions (see Appendix A). CalEEMod uses project characteristics, such as land use, building sizes, and lot acreage, to estimate a project's emissions and uses default equipment lists in its modeling based on empirical data. Noise was modeled based on the project's anticipated construction equipment for each phase and distance to nearby receptors.

Although the nearest noise sensitive receptors are adjacent to the project site, this analysis assumes that on average construction would occur approximately 50 feet from the project boundary because RCNM estimates equivalent noise levels over time, and construction equipment would not typically operate next to the property line. Equipment is typically dispersed in various areas of the site, with only a limited amount of equipment operating near a given location at a particular time. Therefore, this analysis of construction noise impacts is conservative.

Table 19 identifies the average expected noise levels at the nearest sensitive receptors based on the combined use of construction equipment anticipated to be used concurrently during each phase of construction.

Table 19 Maximum Estimated Noise Levels by Construction Phase

Construction Phase	Equipment	Estimated Noise (dBA L _{eq}) at 50 feet
Grading	Grader, backhoe, dozer	88
Building Construction	Generator, tractor, lift, crane, welders	86
Paving	Cement mixers, paver, roller, backhoe, paving equipment	86
Architectural Coating	Air compressors	74

Source: Roadway Construction Noise Model. See Appendix G for equipment noise impact data sheets.

As shown in Table 19, construction noise could be as high as approximately 88 dBA L_{eq} at surrounding residential receptors approximately 50 feet from construction activity. Such levels would exceed ambient noise and would be audible on adjacent properties, including residences immediately east and west of the project site. As shown above in Table 18, the existing ambient noise level during peak-hour traffic is 55 dBA L_{eq}. Therefore, construction noise could be up to 33 dBA L_{eq} louder than existing levels at sensitive receptors, without implementation of noise reduction measures.

HMC Section 4-1.03.4 limits the hours of construction and maintenance activities to the less sensitive hours of the day (7:00 a.m. – 7:00 p.m. Monday through Saturday and 10:00 a.m. – 6:00 p.m. on Sundays and holidays). Therefore, construction would not occur during normal sleeping hours for residents, which are the most sensitive time for exposure to noise. This section also states that during the construction period listed above no piece of equipment may produce a noise level exceeding 83 dBA at 25 feet from the source or 86 dBA outside the project site. As shown in Table 19, noise from construction of the proposed project could exceed these limits without implementation of noise reduction measures. However, similar to typical residential construction in suburban areas, no pile driving would be required.

The following City of Hayward Standard Condition of Approval would apply to construction activities, including measures that would reduce construction noise from the levels estimated in Table 19:

The following control measures for construction noise, grading and construction activities shall be adhered to, unless otherwise approved by the Planning Director or City Engineer:

- In conformance with Section 4-1.03-4 of the City's Municipal Code, construction activities between 7:00 a.m. and 7:00 p.m. Monday through Saturday or between 10:00 a.m. and 6:00 p.m. on Sundays or holidays, unless other construction hours are permitted by the City Engineer or Chief Building Official, shall not include any individual equipment that produces a noise level exceeding 83 dB measured at 25 feet, nor shall activities produce a noise level outside the project property lines in excess of 86 dB. During all other hours, noise shall not exceed the limits defined in Municipal Code Section 4-1.03.1 (70 dB daytime or 60 dB nighttime, measured at residential property lines).
- Grading and construction equipment shall be properly muffled;
- Unnecessary idling of grading and construction equipment is prohibited;
- Stationary noise-generating construction equipment, such as compressors, shall be located as far as practical from occupied residential housing units;

- Applicant/developer shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise.
- Letters shall be mailed to surrounding property owners and residents within 300 feet of the project boundary with this information.
- The developer shall post the property with signs that shall indicate the names and phone number of individuals who may be contacted, including those of staff at the Bay Area Air Quality Management District, when occupants of adjacent residences find that construction is creating excessive dust or odors, or is otherwise objectionable. Letters shall also be mailed to surrounding property owners and residents with this information prior to commencement of construction.

Observance of the above Condition of Approval would ensure that construction noise occurs within the hours specified by the City and does not exceed the standards in HMC Section 4.1.03.4, 83 dBA at 25 feet from the noise-generating source or 86 dBA outside the project site. Impacts related to construction noise would therefore be less than significant.

On-Site Operational Noise

The primary on-site noise sources associated with operation of the proposed project would include vehicle circulation noise (e.g., engine startups, alarms, parking) at the on-site parking lot; heating, ventilation, and air conditioning (HVAC) equipment at proposed buildings; and outdoor recreational noise at common and private open space areas.

Parking Lot Noise

Typical noise sources associated with parking lots include tire squealing, door slamming, car alarms, horns, and engine start-ups. The proposed project includes 135 parking stalls at the southwestern portion of the site, which would be located as close as approximately 50 feet from residences to the west of the site. Table 20 shows typical noise levels at this distance from various noise sources on parking lots. These are instantaneous noise levels which would occur for short bursts of time during the use of cars on the project site.

Table 20 Maximum Noise Levels from Parking Lot Activity

Source	Maximum Noise Level (dBA) at 50 Feet
Autos at 14 mph	50
Car Alarm Signal	69
Car Alarm Chirp	54
Car Horns	69
Door Slams or Radios	64
Talking	36
Tire Squeals	66

Source: Gordan Bricken & Associates, 1996. Estimates are based on actual noise measurements taken at various parking lots.

As shown in the table above, instantaneous parking lot noise could reach a maximum estimated 69 dBA at a distance of 50 feet. Given the proposed church use, noise levels at the proposed parking lot would likely fluctuate depending on the day and time of events. For example, it is expected that noise levels would be greater during Sunday mornings, when typical weekly church services occur, and lower during the evenings and on weekdays.

