
**Clayton Community Church Project
Initial Study/Mitigated Negative Declaration**

ENV-03-16



**City of Clayton
Community Development Department
6000 Heritage Trail
Clayton, California 94517
(925) 673-7340**

February 2021

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INTRODUCTION

Clayton Community Church has proposed to construct a community church and associated parking lot on a 4.42-acre site, located at 1027 Pine Hollow Court in Clayton, California. The community church would be approximately 13,823 square feet (sf) and the proposed parking lot would include 156 parking spaces. The proposed project would require City approval of a Use Permit for the proposed church, a Site Plan Review Permit, and a Tree Removal Permit for the removal of 48 on-site trees.

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies potentially significant environmental impacts for the following environmental areas:

- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Noise; and
- Tribal Cultural Resources.

Environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, a Mitigated Negative Declaration has been prepared pursuant to Public Resources Code Section 21064.5, and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

Pursuant to the requirements of CEQA Guidelines Section 15071, this Mitigated Negative Declaration describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the proposed project; and identifies measures to mitigate adverse environmental impacts. With implementation of the included mitigation measures, the project would not have a significant impact on the environment.

PROJECT/APPLICANT INFORMATION

1. Project Title: Clayton Community Church Project
2. Lead Agency Name and Address: City of Clayton
6000 Heritage Trail
Clayton, CA 94517
3. Contact Person and Phone Number: Matthew Feske
Community Development Director
City of Clayton
(925) 673-7343
4. Project Location: 1027 Pine Hollow Court
Clayton, CA 94517
5. Project Sponsor's Name and Address: Clayton Community Church
6055 Main Street
Clayton, CA 94517
6. Existing General Plan Designation: Rural Estate (RD)
7. Existing Zoning Designation: Single Family Residential (R-40-H)
8. Project Description Summary:

The Clayton Community Church Project (proposed project) would include the development of a new community church with an associated parking lot. The community church would be a single story building, comprising approximately 13,823 sf. The proposed parking lot would include 156 parking spaces. Primary access to the site would be provided by one new driveway on Pine Hollow Court, along the western boundary of the site. The project site would involve the removal of 48 trees within the site. Two existing storage structures in the northwestern portion of the project site would be demolished, while the single-family residence located in the southwestern portion of the site would remain as part of the proposed project and would be used by the pastor.

The proposed project would be consistent with the existing General Plan land use designations and zoning for the project site, subject to approval of a Use Permit. The proposed project would also require City approval of a Site Plan Review Permit and a Tree Removal Permit.

9. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), the City of Clayton sent a project notification letter through certified mail to representatives of the local tribes. Formal requests for consultation have not been received to date.

The environmental factors checked below would be potentially affected by this project. The following Evaluation of Environmental Impacts identifies at least one impact that is "Less Than Significant with Mitigation Incorporated" for each of the checked environmental factors.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input checked="" 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 and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population and 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 and Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- X 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 since the Project proponent has made revisions in the Project and has agreed to the mitigation measures listed in “Section V. List of Mitigation Measures.” I further find that the mitigation measures and the information in this study constitute a MITIGATED NEGATIVE DECLARATION in accordance with Section 15071 of the State CEQA Guidelines.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Holly Pearson
Contract Planner

BACKGROUND

This IS/MND identifies and analyzes the potential environmental impacts of the current proposal for the proposed project. The information and analysis presented in this document is organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed.

The impact discussions for each section of this IS/MND have been largely based on technical studies prepared for the proposed project, as well as information in the Clayton General Plan and the Clayton General Plan EIR.

PROJECT DESCRIPTION

A description of the project location and setting, the components of the project, and project entitlements is provided below.

Site Location and Setting

The project site consists of approximately 4.42 acres of land located at 1027 Pine Hollow Court in the City of Clayton, California (see Figure 1 and Figure 2). The site is identified by Assessor's Parcel Number (APN) 119-050-036. The project site is designated Rural Estate (RD) per the City of Clayton General Plan and zoned R-40-H.

The project site is primarily characterized as open land with ruderal vegetation and scattered trees, and has been subject to a recent grass fire within a portion of the project site. A total of 64 trees are located throughout the site, which include different types of oak, pine, sequoia, and other species. However, six of the trees are dead, leaving 59 live trees remaining on-site. The site includes an occupied single-family residence in the southwestern portion of the project site, as well as storage structures associated with the existing residence in the northwestern portion of the site. The storage structures consist of a barn-type building and a garden shed.

The western and central portions of the site are relatively flat, whereas the eastern portion of the site slopes down toward Mitchell Creek, beyond which is the Town Center area of the City. The slope drops approximately 50 feet to the eastern site boundary.

The project site is bordered by Mt. Diablo Elementary School to the north, Pine Hollow Court and single-family residential homes to the west, single-family residential homes to the south, and Mitchell Creek and Oak Street to the east. Commercial businesses and multi-family residences are located east of Oak Street, within the Clayton Town Center Specific Plan area. The current Clayton Community Church offices operate within the Town Center Specific Plan Area and are located approximately 0.11-mile northeast of the site. Prior to the COVID-19 pandemic, the church met at Diablo View Middle School on Clayton Road.

Figure 1
Regional Location Map

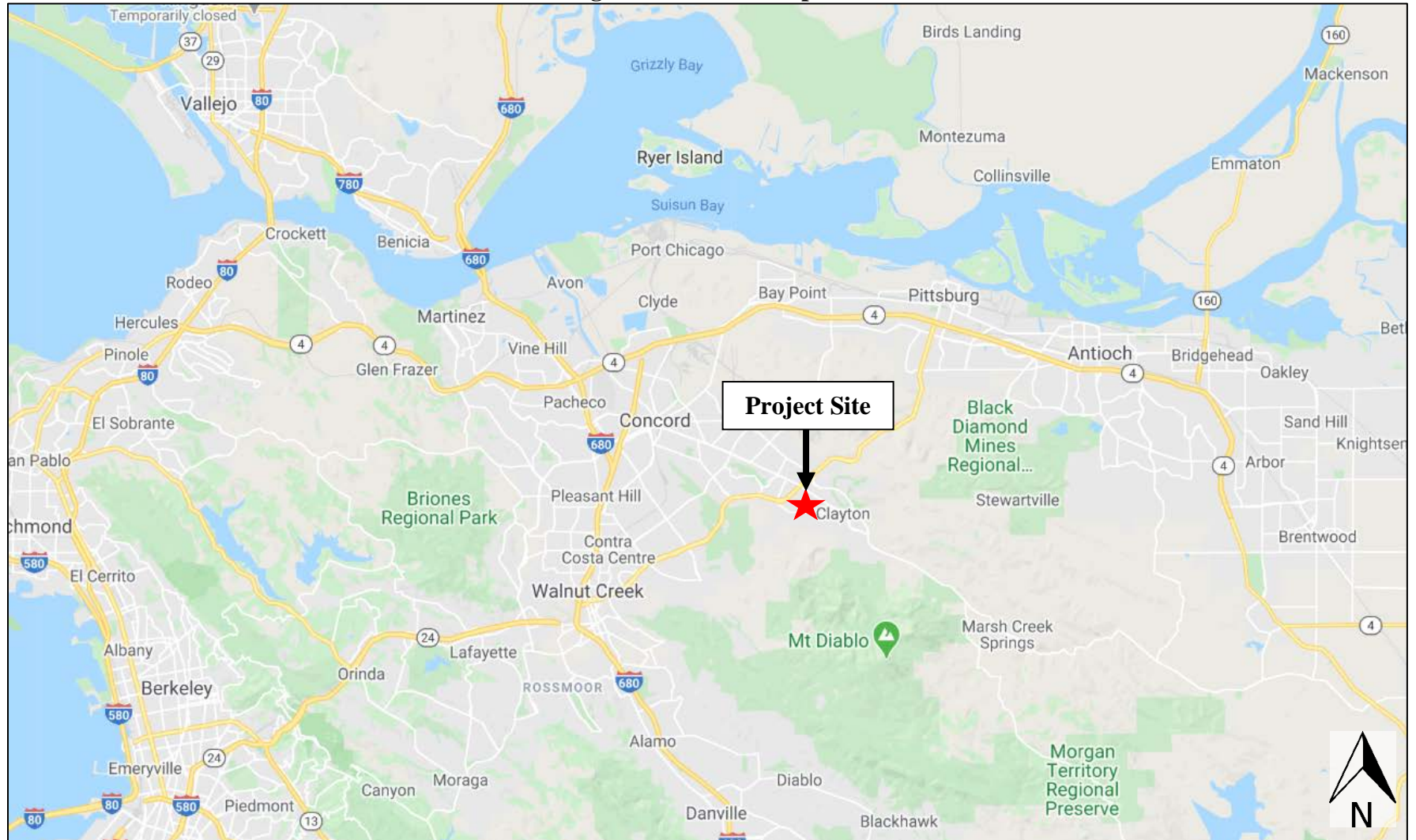


Figure 2
Project Vicinity Map



Project Components

The proposed project would require approval of a Use Permit, Site Plan Review Permit, and Tree Removal Permit. Each of the project approvals, as well as the proposed operational plan, is discussed in detail below.