Because of the maximum noise levels shown in Table 20 and their instantaneous nature, parking lot noise on the project site would not exceed the City's noise standards for residential properties. Instantaneous noise reaching an estimated 69 dBA at adjacent sensitive receptors would not result in average noise levels exceeding the daytime standard of 70 dBA L_{eq} . Evening events at the proposed church could potentially generate parking lot noise after 9 p.m., which would be subject to the City's nighttime noise standard of 60 dBA L_{eq} . However, use of an on-site parking lot after 9 p.m. at a church would be rare, and even during such events it is unlikely that maximum noise approaching 69 dBA would result in average noise levels exceeding 60 dBA L_{eq} over an hour-long period. The loudest individual noise sources in parking lot areas shown in Table 20, including car horns, car alarm signals, and tire squeals, would occur infrequently and would be instantaneous in nature. Furthermore, the City's enforcement of the following restrictions on car horns in HMC Section 4-1.03.3(b) would minimize noise from that source:

"Vehicle horns, or other devices primarily intended to create a loud noise for warning purposes, shall not be used when a situation endangering life, health or property is not imminent."

Moreover, parking lot activity is a typical noise source in Hayward, even near residential uses. For example, there are several parking lots that serve the multi-family residential buildings that abut the site to the northeast. Estimated intermittent noise levels of up to 69 dBA also would not be unusually loud and intense, with respect to typical noise sources in a residential neighborhood such as landscaping equipment. Therefore, the project would have a less than significant impact from parking lot noise.

Off-Site Traffic Noise

The proposed project would generate new vehicle trips and incrementally increase traffic on area roadways, which would increase roadway noise at nearby residences to the northeast and west. As discussed in Section 17, *Transportation*, the proposed project would generate approximately 247 daily vehicle trips. To determine existing traffic volumes along area roadways, a traffic count was taken along Garin Avenue at the location of NM 1 over a 15-minute interval. During the 15-minute interval at NM 1, 21 vehicles were counted. Traffic numbers were multiplied by four to obtain an approximate hourly traffic volume of 84 vehicles along Garin Avenue. Because hourly traffic is equivalent to up to 10 percent of daily traffic, the daily traffic volume along Garin Avenue was estimated at approximately 840 vehicles.²

The proposed project's contribution to roadway noise was evaluated through a calculation by comparing existing traffic noise levels with operation of the project. Generally, a doubling of traffic (i.e., 100 percent traffic increase) would increase noise levels by approximately 3 dBA, which is the human level of perception for an increase in noise (FTA 2018). By contrast, modeling of traffic noise indicates that a 10 percent increase in traffic volume would raise traffic noise by approximately 0.4

² Because the noise measurements were taken during the Alameda County Shelter-in-Place order due to the COVID-19 pandemic, traffic was likely artificially low compared to typical conditions. Lighter traffic conditions also likely contributed to artificially low noise levels during the time the measurements were taken. However, these baseline ambient noise conditions would not affect the project's operational noise impacts.

dBA, a 20 percent increase would raise traffic noise by about 0.8 dBA, and a 30 percent increase would result in an approximately 1.1 dBA increase in traffic noise. The 247 daily trips added by the project would constitute a 29 percent increase in traffic volume along Garin Avenue, resulting in a noise increase of approximately 1.1 dBA. Such an increase would be imperceptible and would not result in a substantial permanent increase in ambient noise levels. Traffic noise would be less than significant.

Mechanical Equipment

Mechanical equipment includes HVAC equipment typically located on the roof of a building or within an interior mechanical room. Noise levels from large-scale rooftop-mounted commercial HVAC systems are typically in the range of 60 to 70 dBA L_{eq} at a distance of 15 feet from the source (Illingworth & Rodkin, Inc. 2009). It is assumed that HVAC equipment for the new church and office buildings would not exceed this reference noise level for large-scale commercial facilities. Conservatively, HVAC equipment at the project site would be installed at a distance of at least 50 feet from the nearest sensitive receptors. At this distance, HVAC equipment would generate an estimated noise level of up to 60 dBA L_{eq} , without accounting for a shielding effect by rooflines and parapets. Therefore, the equipment would not result in noise levels at the closest residential buildings that would exceed the daytime noise limit of 70 dBA L_{eq} or the nighttime noise limit of 60 dBA L_{eq} identified in HMC Section 4-1.03.1. Moreover, new HVAC equipment would not generate greater noise than existing HVAC equipment at the multi-family residential buildings in the surrounding urbanized area. Therefore, new HVAC noise would not generate a substantial increase in ambient noise levels at nearby sensitive receptors, relative to existing conditions. On-site mechanical equipment would have a less than significant noise impact.

Outdoor Recreation

Operation of the proposed project would involve use of the outdoor recreational areas and gardens, including a play structure, basketball court, and plaza. Noise-generating activities typical of these outdoor activity areas are outdoor gatherings and general conversation.

Conversational noise was estimated based on noise levels from a certified EIR for the Palladium Residences Project in Los Angeles. The noise level of 20 people talking simultaneously was estimated at 63 dBA L_{eq} at receptors 3 feet away (City of Los Angeles 2014). Noise from informal outdoor basketball games was estimated based on a noise study completed for the Southampton Tennis Club and Camp in New York. The noise level of 7 people playing basketball was estimated at 62.3 dBA L_{eq} at receptors 20 feet away (VHB Engineering 2018). The outdoor recreational areas would be located as close as approximately 90 feet from the nearest sensitive receptors, the multi-family residences to the northeast of the property, where the existing ambient noise level is approximately 45 dBA L_{eq} during peak-hour traffic. At this distance, noise from human conversations would decrease to an estimated 32 dBA L_{eq} , and noise from the basketball court would decrease to an estimated 50 dBA L_{eq} (based on attenuation of 6 dBA per doubling of distance). Therefore, noise from the outdoor recreation areas would not exceed the residential noise limits in HMC Section 4-1.03.1. Impacts of noise at the outdoor recreation areas would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction of the proposed project would intermittently generate vibration on and adjacent to the project site. Vibration-generating equipment may include bulldozers and loaded trucks to move materials and debris, and vibratory rollers for paving. It is assumed that pile drivers, which generate strong groundborne vibration, would not be used during construction. Vibration-generating equipment on the project site would be used as close as approximately 25 feet from the nearest sensitive receptors to the west and east.