Use Permit

Per Section 17.60.030 of the City's Municipal Code, construction and operation of churches are allowed under the R-40-H zone with the approval of a Use Permit. Therefore, the proposed project would require City approval of a Use Permit.

In order to approve a Use Permit, the City must be able to make general findings, identified in Section 17.60.060 of the Municipal Code, as follows:

- A. That the use shall be in conformity with the General Plan and any applicable specific plan.
- B. That the use shall be in conformity with city-adopted standards.
- C. That the use shall not negatively affect the general safety (e.g., seismic, landslide, flooding, fire, traffic) of the City or surrounding area.
- D. That the use shall not have significant negative impacts on the health or general welfare of residents, businesses, property owners, or employees in the City.
- E. That the permit will be in accord with the purpose of Use Permits, as stated in the City of Clayton Municipal Code.

This IS/MND will provide decision-makers with information and analysis related to the particular aspects of the findings that pertain to environmental issues.

Site Plan Review Permit

The proposed project would require approval of a Site Plan Review Permit for the proposed community church and parking area (see Figure 3). The Municipal Code (Section 17.46.040) identifies several standards of review for Site Plan Review permit applications, some of which are related to environmental concerns and will be addressed in this IS/MND, including preservation of general safety (e.g., seismic conditions, landslide, flooding, fire, and traffic). The community church would be a single-story building consisting of approximately 13,823 sf and would include a sanctuary at the center of the east portion of the building, ministry offices east of the sanctuary, and a prayer room, storage room, sound room, and restrooms to the west of the sanctuary (see Figure 4). The western portion of the building would include classrooms and the south portion of the building would contain the lobby and warming kitchen. The single-story building would have different height articulations (see Figure 5 and Figure 6). The maximum building height would be approximately 27 feet. Additionally, the community church would include three ground-level wooden decks, a courtyard, and a balcony on the eastern side of the building, as well as an outdoor playground northeast of the proposed building (see Figure 7 and Figure 8).