Unlike construction noise, vibration levels are not averaged over time to determine their impact. The most important factors are the maximum vibration level and the frequency of vibratory activity. Therefore, it is appropriate to estimate vibration levels at the nearest distance to sensitive receptors that equipment could be used, even though this equipment would typically be located farther from receptors. This analysis assumes that vibration-generating equipment could be located as close as 25 feet from sensitive receptors adjacent to construction at the project site, which is the reference distance for vibration levels provide by Caltrans. Table 21 estimates vibration levels from equipment at this distance.

Table 21 Vibration Levels for Construction Equipment at Noise-Sensitive Receptors

Equipment	PPV (in/sec)
	25 feet
Vibratory Roller	0.210
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Source: Caltrans 2013b	

As shown in Table 21, construction activity would generate vibration levels reaching an estimated 0.210 PPV at a distance of 25 feet, if vibratory rollers are used to pave asphalt. Vibration-generating equipment would be operated on a transient basis during construction.

A maximum vibration level of 0.210 PPV during the potential use of vibratory rollers would not exceed 0.25 PPV, Caltrans' recommended criterion for distinctly perceptible vibration from transient sources. Construction activity that generates loud noises (and therefore vibration) also would be limited to daytime hours on weekdays and Saturdays, which would prevent the exposure of sensitive receptors to vibration during evening and nighttime hours. As a result, it would not result in substantial annoyance to people of normal sensitivity. In addition, the vibration level would not exceed the Caltrans' recommended criterion of 0.5 PPV for potential damage of historic and old buildings from transient vibration sources. Therefore, the impacts of vibration on people and structures would be less than significant.

As a church development, the proposed project would not generate significant stationary sources of vibration after construction, such as manufacturing or heavy equipment operations. Operational vibration in the project vicinity would be generated by additional vehicular travel on local roadways; however, any increase in traffic-related vibration levels would not be perceptible because, as described in Section 17, *Transportation*, operation of the proposed project would not substantially

increase existing traffic volumes in the area. Therefore, operational vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Section 9, *Hazards and Hazardous Materials*, the nearest airport to the project site is the Hayward Executive Airport, located approximately six miles to the northwest of the project site. The project site is not located within the Hayward Executive Airport Influence Area and is located outside the existing noise level contours for the airport (ALUC 2012). The proposed project would not subject people at the site to excessive noise and there would be no impact.

NO IMPACT

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14 Population and Housing

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

- a. *Would the project 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)?*

The project would involve the construction of a church and associated structures; it would not involve the construction of new dwelling units and would therefore not directly induce population growth in the City. The project would create jobs that could indirectly cause population growth through employee relocations to the project area. However, operation of the church is expected to require approximately five part-time employees; such an incremental increase in employment would not induce substantial population growth. Moreover, since the proposed project would be used as a replacement for an existing church currently renting space at 31123 Mission Boulevard in Hayward, the project would not result in a substantial increase in new employment opportunities in the City.

The project would not involve the extension of roads or other infrastructure; the new structures would be constructed within City limits and connected to existing infrastructure systems in the area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project would involve construction of a church on a vacant lot; there are no existing housing units or temporary housing accommodations on the project site. Therefore, the project would not displace existing housing units or people. No impact would occur.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Fire protection is provided to the City by the Hayward Fire Department (HFD). The HFD provides fire suppression, advanced life support/emergency medical, emergency services, and public education. Station 3 is the closest fire station to the project site. Located at 31982 Medinah Street, this station is located approximately five minutes driving time, 1.8 miles northwest of the project site. Hayward adopted the 2018 edition of the International Fire Code and the 2019 California Fire Code as the city's Fire Code in 2019 (HMC Section 3-14.00).

The proposed project would involve the development of a church and associated structures on a vacant site in an area developed primarily with residential development and that is currently served by the HFD. Therefore, the proposed project would incrementally increase the demand for fire and medical services. The proposed project would be required to comply with City requirements for fire access and onsite fire prevention facilities (e.g., sprinkler systems, installation of a new fire hydrant if existing capacity is not sufficient). As described under Section 11, *Land Use and Planning*, and Section 13, *Population and Housing*, the proposed project would be consistent with the General Plan's LMDR land use designation and would not generate growth beyond that anticipated for the

City. Therefore, the proposed project would not place an unanticipated burden on fire protection services or affect response times or service ratios such that new or expanded fire facilities would be needed. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The Hayward Police Department (HPD) provides law enforcement services in Hayward. The nearest police station to the site is located at 2434 Whipple Road, 3 miles northeast of the project site (approximately nine minutes driving time). The proposed project would involve the construction of a church on a site that is in a developed area of the City of Hayward and currently served by the HPD. Although the proposed project would incrementally increase the demand for police services, the project site is located in the close vicinity (within five miles) of the City's police headquarters, and, as described in Section 13, *Population and Housing*, the project would not result in population growth beyond expectations in the City's General Plan. The project would not require the construction or expansion of police protection facilities beyond those already planned under General Plan assumptions (City of Hayward 2013). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The project site is served by the Hayward Unified School District (HUSD). As described in Section 13, *Population and Housing*, the project would not result in direct population growth or substantial indirect population growth; therefore, the project would not result in a substantial increase in the number of students attending schools operated by HUSD. In addition, pursuant to Senate Bill 50 (Section 65995(h)), payment of mandatory fees to the affected school district would reduce potential school impacts to less than significant level under CEQA. Therefore, the proposed project would have a less than significant impact with respect to schools.