Figure 3
Site Plan

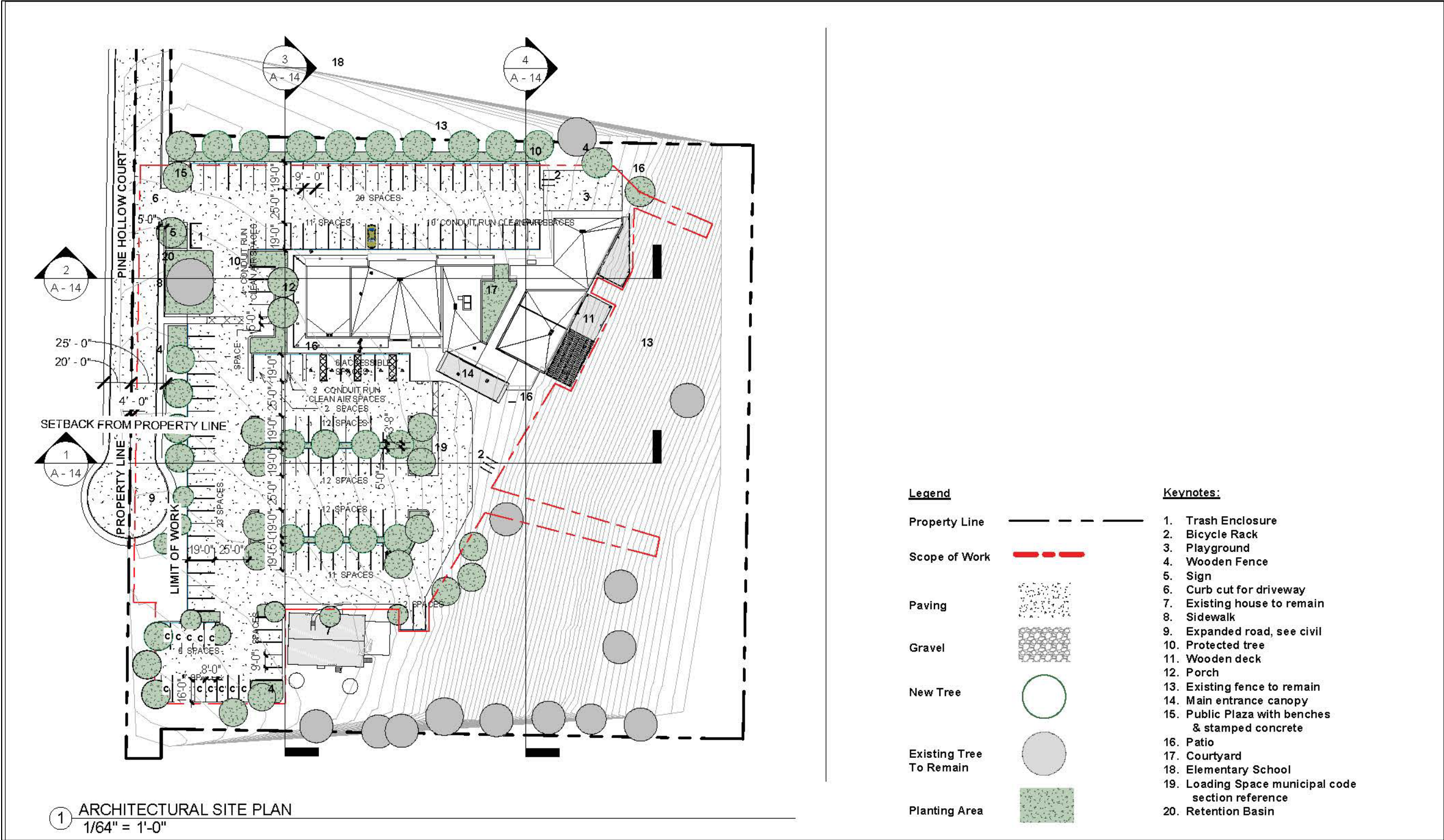


Figure 4 Floor Plan

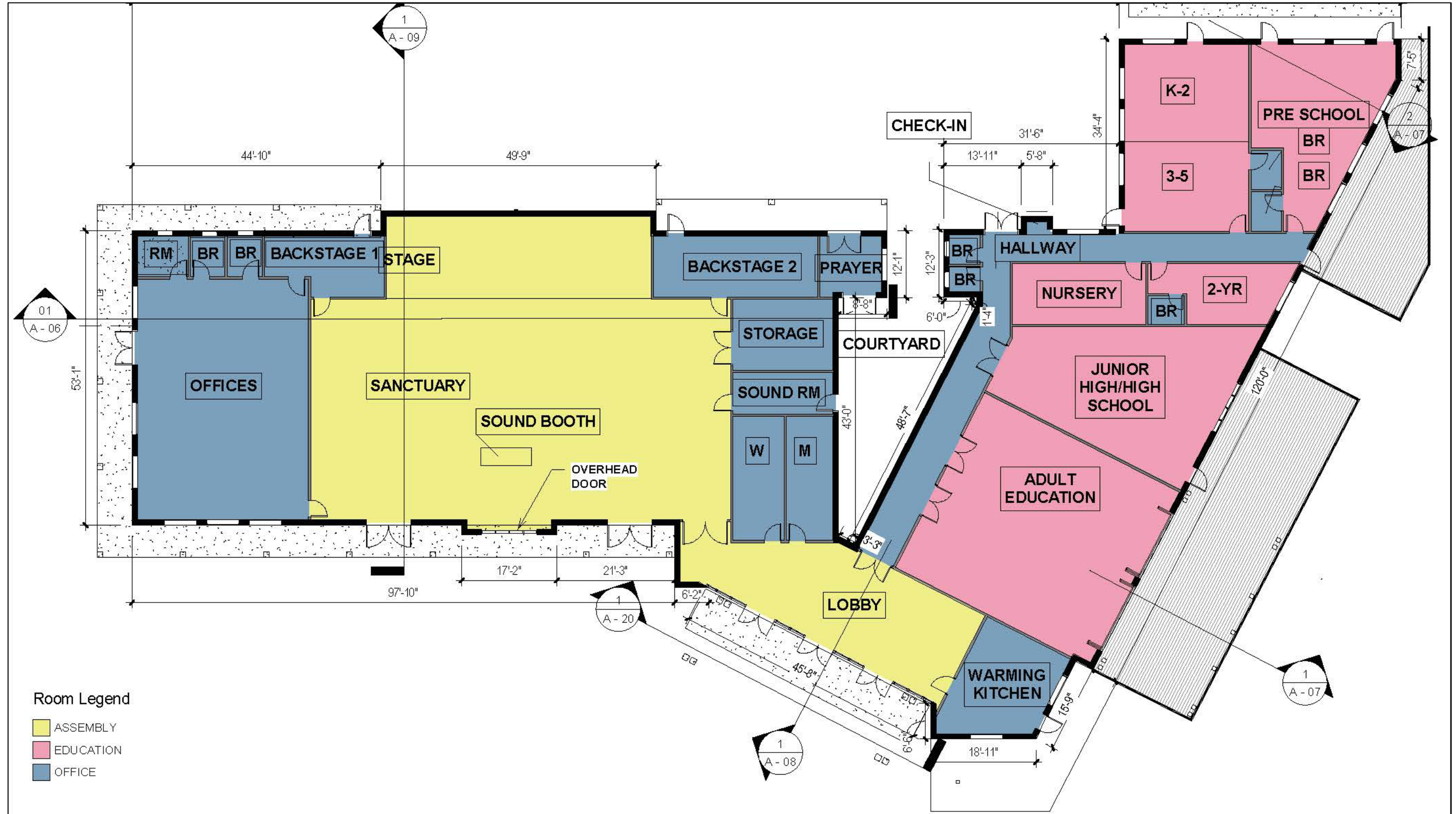


Figure 5
Northern Elevation

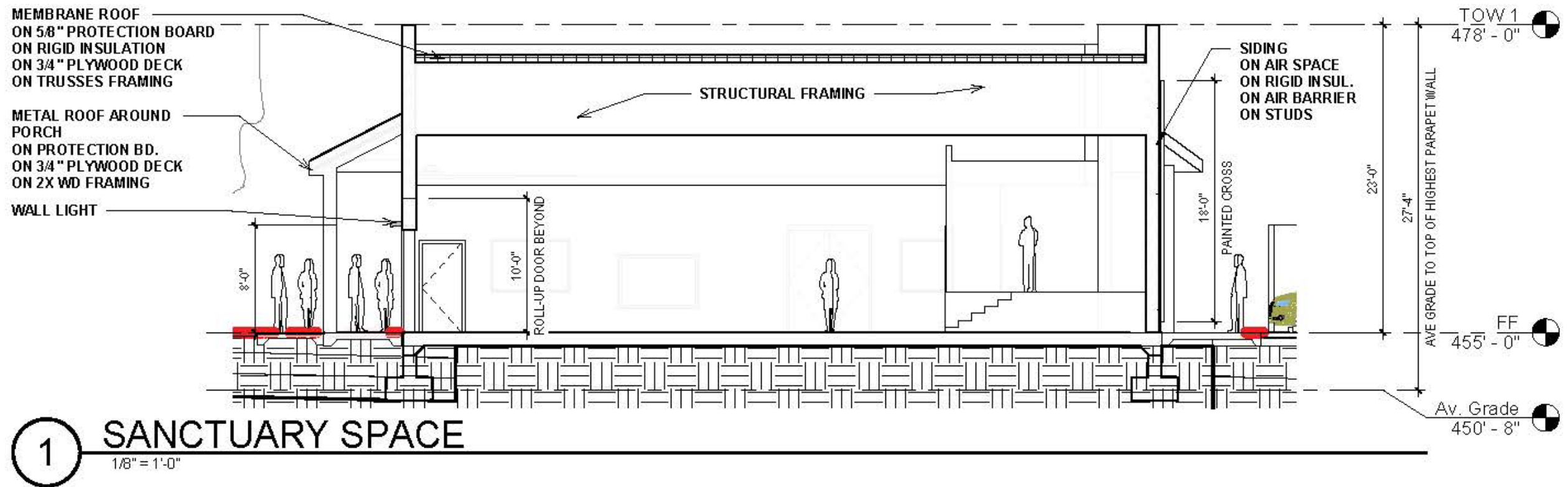


Figure 6
Southern Elevation

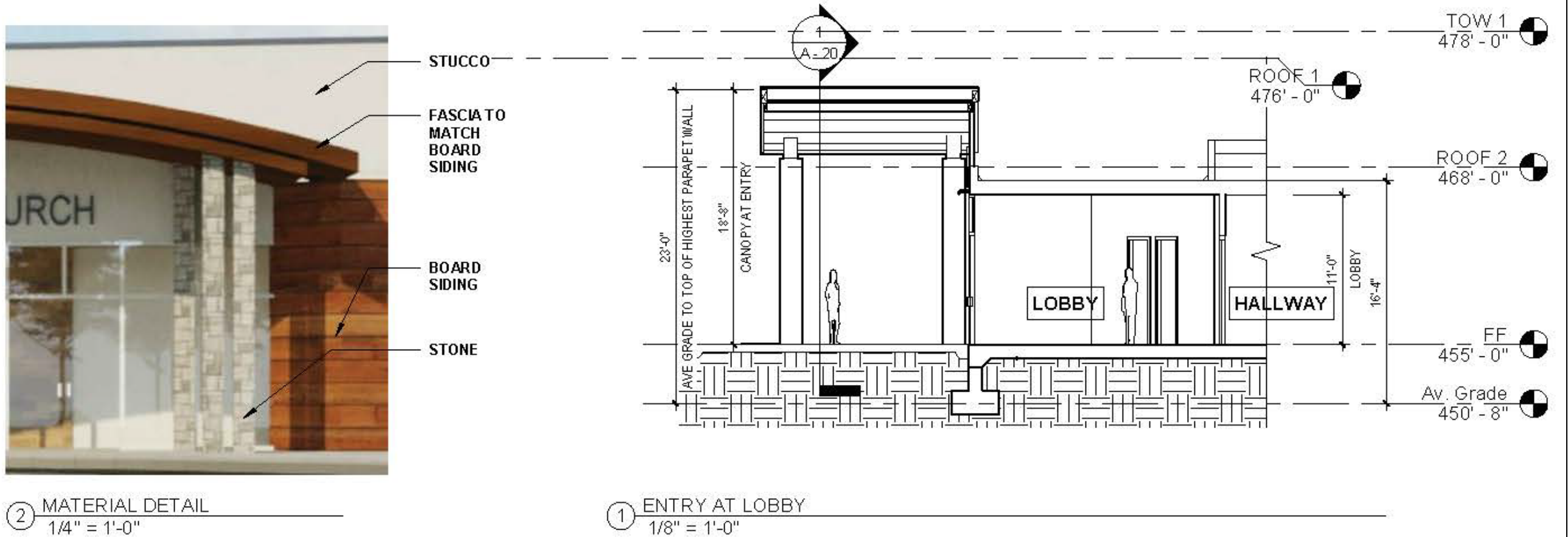
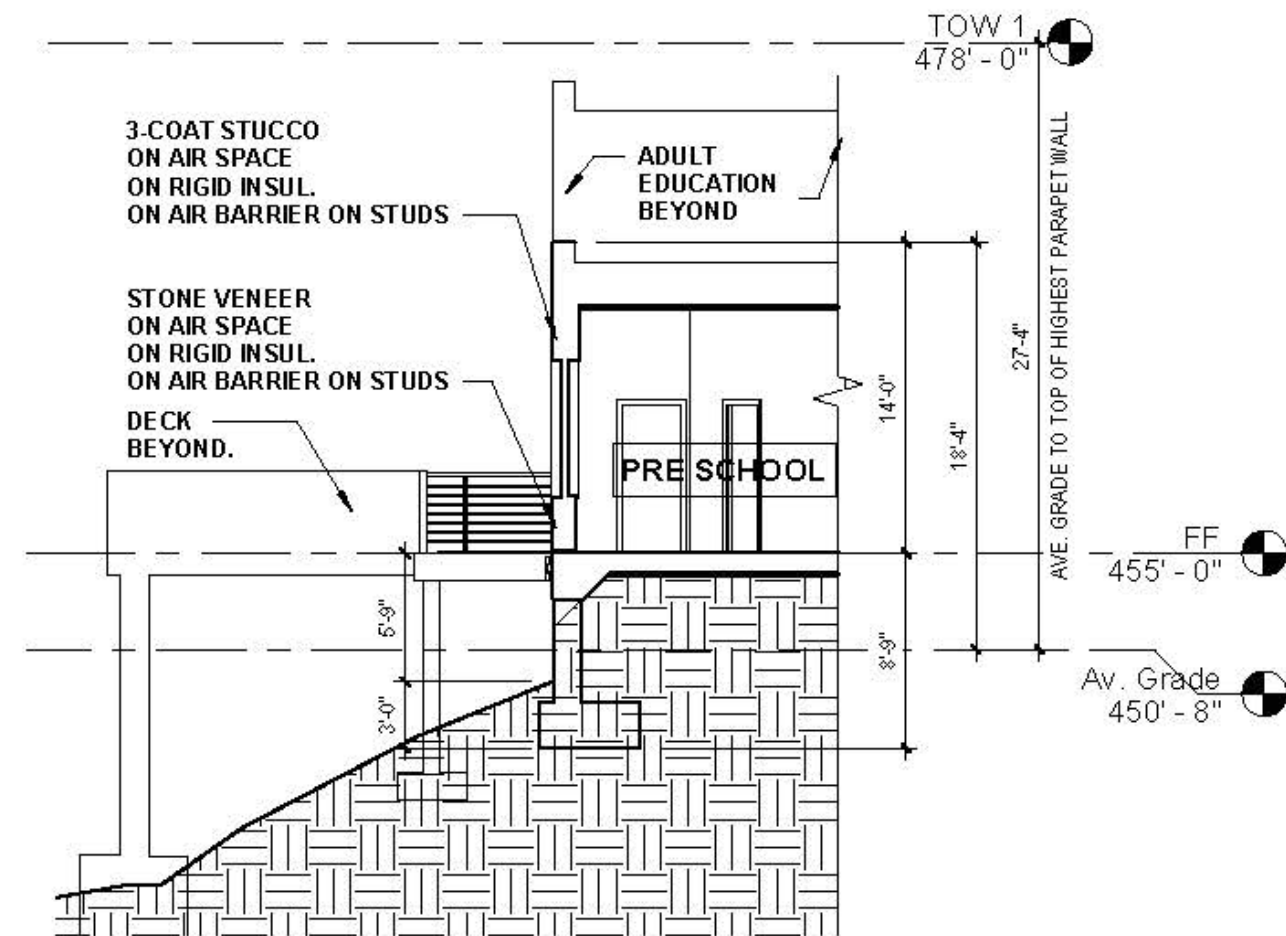
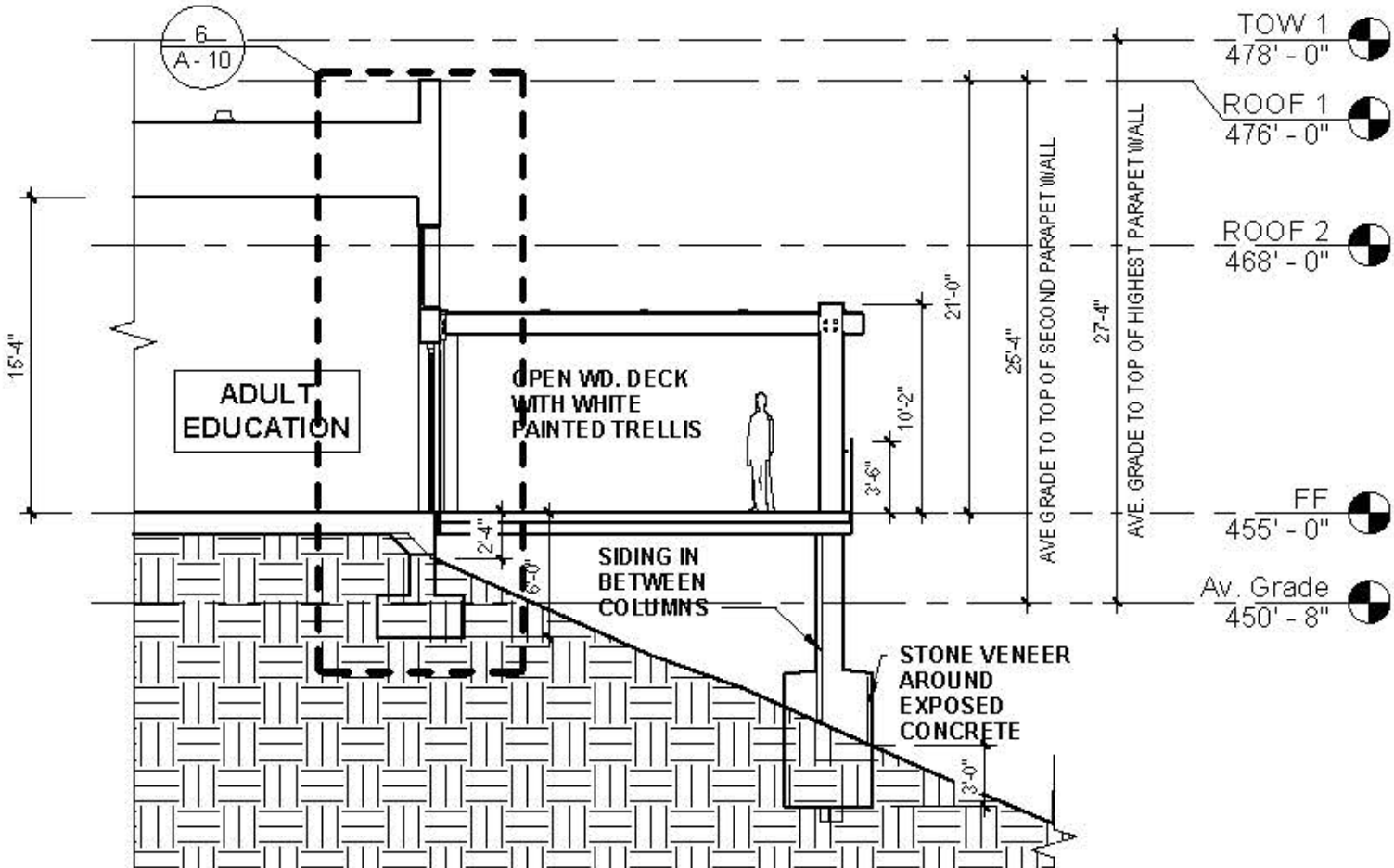


Figure 7
Eastern Elevation



② PRESCHOOL DECK AND PRESCHOOL
1/8" = 1'-0"



① ADULT EDUCATION AND PERGOLA
1/8" = 1'-0"



Figure 8
Western Elevation



The proposed parking lot would include 156 parking spaces, consisting of six accessible spaces, 13 compact spaces, 10 spaces marked “clean air/vanpool/EV” with conduit run for future EV, and 127 standard spaces. A portion of the parking spaces would be located directly north of the proposed building, while the remaining parking spaces would be located to the west and south of the building. Furthermore, 17 bicycle rack spaces would be provided near the playground area as well as to the east of the parking area. The parking spaces would be consistent with the parking ratios required by the City’s Municipal Code. Vehicular access to the site would be provided by a new driveway from Pine Hollow Court, along the western boundary of the site.

The existing single-family residence located within the southwestern portion of the project site would remain and be used by the worship director, while the two storage structures would be demolished as part of the proposed project. Following construction of the proposed project, the existing community church offices within the Town Center would remain in use.

Proposed Operations

Table 1 below includes the weekly operational plan for the proposed project. As shown in Table 1, the day that would include the highest attendance on a weekly basis would be Sundays, with a total attendance of 433 people over the course of the day and a maximum anticipated attendance of 259 people during the first of two Sunday worship services (9:00 AM to 10:15 AM period). The church would also hold other events during the week, as shown in the table, including a staff meeting on Mondays, women’s craft group and worship team meetings on Tuesdays, WOW (women’s group), “Crosswalk”, and youth group meetings on Wednesdays, and women’s and men’s bible study on Thursdays.

In addition, the community church would hold two monthly events. The monthly events would include a worship night from 7:00 PM to 9:00 PM on a Friday and a men’s breakfast at 8:00 AM on a Saturday. The worship night would result in an estimated attendance of 50 people, while the men’s breakfast event would result in an estimated attendance of 40 people.

In addition to the weekly and monthly events noted above, the church would hold two annual events. The first annual event would be Easter Sunday Services to be held at 9:00 AM and 10:45 AM. The total attendance for Easter Sunday Services would be approximately 600 people. The second annual event would be Christmas Eve Services to be held at 5:00 PM and 7:00 PM. The total attendance for Christmas Eve Services would be approximately 600 people. Parking management would occur during special events, when the church would have volunteers in the parking lot helping to direct traffic and greet people. In addition, the church has been in discussions with the adjacent elementary school and they have indicated that they are agreeable to allowing the church to use school parking for overflow parking purposes during special events at the church. The proposed special events would occur on days when school is not in session, so no conflicts would occur between school and church operations.

The church staff is estimated to consist of up to nine employees, with typical arrival and departure times of 9:00 AM and 5:00 PM.

Table 1		
Weekly Operational Plan		
Time	Event	Attendance
Sundays		
9:00 AM – 10:15 AM	Worship Service	217
9:00 AM – 10:15 AM	Nursery/Toddlers	12
9:00 AM – 10:15 AM	Elementary (K-5)	30
10:15 AM – 12:00 PM	Worship Service	100
10:15 AM – 12:00 PM	Nursery/Toddlers	12
10:15 AM – 12:00 PM	Elementary (K-5)	30
10:15 AM – 12:00 PM	Junior/Senior High School (6-12)	20
7:00 PM – 8:00 PM	AA Meeting	12
Mondays		
9:00 AM – 11:00 AM	Staff Meeting	10
Tuesdays		
9:00 AM – 11:00 AM	Women's Craft Group	10
7:00 PM – 9:00 PM	Worship Team	10
Wednesdays		
9:00 AM – 11:00 AM	WOW (Women's Group)	40
12:00 PM – 2:30 PM	"Crosswalk" (Grades 2-5)	40
7:00 PM – 8:30 PM	Youth Group	25
Thursdays		
7:00 PM – 8:30 PM	Women's Bible Study	15
7:00 PM – 8:30 PM	Men's Bible Study	40

Utilities

Water and sewer service for the proposed development would be provided through connections to existing infrastructure located in the site vicinity. The proposed project would include a new potable water connection to an existing six-inch water main within Pine Hollow Court (see Figure 9). A water line to be used for irrigation services would also connect to the existing water main within Pine Hollow Court. In addition to the aforementioned domestic and irrigation water lines, a new six-inch water line from the existing water main within Pine Hollow Court would connect to the building for fire emergency purposes. A new sanitary sewer line would be routed from the proposed building to a new lift station in the northwestern portion of the site. From the lift station, the sanitary sewer line would connect to existing sewer infrastructure within Pine Hollow Court.

With respect to stormwater, the project site would include eight drainage management areas (DMAs), which would drain to seven different bio-retention areas within the site (see Figure 10). Stormwater from the DMAs within the northern portion of the site would be directed to one of the bio-retention areas for treatment on-site. The landscaped portions of the project site would be self-treating areas and, thus, would not connect to the bioretention basins. The bio-retention areas would provide for treatment by filtering stormwater through layers of vegetated soils and gravel. Treated stormwater would be captured by perforated underdrains and routed to three underground 60-inch drainage pipes within the proposed parking areas, which would provide for on-site detention. The underground drainage pipes would discharge, through flow restrictors, to new outfalls within the slope to the east of the proposed development area.