LESS THAN SIGNIFICANT IMPACT

- a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Please see Section 16, *Recreation*, for an analysis of impacts related to parks and recreation resources. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As discussed in Section 13, *Population and Housing*, the proposed project would not result in substantial population growth in Hayward or growth beyond that anticipated in the City's General Plan. As discussed in Section 10, *Hydrology and Water Quality*, impacts related to stormwater facilities would be less than significant. As discussed in Section 19, *Utilities and Service Systems*, impacts related to water and wastewater water facilities would be less than significant. No significant impacts to other public services are anticipated. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

Public parks in Hayward are managed by the Hayward Area Recreation and Park District, an independent special use district created to provide park and recreational services for over 280,000 residents in the city and the surrounding area (City of Hayward 2019). The proposed project would include landscaped open space, including gathering and play spaces, and outdoor recreation areas, including a basketball court and a fenced play structure. The closest park to the project site is Garin Regional Park, located approximately 0.5 mile east of the site. Pursuant to HMC Chapter 10.16, payment of mandatory park in-lieu fees would reduce potential park impacts to less than significant level under CEQA. Therefore, the proposed project would result in no impact with respect to parks and recreational facilities.

NO IMPACT

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17 Transportation

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

Regulatory Setting

Senate Bill 743 and Vehicle Miles Traveled

Senate Bill (SB) 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.”

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. SB 743 requires the Governor’s OPR to identify new metrics for identifying and mitigating transportation impacts within CEQA. In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications, and are now in effect. SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, § 21099 (b)(2)). In addition to new exemptions for projects consistent with specific plans, the CEQA Guidelines replaced congestion-based metrics, such as auto delay and level of service (LOS), with VMT as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

City of Hayward

CEQA Guidelines Section 15064.3(b) indicates that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. In June 2020, the City of Hayward adopted the following thresholds of significance for VMT analysis according the guidance from OPR:

- Residential: 15 percent below existing average VMT per capita for the City
- Employment – Office: 15 percent below existing regional average VMT per employee
- Employment – Industrial: Below existing regional average VMT per employee
- Retail: Net increase in total regional VMT

In addition, the City of Hayward has developed screening criteria to provide project applicants with a conservative indication of whether a project could result in potentially significant VMT impacts. If the screening criteria are met by a project, the applicant would not need to perform a detailed VMT assessment for their project. The City's guidelines do not include screening criteria for assembly uses such as the proposed project. However, the City's traffic engineer determined that the screening criteria for local serving retail projects could be used to evaluate the proposed project. The City's screening criteria for local serving retail projects is 50,000 square feet; since the project would involve 30,978 square feet of floor area, it is below the applicable screening criteria.

Impact Analysis

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Roadway Facilities

In December 2019 California's Third District Court of Appeal ruled that under SB 743, automobile delay may no longer be treated as a significant impact in CEQA analysis (*Citizens for Positive Growth & Preservation v. City of Sacramento*). Nevertheless, this analysis and the completed Transportation Impact Analysis (TIA) prepared by Kittelson & Associates Inc. in 2020 provides a discussion of the project's effects on levels of service (LOS) for informational purposes, because they are relevant to consistency with local standards for the performance of the circulation system. This analysis is briefly summarized below and included fully in Appendix H.

Table 22 shows the estimated trip generation from the project based on trip generation rates provided in the draft TIA (Kittelson & Associates 2020).

Table 22 Proposed Project Trip Generation

Land Use	Square Feet	Weekday Daily Trips	Weekday a.m. Peak Hour Trips			Weekday p.m. Peak Hour Trips			Sunday Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Church	27,598	192	5	4	9	6	8	14	132	144	276
Small Office Building	3,380	55	5	1	6	3	5	8	--	--	--
Total		247	10	5	15	9	13	22	132	144	276

¹ Trip generation rates from Institute of Transportation Engineers (ITE) *Trip General Manual, 10th Edition*, land use categories 560 (Church) and 712 (Small Office Building).

As shown in Table 22, the proposed project would generate approximately 247 daily trips including 15 a.m. peak hour trips and 22 p.m. peak hour trips. In addition, on Sundays, during which most church activities would take place, the project would generate approximately 276 peak hour trips. The primary roadway that would be affected is Mission Boulevard, a two-lane road designed to carry relatively low levels of vehicle traffic.

As the Congestion Management Agency (CMA) for Alameda County, the Alameda County Transportation Commission (ACTC) is responsible for establishing, implementing, and monitoring the County's Congestion Management Program (CMP). Through its implementation of the CMP, the ACTC works to ensure that roadways operate at acceptable LOS and reviews development proposals to ensure that transportation impacts are minimized. ACTC does not require transportation impact analyses for projects generating fewer than 100 p.m. peak hour trips; the proposed project would generate approximately 22 p.m. peak hour trips, below the County's threshold. Therefore, the project is expected to generate a modest number of new trips during weekdays and would not significantly alter the area's transportation network and operations. Therefore, a CMP segment and transit analysis consistent with the Alameda CTC Land Use Program was not required.

The TIA also includes an analysis of the project's impact on LOS at nearby intersections. As described further in the TIA, under existing conditions, the proposed project would not result in a substantial decrease in LOS in the area, and all study intersections would operate acceptably (LOS E or better). Under cumulative conditions in the year 2035, the intersection of Mission Boulevard and Industrial Parkway/Alquire Parkway would operate at unacceptable levels (LOS F), and the proposed project would result in a delay increase of five seconds. However, the TIA concludes that with optimization of the intersection signal timing, the intersection would operate at better than pre-project conditions, and that this intersection is a part of the City's SCATS signal system, which dynamically adjusts and optimizes signal timing to reflect changing traffic patterns. Therefore, the TIA concludes that the project would not increase traffic levels at local intersections to levels that would require improvements. Because LOS is no longer considered a CEQA issue, this analysis is provided for informational purposes only.

In addition, the TIA also evaluates the project's impacts on roadway safety. Although the TIA did not identify potentially significant impacts related to traffic safety, the TIA identified the following recommendation:

- In order to improve visibility and safety at the project driveway on Garin Avenue for eastbound and westbound vehicles, it is recommended that an inbound left turn lane be added along Garin Avenue at the project driveway. Garin Avenue is currently 24 feet wide (with two 12-foot

vehicle lanes) along the project frontage. Adding an inbound lane and its taper would require widening Garin Avenue by approximately 11 feet.

This recommendation would be included as a condition of approval for the project. With compliance with this condition of approval, impacts related to roadway safety would be less than significant.

Transit, Bicycle, and Pedestrian Facilities

The proposed project would not conflict with adopted policies, plans, or programs regarding transit facilities as the it would not include alterations to existing transit routes. Because construction and operations would be contained within the boundary of the project site, no changes to the existing transportation policies, plans, or programs would result, either directly or indirectly, from development on the project site. In addition, the proposed project would not involve the obstruction, removal or relocation of, or excessive additional demand for, existing transit or facilities.

Although the TIA did not identify potentially significant impacts related to pedestrian and bicycle safety, the TIA provides the following recommendations for alterations to bicycle and pedestrian access to and from the site:

- Ensure that the driveway on Garin Avenue is designed for pedestrian visibility and safety (sidewalks clearly delineated, improved visibility by minimizing bushes and large signs, install continental crosswalk). Provide other signage such as bikeway signage and caution signage for vehicles entering or existing the project driveway to be aware of pedestrians and bicyclists.
- Coordinate with the City to install continental crosswalks at all intersection legs at the intersections of Larrabee Street & Garin Avenue and Vanderbilt Street & Garin Avenue.
- Coordinate with the City of Hayward to extend the eastbound and westbound bike lanes to the project driveway to provide direct bicycle access to and from the project site. Garin Avenue is currently 24 feet wide (with two 12-foot vehicle lanes) along the project frontage. Extending the eastbound and westbound bike lanes to the project driveway would require widening Garin Avenue by approximately eight feet along the project frontage.
- Coordinate with the City of Hayward to move the existing Bike Lane End and Bike Route signage on Garin Avenue east of Larrabee Street closer to the bike lane termination point, and consider adding markings such as transition markings and sharrows east of the bike lanes so vehicles and cyclists are aware that cyclists will be merging into the vehicle lane.
- Work with the City to explore options for implementing traffic calming techniques in the area (such as installing lateral shifts and curb extensions) to decrease vehicle speeds and increase bicycle and pedestrian safety as part of design review and conditions of approval.

These recommendations would be conditions of approval for the project. Implementation of these recommendations would allow direct and safe access for bicyclists and pedestrians traveling to, from, and near the project site. Since these recommendations would be included as conditions of approval for this project, impacts related to bicycle facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

As described in the *Regulatory Setting* section above, the City's traffic engineer determined that the screening criteria for local serving retail projects, 50,000 square feet, could be used to evaluate the proposed project. Since the project would involve 30,978 square feet of floor area, it is below the applicable screening criteria. Therefore, the project would not result in significant impact and a detailed traffic assessment is not required.

Nevertheless, the project applicant has provided a detailed assessment of the project's impacts on VMT (Appendix H). The assessment includes a calculations of the church's VMT in its current location (31123 Mission Boulevard, Hayward) and the VMT of the proposed project. The assessment also calculates daily VMT based on the vehicle trips that would occur on Sundays, when the greatest number of trips would occur. Therefore, the assessment provides a conservative estimate of project VMT. As described in detail in the assessment, the total VMT of the church in its current location is 3,813 miles per day, and the total VMT of the proposed project would be 3,759 miles per day. Therefore, the proposed project would result in a 1.4 percent reduction of VMT. Since the project would result in reduced VMT compared to the church's existing location, impacts related to VMT would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Project implementation would occur on an existing vacant parcel and would not alter or effect existing street and intersection networks. The proposed project would be required to comply with the City's design standards for vehicular access and circulation and the Fire Code. The project would also be subject to several conditions of approval related to safety, as described under question (a) above. Compliance would prevent hazardous design features and would ensure adequate and safe site access and circulation. The proposed project involves nonresidential and quasi-public uses on a site designated for residential, neighborhood commercial, and public and quasi-public uses; the proposed church would not introduce incompatible uses, including vehicles or equipment, to the site or the surrounding area. There would be no impact.

NO IMPACT

- d. *Would the project result in inadequate emergency access?*

The project site is directly accessible via two driveways that would connect to Garin Avenue and Woodland Avenue, respectively. The proposed project would be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and HFD. Required review by these departments would ensure the circulation system for the project site would provide adequate emergency access. In addition, the proposed project would not require temporary or permanent closures to roadways. There would be no impact.

NO IMPACT

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18 Tribal Cultural Resources

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

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

The City of Hayward mailed a notification letter on April 3, 2020 to one local Native American tribe that has requested notification under AB 52: the Lone Band of Miwok Indians. Correspondence is included in Appendix I. Under AB 52, tribes have 30 days from receipt of the letter to respond and request consultation. The tribe did not respond during that window and request formal consultation under AB 52. Although no tribal cultural resources are expected to be present on-site, there is the possibility of encountering undisturbed subsurface tribal cultural resources. The proposed excavation of the project site could potentially result in adverse effects on unanticipated tribal cultural resources. However, impacts from the unanticipated discovery of tribal cultural resources during construction would be less than significant with Mitigation Measure TCR-1.