Figure 9
Utility Plan

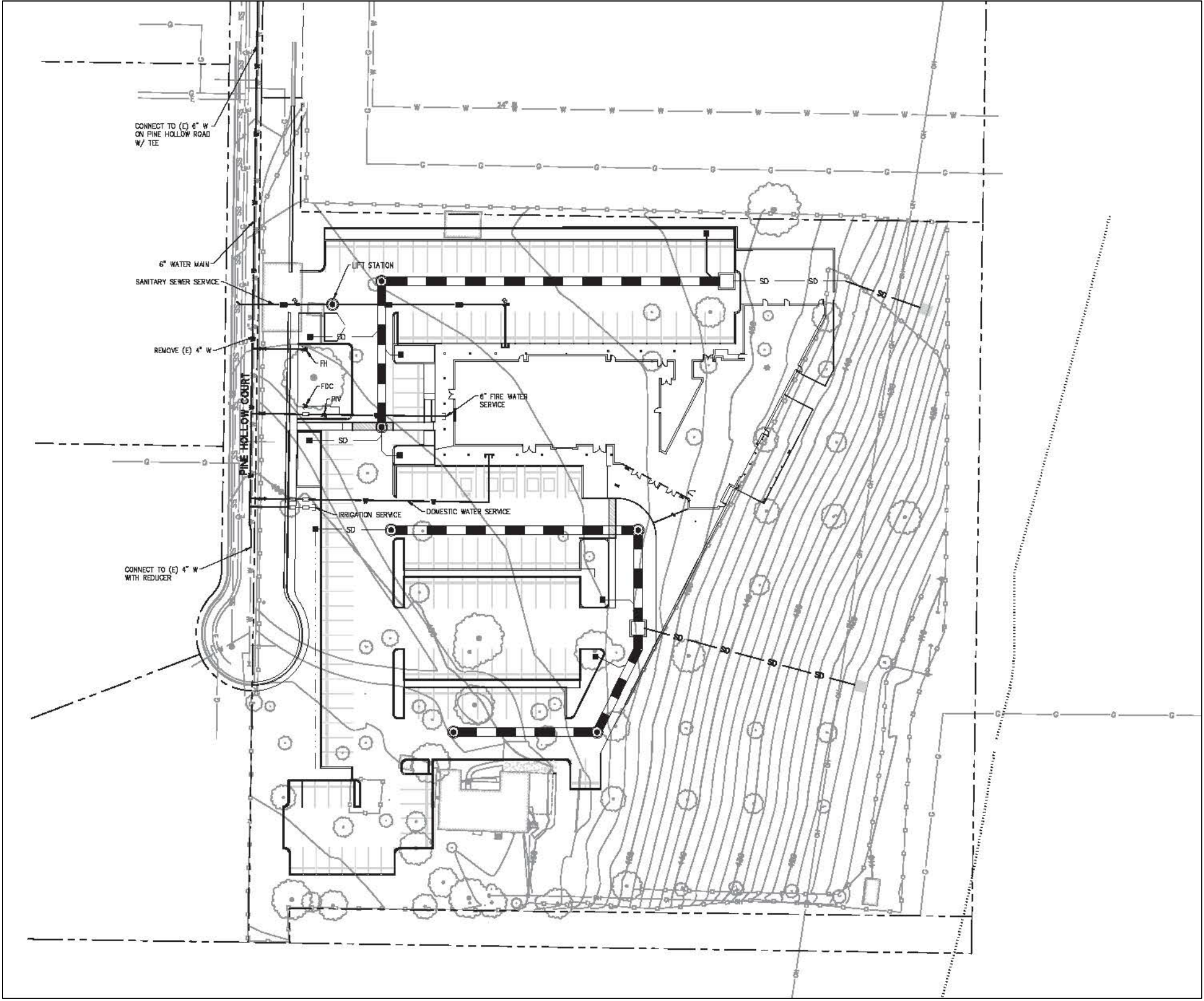
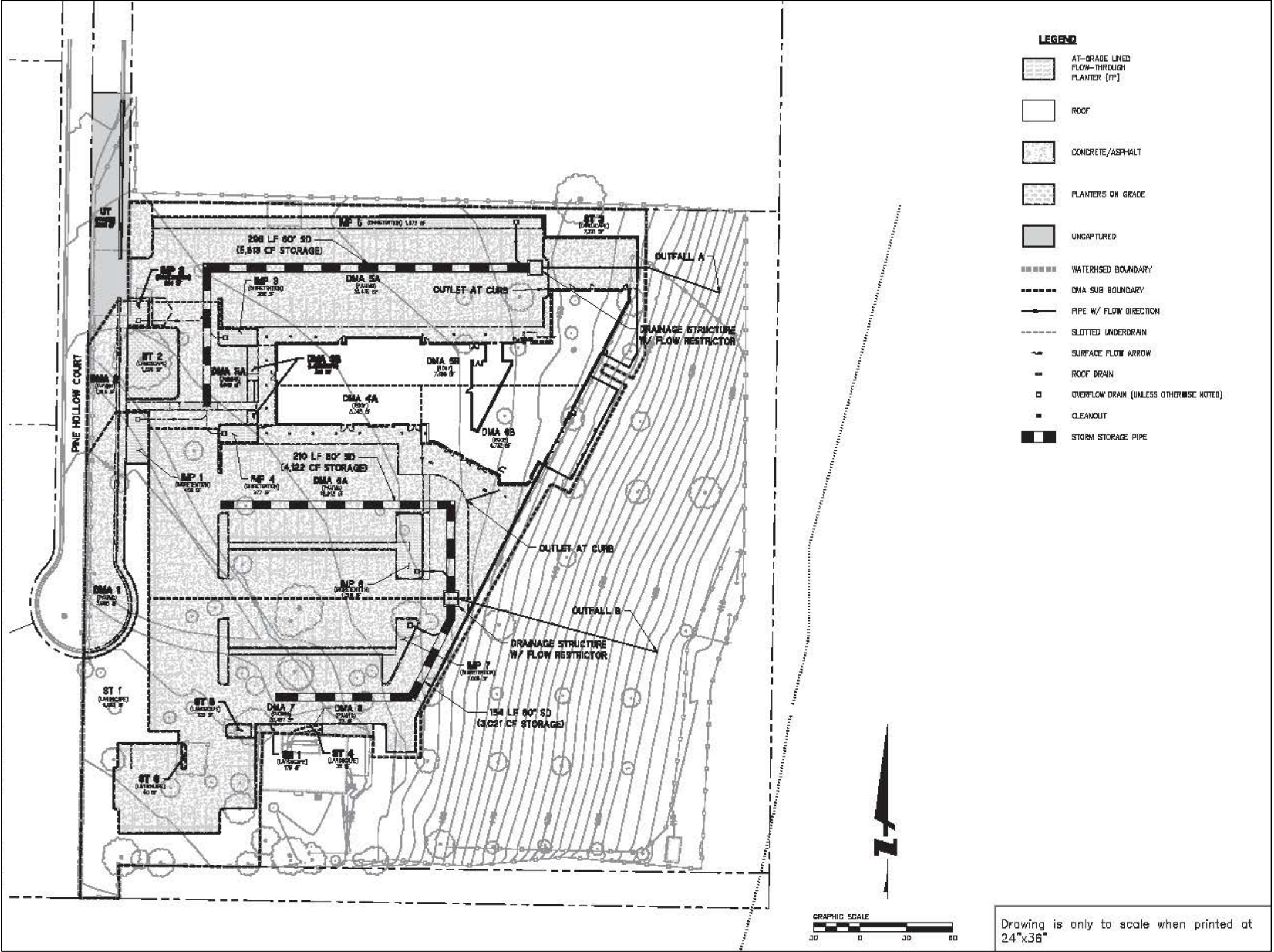


Figure 10
Stormwater Control Plan



The outfalls would include flared end sections and rock slope protection immediately above and below the outfalls to prevent erosion and provide for energy dissipation. Stormwater would flow overland to Mitchell Creek, which is consistent with the existing conditions. The flow restrictors would ensure that the rate and amount of runoff entering the creek would not exceed pre-development levels.

Landscaping and Fencing Improvements

The proposed project would incorporate landscaping features throughout the project site, including trees, shrubs, and groundcover along the western and northern site boundaries and within the southern portion of the parking lot. Trees to be planted within the site would include Muskogee crape myrtle, California live oak, Chinese pistache, and blue oak.

Fencing improvements would also be included as part of the proposed project. The proposed fencing improvements would include the construction of a five-foot, wooden fence along the southwestern boundary of the site and near the existing residence. A five-foot wooden fence with 3.5 inches of picket spacing would be constructed in the northeastern corner of the project site.

Furthermore, a retaining wall would be located within the northeastern corner of the site, near the proposed outdoor playground. A tieback wall would be incorporated into the east elevation building design, near the top of the existing slope. Generally, the walls would support the proposed church patio and playground and provide a transition from the developed area to the natural hillside.

Tree Removal Permit

Per the City's Tree Protection Ordinance (Chapter 15.70 of the Municipal Code), a Tree Removal Permit is required for the removal of any tree with a trunk diameter of six inches or greater. The Tree Protection Ordinance also calls for the protection of certain species of trees. The proposed project would include the removal of 48 trees, seven of which are in good or fair health and protected under the City's Ordinance; therefore, the proposed project would require approval of a Tree Removal Permit.

Discretionary Actions

As discussed in detail above, the proposed project would require the following approvals from the City of Clayton:

- Use Permit;
- Site Plan Review Permit; and
- Tree Removal Permit.

LIST OF MITIGATION MEASURES

Mitigation Measure 1. *Prior to the initiation of ground disturbance, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used in the construction of the project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 Interim or cleaner.*

In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the Off-Road Diesel Fueled Fleet Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the Community Development Director for the City of Clayton.

Mitigation Measure 2 *Special-status plant surveys shall be conducted in accordance with CNPS and CDFW protocols throughout the project site within two years prior to the commencement of construction. The CNPS and CDFW protocols require that the surveys be conducted at the time of year that the target species are most identifiable; this often requires multiple survey visits to capture the identifiable period of all target species. If special-status plant species are not found, further mitigation would not be required. If special-status plants are found and will be impacted, mitigation for those impacts shall be determined in coordination with CDFW. If the plant found is a perennial, then mitigation could consist of digging up the plant and transplanting it to a suitable nearby avoided area prior to construction. If the plant found is an annual, then mitigation could consist of collecting seed-bearing soil and spreading it in a suitable nearby avoided area prior to construction.*

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If special-status plant species are not found, further mitigation is not required.