Mitigation Measure

The following mitigation measure would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

TCR-1 Unanticipated Discovery of Tribal Cultural Resources

In the event that cultural resources of Native American origin are identified during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.

Significance After Mitigation

Mitigation Measure TCR-1 would ensure that tribal cultural resources are identified properly and preserved in the event they are uncovered during construction and would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

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

- a. *Would the project 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?*

Water Supply

The proposed project would receive its water from the City of Hayward. The City of Hayward provides water for residential, commercial, industrial, governmental, and fire suppression uses. The City owns and operates its own water distribution system and receives its water from the Hetch Hetchy system, owned and operated by the San Francisco Public Utilities Commission (SFPUC).

Emergency water supplies are available through connections with Alameda County Water District (ACWD) and East Bay Municipal Utility District (EBMUD) in case of disruption of delivery (City of Hayward 2016b).

The City's Urban Water Management Plan (UWMP) assesses Hayward's water supply reliability, and describes the City's anticipated water demand, water shortage contingency plans, and water conservation strategies. The UWMP is based on the growth projections in the City's General Plan. Major water system projects in the near-term focus on replacing and renovating existing water storage reservoirs to increase storage capacity and improve structural reliability. Hayward has also made extensive efforts to improve the seismic safety of the water system, including seismic retrofits of several reservoirs and improvements to pipes at fault line crossings (City of Hayward 2016b).

As determined in the City's UWMP, there is adequate water supply available to serve anticipated growth in Hayward. As described in Section 11, *Land Use Planning*, the proposed project is consistent with the General Plan's LMDR land use designation. Moreover, as described in Section 13, *Population and Housing*, the project would not generate growth beyond that anticipated in the General Plan. Therefore, there would be sufficient potable water supply and infrastructure to accommodate the anticipated demand increases resulting from the proposed project. Construction and operation of the project would not require relocation or construction of new or expanded water supply facilities. Impacts would be less than significant.

Wastewater Generation

Water quality in the State of California is regulated by the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards. The City of Hayward is located in the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Section 303(d) of the CWA requires that states identify water bodies including bays, rivers, streams, creeks, and coastal areas that do not meet water quality standards and the pollutants that are causing the impairment. Total Maximum Daily Loads (TMDLs) describe the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL requires that all sources of pollution and all aspects of a watershed's drainage system be reviewed and set forth action plans that examine factors and sources adversely affecting water quality and identify specific plans to improve overall water quality and reduce pollutant discharges into impaired water bodies.

The proposed project would connect to the City of Hayward sanitary sewer system. Sanitary sewage from the City's system is treated at the Hayward Water Pollution Control Facility (WPCF). The treatment facility discharges into the San Francisco Bay under a permit with the RWQCB. Since the WPCF is considered a publicly-owned treatment facility, operational discharge flows treated at the WPCF would be required to comply with applicable water discharge requirements issued by the RWQCB. Compliance with conditions or permit requirements established by the City as well as water discharge requirements outlined by the RWQCB would ensure that wastewater discharges coming from the project site and treated by the WPCF system would not exceed applicable RWQCB wastewater treatment requirements. Moreover, the project site is located in an urban area within the boundaries of the City of Hayward's water system. Utility infrastructure would not require significant improvements other than infrastructure to service the proposed church building, office building, and multi-purpose room building. Therefore, the project would not result in relocation or construction of new or expanded wastewater treatment facilities, and impacts would be less than significant.

Stormwater

Stormwater runoff from the site currently drains into the existing storm pipes in Garin Avenue and Woodland Avenue. Major storm drainage facilities in Hayward are owned and maintained by the Alameda County Flood Control and Water Conservation District (ACFCWCD), and include gravity pipelines predominantly made of reinforced concrete, which discharge to underground storm drain lines or manmade open channels. Storm drain pipes smaller than 30 inches are typically owned by the City and are generally provided within local streets and easements.

This system of stormwater collection and filtration would not change with implementation of the project; new stormwater pipes would be connected to the existing system near the site. The proposed project would increase the amount of impervious surfaces on the project site by approximately 30,182 square feet, which would incrementally reduce the potential for groundwater recharge, increasing stormwater runoff from the site. However, as discussed in Section 10, *Hydrology and Water Quality*, the proposed project would include permeable pavement and three stormwater bioretention areas to assist with groundwater recharge and would be required to comply with all applicable stormwater management requirements. Therefore, the proposed project would not result in the need for new off-site storm water drainage facilities. All site runoff would be directed to the City's existing municipal storm drainage system, which was designed to accommodate flows resulting from buildout in the project area. The proposed project would be subject to local policies requiring that post-construction runoff volumes be less than or equal to preconstruction volumes (MS4 C.3, discussed further in Section 10). Therefore, expansion of the existing stormwater collection system is not required. Impacts would be less than significant.

Electricity, Natural Gas, and Telecommunications

A significant impact to electricity, natural gas, and telecommunications facilities may occur if the demand for services exceeds the capacity of local providers. Electricity and natural gas would be provided to the project site by PG&E. Telecommunications services would be provided by AT&T, SBC Telecom, or other providers, at the discretion of future tenants. Telecommunications are generally available in the project area, including at the residential development east and west of the site, and facility upgrades would not likely be necessary.