Mitigation Measure 3 *Within 14 days prior to construction activities, a qualified biologist shall conduct a take avoidance survey for active bumble bee colony nesting sites. In order to maximize detection of active bee colonies, the take avoidance survey shall be conducted during the spring, summer, or fall during appropriate weather (not during cool overcast, rainy, or windy days). The biologist shall walk the entire area proposed for grading and inspect all rodent burrows for bumble bee activity. If any bumble bees are detected during the survey, the species shall be identified. Active colonies of crotch bumble bee or western bumble bee shall be avoided and work shall not occur within 50 feet of the colony. If the colony is in a location proposed for development, consultation for the CDFW shall be necessary and an Incidental Take Permit from the CDFW may be required prior to disturbance.*

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If crotch bumble bee or western bumble bee nests are not found, further mitigation is not required.

Mitigation Measure 4. *A targeted take avoidance burrowing owl nest survey shall be conducted within all accessible areas within 250 feet of the proposed construction area within 14 days prior to construction activities utilizing 60-foot transects, as outlined in the 2020 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation. If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW to determine if the nest buffer can be reduced. During the non-breeding season (late September through the end of January), the applicant may choose to conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance, exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined by the CDFW.*

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If western burrowing owl nests are not found, further mitigation is not required.

Mitigation Measure 5(a). *A preconstruction nesting bird survey shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, no more than 14 days prior to the initiation of construction. If there is a break in construction activity of more than two weeks, subsequent surveys shall be conducted.*

If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer shall be established. The no-disturbance buffers may be reduced if a smaller buffer is proposed by the project biologist, and approved by the City, after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (if there are visual or acoustic barriers between the proposed activity and the nest). A qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If raptor or songbird nests or nests of birds protected by the MBTA are not found, further mitigation is not required.

Mitigation Measure 5(b). *Should construction activities cause a nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest as a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction activities may only resume within the buffer zone after a follow-up survey by the Project Biologist has been conducted and a report has been prepared and submitted to the City, indicating that the nest (or nests) are no longer active and that new nests have not been identified.*

Mitigation Measure 6. *A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features within the proposed development footprint. The habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction. A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If roosting bats are not found, further mitigation is not required.*

If potential roosting habitat is identified within the areas proposed for development, the biologist shall survey the potential roosting habitat. Ideally, this survey should be conducted during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees Fahrenheit) to determine the presence of roosting bats. The surveys are recommended to be conducted using methods that are considered acceptable by the CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras, or a combination thereof.

If roosting bats are identified within any of the trees or buildings planned for removal, or if presence is assumed, then the qualified bat biologist shall specify appropriate exclusion methods according to where the roosting bats are located and what season the exclusion must occur. These exclusion methods may include two-step tree removal or building exclusion as detailed below.

In general, the trees/buildings shall be removed outside of pup season only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Building exclusion methods may include such techniques as installation of passive one-way doors, or the installation of netting when the bats are not present to prevent their reoccupation. Once the bats have been excluded, tree removal may occur. Removal of trees/buildings where roosting habitat is not identified during the survey is recommended to be conducted from January through March on days with temperatures in excess of 50 degrees Fahrenheit to avoid potential impacts to foliage-roosting bat species.

Mitigation Measure 7. *The following tree protection measures shall be implemented pursuant to the recommendations listed in the Arborist Report, to the extent feasible:*

- The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the existing trees to be retained, as identified in the Arborist Report; and*
- The project applicant shall include all recommendations provided in the Updated Arborist Report by Trees, Bugs, Dirt Landscape Consulting and Training within the Tree Protection Plan. The Tree Protection Plan shall meet the standards provided in Section 15.70.45 of the Municipal Code, and shall include, but not necessarily be limited to, the establishment of TPZs and protective fencing around trees to be preserved; temporary irrigation systems to be provided for each tree; the installation and maintenance of at least two inches of wood chip mulch within the protected soils within each TPZ; air spade trenching; root pruning and clearance pruning; and the prohibition of oil, gas, chemicals, vehicles,*

construction equipment, machinery, and other construction materials within the dripline of trees to be preserved.

Mitigation Measure 8. *A tree replacement plan for the removal of 58 inches of cumulative trunk diameter of protected tree species shall be prepared in accordance with Municipal Code Section 15.070.040 A1. or A.2., or, subject to determination by the Community Development Director or Planning Commission, the applicant must pay an in-lieu fee to the City for the purchase and installation of trees of equivalent value.*

Mitigation Measure 9. *Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, tribal cultural resources, or human remains, are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.*

Mitigation Measure 10. *Pursuant to State Health and Safety Code §7050.5(c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-interment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.*

Mitigation Measure 11. *Prior to approval of the improvement plans for the project, all recommendations from the Geotechnical Investigation prepared by Cornerstone Earth Group (2019) and the Geotechnical Response to Comments prepared by Cornerstone Earth Group (2020) shall be incorporated into the improvement plans to the satisfaction of the City Engineer.*

In addition, the applicant shall retain a California Registered Geotechnical Engineer to review the geotechnical aspects of the project's structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing plans for construction. The geotechnical engineer shall perform field observations during earthwork and foundation construction to confirm project compliance with project plans, project specifications, and the recommendations provided in Cornerstone's Geotechnical Investigation and Geotechnical Peer Review Response Memo. The on-site geotechnical engineer shall have the authority to provide supplemental recommendations as necessary based on site conditions. Compliance with the recommendations of the Geotechnical Engineer shall be provided to the City Engineer.

Mitigation Measure 12. Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- Hydro-seeding;
- Placement of erosion control measures within drainage ways and ahead of drop inlets;
- The temporary lining (during construction activities) of drop inlets with “filter fabric”;
- The placement of straw wattles along slope contours;
- Use of a designated equipment and vehicle “wash-out” location;
- Use of siltation fences;
- Use of on-site rock/gravel road at construction access points; and
- Use of sediment basins and dust palliatives.

Mitigation Measure 13. Prior to initiation of any ground disturbance activities, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from Contra Costa Health Services and properly abandon the on-site well to the satisfaction of the Contra Costa Health Services Department. Proof of abandonment shall be provided to the City of Clayton Community Development Department and City Engineer.

Mitigation Measure 14. Prior to issuance of a demolition permit for any on-site structures, the Developer shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the City of Clayton Community Development Director an asbestos and lead survey. If ACMs or lead-containing materials are not discovered during the survey, further mitigation related to ACMs or lead containing materials will not be required. If ACMs and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site ACMs and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all California Environmental Protection Agency regulations, prior to the demolition and/or removal of the on-site structures. The applicant shall submit the work plan to the City for review and approval.

Mitigation Measure 15. To the maximum extent practical, the following measures should be incorporated into the project construction plans:

- Pursuant to Section 15.01.101 of the Clayton Municipal Code, all grading and excavation, construction, demolition, renovation, and other works of improvement shall occur only between the hours of 7:00 A.M. and 5:00 P.M., Monday through Friday.
- The project shall utilize temporary construction noise control measures, including the use of temporary noise barriers, or other appropriate measures as mitigation for noise generated during construction of projects.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.

- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.*
- *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.*
- *Project area and site access road speed limits shall be established and enforced during the construction period.*
- *Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.*

The requirements above shall be included, via notation, on the final grading plan submitted for review and approval by the Community Development Director prior to grading permit issuance.

Mitigation Measure 16. *Implement Mitigation Measure 9 and Mitigation Measure 10 within Section 5, Cultural Resources, of this IS/MND.*

EVALUATION OF ENVIRONMENTAL IMPACTS

1. AESTHETICS.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X
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 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"/>	X	<input type="checkbox"/>
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Would the project have a substantial adverse effect on a scenic vista?.....Less-Than-Significant Impact**

Discussion (a.)

For purposes of this analysis, scenic vistas would be officially designated mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. The City of Clayton General Plan identifies the protection of scenic resources as a core concern for future development and planning. Impacts to the views of open spaces or vistas would diminish the rural character of the City, and should be avoided. However, the City's General Plan does not contain any policies that address scenic vistas, nor does the General Plan define or identify any specific scenic vistas. Thus, the proposed project would not have a substantial adverse effect on a scenic vista, and a *less-than-significant* impact would occur.