As described in Section 6, *Energy*, the proposed project would require approximately 0.26 GWh of electricity. The proposed project's electricity demand would be served by PG&E (likely through EBCE), which provided approximately 10,417 GWh of electricity to Alameda County in 2018; therefore, PG&E would have sufficient supplies for the proposed project (CEC 2018a). The proposed project's natural gas demand would be serviced by PG&E, which provided approximately 4,794 MMthm per year in 2018; therefore, PG&E would have sufficient supplies for the proposed project (CEC 2018b). Improvements to existing facilities or the provision of new electricity and natural gas facilities is not anticipated. The proposed project would have a less than significant impact on local electricity, natural gas, and telecommunications providers.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As described under question (a) above, the City of Hayward owns and operates its own water distribution system and receives its water from the Hetch Hetchy system, and emergency water supplies are available through connections with ACWD and EBMUD in case of disruption of delivery (City of Hayward 2016b). The City's UWMP describes that there is adequate water supply available to serve anticipated growth in Hayward (City of Hayward 2016b). As described in Section 11, *Land Use Planning*, the proposed project is consistent with the General Plan's LMDR land use designation, and as described in Section 13, *Population and Housing*, the project would not generate growth beyond that anticipated in the General Plan. Therefore, the proposed project is consistent with the anticipated development and growth in the General Plan and is covered by the analysis in the UWMP. Therefore, the City's existing water supply is sufficient to supply to the proposed project and reasonably foreseeable future, including during normal, dry, and multiple dry years. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project 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?*

As described above under question (b), the proposed project is consistent with the General Plan's LMDR land use designation and would not generate growth beyond that anticipated in the General Plan. The EIR for the City's General Plan found that there was adequate capacity at the WPCF to serve development anticipated under the General Plan. Therefore, there is adequate capacity at the WPCF to service the proposed project and no expansion of the WPCF would be required (City of Hayward 2013). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City of Hayward provides weekly garbage collection and disposal services through a Franchise Agreement with Waste Management, Inc. (WMI), a private waste management company. WMI subcontracts with a local non-profit, Tri-CED Community Recycling, for residential collection of recyclables. Altamont Landfill is the designated disposal site in the City's Franchise Agreement with WMI, which is approximately 24 miles northeast of the project site. Altamont Landfill is a Class II facility that accepts municipal solid waste from various cities, including Hayward. The landfill occupies a 2,170-acre site of which 472 acres are permitted for landfill (WMI 2014). In 2001, the landfill received County approval to increase capacity, adding 25 years to the life of the landfill and extending the anticipated closure date to the year 2040.

HMC Chapter 5, Article 10 requires that applicants for all construction and demolition projects that generate significant debris recycle 100 percent of all asphalt and concrete and 65 percent of remaining materials. Construction activities associated with the project would be required to comply with this requirement.

The Altamont Landfill processes approximately 1,500,000 tons of solid waste per year and has a remaining permitted capacity of 42.4 million tons (WMI 2014). Given the available capacity at the landfill, the incremental additional of solid waste generated by the proposed church would not cause the facility to exceed its daily permitted capacity. In addition, implementation of the City's recycling programs, including construction debris, would further reduce solid waste generation. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

A wildfire is a nonstructural fire that occurs in vegetative fuels, excluding prescribed fire. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. A wildland-urban interface is an area where urban development is near open space or “wildland” areas. The potential for wildland fires represents a hazard where development is adjacent to open space or near wildland fuels or designated fire severity zones. Steep hillsides and varied topography also contribute to the risk of wildland fires.

The California Department of Forestry and Fire Protection (Cal Fire) has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program. These maps place areas of the state into different fire hazard severity zones based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. As part of this mapping system, land where Cal Fire is responsible for wildland fire protection and generally located

in unincorporated areas is classified as a State Responsibility Area (SRA). Where local fire protection agencies, such as the City of Hayward Fire Department (HFD), are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA). Cal Fire currently identifies Hayward as an LRA. In addition to establishing local or state responsibility for wildfire protection in a specific area, Cal Fire designates areas as very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ. The project site is approximately 0.3 miles west of a State Responsibility Area designated as a High Fire Hazard Severity Zone. The nearest Very High Fire Hazard Severity is located approximately two miles east of the project site (CalFire 2007; 2008).

Regulatory Setting

California Public Resources Code Fire Hazard Severity Zones

Public Resources Code (PRC) Sections 4201–4204 and Government Code Sections 51175–89 direct Cal Fire to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as fire hazard severity zones, define the application of various mitigation strategies to reduce risk associated with wildland fires.

California Building Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code (CFC), included as Part 9 of that Title. Updated every three years, the CFC establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The City of Hayward has adopted the California Fire Code as part of its building regulations (HMC Chapter 3-14) and implements these standards through its building permit process.

In addition, in late 2005, the California Building Commission adopted CBC Chapter 7A (effective 2008), which require new buildings in Very High Severity Zones to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands.

City of Hayward 2016 Local Hazard Mitigation Plan

The City of Hayward 2016 Local Hazard Mitigation Plan (LHMP) is intended to prepare the community for potential life-threatening emergencies, such as fire, flood, and earthquakes. The LHMP is essentially a “road map” for action involving hazard mitigation and emergency preparedness. In general, the LHMP includes a guiding strategy for emergency preparedness (City of Hayward 2016a).

Hayward Municipal Code

HMC Section 3-14.01 codifies the California Fire Code and includes additional regulations specific to construction in the City of Hayward. In addition, the HMC defines Wildland-Urban Interface Fire

Area as the areas east of Mission Boulevard Blvd. from the south side of D Street to the city limits south to Union City. The project site is included in this area. Among other requirements, the code requires that development located in the hillside wildland-urban interface zone be equipped with a sprinkler system that complies with National Fire Protection Association regulations.

Additional construction requirements in the Wildland-Urban Interface Fire Area include the following:

- Within ten feet of a structure, construct fences with an open wire mesh or non-combustible material to prevent fire from spreading to the structure.
- Design roofs shall comply with a 'Class A' non-combustible roof rating as outlined in the California Building Code. (Do not use wood shake or treated wood shake roofs.)
- Provide spark arrestors with 1/4" metal mesh screens on all chimneys. Homeowners should inspect spark arrestors every year to ensure mesh screen integrity.
- Additions to existing decks are subject to review by the Fire Marshal and may be required to meet building construction and fire protection standards.
- Restrict outdoor storage of firewood, kindling, or compost material within 30 feet of any structure, unless the material is stored in an approved bin or enclosure.
- Locate chimney at least ten feet away from existing tree canopies.
- Enclose all roof eaves

Impact Analysis

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

As described in the *Setting* section above, while the project site is not in a state responsibility area or Very High Fire Hazard Severity Zone, a state responsibility area designated as a High Fire Hazard Severity Zone is located approximately 0.3 miles east of the site. Moreover, the site is within the Wildland-Urban Interface Fire Area as defined in the HMC. However, as described in Section 9, *Hazards and Hazardous Materials*, construction of the proposed project would occur within the boundary of the project site and no street closures would occur. The project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including the Hayward Local Hazard Mitigation. Moreover, as described in Section 14, *Population and Housing*, the project would not result in an increase in population beyond the growth forecasts for the City. Finally, as described in Section 15, *Public Services*, the project would not result in the need for new or expanded emergency services, including police and fire protection. Therefore, the implementation of emergency response procedures would not be affected. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The area surrounding the project site is primarily urbanized, largely consisting of concrete roads, driveways, parking lots, and structures. Existing vegetation immediately surrounding the site that could provide fuel for a wildfire is minimal. However, wildfires may potentially occur in wildland and open space areas east and north of the site and spread to the site. In addition, the proposed project would introduce new potential ignition sources in the form of building materials (e.g., wood, stucco), vegetation for landscaping, vehicles, and small machinery (e.g., for typical residential and landscape maintenance). The proposed project could therefore expose greater numbers of people to pollutant concentrations or the uncontrolled spread of wildfire. In addition, the project would require the installation and maintenance of infrastructure, including new connections to existing utility systems, which could exacerbate fire risk.

The numerous fire hazard regulations detailed in the *Regulatory Setting* section would minimize impacts related to wildfire. The project would be required to comply with the California Fire Code. In addition, the project would be required to comply with the additional HMC requirements for development in the Wildland-Urban Interface Fire Area, including requirements related to roofing and other building materials, alarm and fire sprinkler systems, and control of kindling and compost material. Moreover, the proposed project would be subject to review by the Fire Marshal prior to approval of building permits. This review would ensure that new construction would comply with applicable fire codes and regulations and would not exacerbate wildfire risk at the project site and surrounding area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As described in the *Setting* section above, the project site is approximately 0.3 miles west of a State Responsibility Area designated as a High Fire Hazard Severity Zone. Moreover, the nearest Very High Fire Hazard Severity is located approximately two miles east of the project site. These fire zones stretch further eastward and cover an area that includes steeper slopes, less development, and more vegetation than the neighborhood immediately surrounding the site. Severe wildfires damage the forest or shrub canopy, the plants below, as well as the soil. In general, this can result in increased runoff after intense rainfall, which can put structures below a burned area at risk of localized floods and landslides. Therefore, wildfires that could occur within this area could result in increased risk related to downslopes, downstream flooding, or landslides.

The project site is separated from the fire zones by approximately 0.3 miles of existing residential development and open space. In addition, the project site occurs near the bottom and flatter portion of the hills. In the event of a wildfire east and upslope from the site, runoff, flooding, and other post-fire slope instability would likely occur east and south of the site, where there are more

extreme slopes and where existing development is adjacent to the fire hazard severity zones and undeveloped vegetated areas. Therefore, hazards from fires outside the site would not substantially impact the development at the project site. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Based on the information and analysis provided throughout this Initial Study, implementation of the proposed project would not substantially degrade the quality of the environment and would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of California history or prehistory. Cultural resources, which illustrate examples of California history and prehistory, are discussed in Section 5, *Cultural Resources*, and Section 18,

Tribal Cultural Resources. Mitigation measures CR-1 and TCR-1 have been designed to reduce potential impacts of disturbing archaeological and tribal cultural resources and human remains. Biological resources are addressed in Section 4, *Biological Resources*. With mitigation measures BIO-1 and BIO-2 related to nesting birds and trees, the proposed project would not substantially reduce wildlife habitat or population. Based on the ability of the identified mitigation measures to reduce potential impacts to less than significant levels, the proposed project's impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Cumulative impacts associated with some of the resource areas are addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Water Supply, and Solid Waste (CEQA Guidelines Section 15064(h)(3)) and would be less than significant. Some of the other resource areas were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts, such as Mineral Resources and Agricultural Resources. As such, cumulative impacts in these issue areas would also be less than significant (not cumulatively considerable). The proposed project would incrementally increase traffic compared to existing conditions. However, due to the low volume of traffic generated by the proposed project, the proposed project would not significantly contribute to cumulative impacts to nearby roadways. The proposed project involves development of a church and would be consistent with the City's General Plan designation and development standards for the site. The proposed project would not result in a significant contribution to cumulatively considerable impacts.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Effects to human beings are generally associated with air quality, noise, traffic safety, geology/soils and hazards/hazardous materials. As discussed in this Initial Study, implementation of the proposed project would result in less than significant environmental impacts with respect to these issue areas with mitigation incorporated. The geotechnical recommendations and mitigation measure discussed in Section 7, *Geology and Soils*, would ensure that soils and grounds are stable, and that liquefaction risks are less than significant. Mitigation Measure GEO-1 would reduce health and safety risks to human beings and would result in less than significant impacts. With mitigation, the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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