- b. **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? No Impact**

Discussion (b.)

According to the California Scenic Highway Mapping System, two highways in Contra Costa County are officially-designated State Scenic Highway corridors:¹ Interstate 680 (I-680), from the Alameda County line to the junction with State Route (SR) 24; and SR 24

¹ California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed October 2020.

from the east portal of the Caldecott tunnel to I-680 near Walnut Creek. Neither of the aforementioned corridors provide views of Clayton or the project site. Accordingly, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, or historic buildings within a State Scenic Highway. Thus, the project would result in *no impact*.

- 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 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?Less-Than-Significant Impact**

Discussion (c.)

The project site is primarily characterized as open land with ruderal vegetation and scattered trees, and has been subject to a recent grass fire within a portion of the project site. A total of 64 trees are located throughout the site, four of which are dead. Shade trees are located to the front of the single-family residence, while fruit and nut trees are planted on the rear side of the residence. A perimeter row of primarily oak trees screens the southern property line behind the dwelling, and a few large oak trees are scattered around the property. The prevalent tree species is northern California walnut.

The site also includes an occupied single-family residence in the southwestern portion of the project site, as well as storage structures associated with the existing residence in the northwestern portion of the site. The storage structures consist of a barn-type building and a garden shed.

The implementation of the proposed project would include the demolition of the two storage structures, but not the single-family residence; removal of 48 existing trees; and grading of the project site. Therefore, implementation of the proposed project would change the existing visual setting from a rural ranch style lot to a more urban setting comprised of an approximately 13,823 sf community church with 156 associated parking spaces, and landscaping within the level portion of the site. The existing vegetated slopes along the eastern site boundary would remain undeveloped, though two new stormwater outfalls would be installed along the slope. The following discussion provides an analysis of the changes in visual character and quality, as viewed from public areas in the project vicinity, that would be expected to occur as a result of the proposed project.

Distinguishing between public and private views is important, because private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public, and include views of significant landscape features and along scenic roads. According to CEQA (Pub. Resources Code, § 21000 et seq.) case law, only public views, not private views, are protected under CEQA. For example, in *Association for Protection*

etc. Values v. City of Ukiah (1991) 2 Cal.App.4th 720, the court determined that “we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188: ‘[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.’” Therefore, the focus in this section is on potential impacts to public views.

Public views in the project vicinity would consist primarily of views seen by motorists, bicyclists, and pedestrians traveling on local roadways surrounding the project site, including High Street to the south and Pine Hollow Court to the west. The proposed project would convert a portion of the undeveloped project site to a community church and parking lot, and, thus, would alter the existing visual character of the site. However, the project is consistent with the site’s existing General Plan land use designation of RD, which allows for development of churches and places of worship, provided that such uses are consistent with the underlying zoning district. The project site is zoned R-40-H and the proposed project would be an allowed use upon approval of a Use Permit, and changes to the visual character and quality associated with buildout of the site have been generally anticipated by the City and analyzed in the General Plan EIR.

The proposed building area, not including the required amount of parking spaces, would be approximately 13,823 sf. The remaining area would consist of parking, the pastor’s residence, and new landscaping areas. A recent fire on the project site resulted in the loss of several trees, with a remainder total of 59 live on-site trees; the proposed project would retain 11 protected trees, while 48 trees would be removed due to poor tree health and incompatibility with new development. A total of 52 new trees to be planted within the site include Muskogee crape myrtle, California live oak, Chinese pistache, and blue oak. The landscaping trees would primarily be planted along the project site perimeters and parking areas. Various shrub species, including the creeping mahonia and red flowering currant, would also be planted alongside new landscaping trees within the parking area for shading and aesthetics purposes.

The single-story building would have different height articulations, most notable of which are the three taller elements ranging between 12 and 27 feet, that would help gather light and provide for vaulted ceilings. The maximum building height would be approximately 27 feet.

Photo simulations were prepared for the proposed project to aid in evaluating the potential visual impacts of the proposed project to the surrounding areas (see Figure 11 through Figure 14). The visual simulations include views of the project site upon development of the proposed project, including architectural design, parking areas, and fencing and landscaping features. Details regarding the visual simulation are provided below.

Figure 11
Photo-simulation of Proposed Project Looking West from High Street



Figure 12
Photo-simulation of Proposed Project Looking East from Pine Hollow Court



Figure 13
Photo-simulation of Proposed Project Looking Northeast from Pine Hollow Court Cul-de-Sac



Figure 14
Photo-simulation of Proposed Project Looking Southeast from Pine Hollow Court



View Looking West from High Street

Figure 11 presents the potential future view of the project site looking west from High Street upon development of the proposed project. The proposed project would change the existing visual character of the site from a primarily undeveloped field with scattered trees and ruderal vegetation to an approximate 25-foot structure with outdoor patios and associated landscaping. While the post-project western view from High Street would transition from an open setting to a more urban setting with a large church structure and landscaping, views of a majority of the project site are not available from this viewpoint. Rather, the western view from High Street primarily contains views of the scattered trees and ruderal vegetation along the eastern slope facing High Street. Although portions of this viewpoint would contain views of the eastern side of the proposed church structure with the outdoor patio, much of the vegetation along the eastern slope would not be disturbed by the proposed project. Therefore, the visual character of the area as seen looking west from High Street would not be substantially degraded with implementation of the proposed project.

View Looking East from Pine Hollow Court

Figure 12 presents the potential future view looking east from Pine Hollow Court towards the western side of the proposed church building which contains the ministry offices. The existing view is characterized by storage structures, wired fencing, and scattered trees and ruderal vegetation. Views of the hillsides to the east of the project site are also available from this vantage point. As shown in Figure 12, the post-project view would consist of the western side of the proposed church building which contains the ministry offices and a portion of the proposed parking area. Views from this vantage point would also include landscaping trees and wood-panel fencing leading to a project entrance further north along Pine Hollow Court.

The proposed project would replace the existing storage structures and the wired fencing surrounding the project site with new sidewalks, fencing, and structures. Compliance with Section 17.44 of the Clayton Municipal Code would ensure that the proposed landscaping and structures undergo Site Plan Review. The Site Plan Review process would consider project conformity with General Plan standards, adopted architectural and/or design standards, and whether the proposed project would reasonably maintain existing views and complement the existing adjacent structures in terms of materials, colors, size, and bulk.

In addition, views of the hillsides beyond the project site to the east would still be afforded from this vantage point, though to a lesser degree. Therefore, while the eastern post-project view from Pine Hollow Court would transition from an open setting to a more urban setting, the existing on-site structures would be replaced by newer structures designed in relative harmony with surrounding uses, and scenic views of the eastern hillsides would be partially retained. Another important consideration is the fact that the public viewpoint is from a cul-de-sac where few motorists, bicyclists, pedestrians travel. Thus, the alterations of this viewpoint would not affect a substantial number of the public. Although the visual character of the project site would be noticeably altered, the visual character of the area as seen looking east from Pine Hollow Court would not be substantially degraded with implementation of the proposed project.

View Looking Northeast from Pine Hollow Court Cul-de-Sac

Figure 13 presents the potential future view of the project site looking northeast from the Pine Hollow Court cul-de-sac toward the proposed parking area and church structure. The existing view is characterized by the main entrance and driveway to the existing single-family home. Existing views also include wire fencing, scattered trees, and ruderal vegetation, in addition to views of hillsides to the east. As shown in Figure 13, the post-project view would consist of new sidewalks, wood-panel fencing, landscaping, a parking area, and the main church facility. The single-family home would be retained, although the existing driveway would be removed to develop a new driveway and parking area which would provide access to the church facility and single-family home.

Portions of the eastern hillsides would still be visible from the Pine Hollow Court cul-de-sac with development of the proposed project. As mentioned previously, the proposed project would undergo Site Plan Review, which would ensure that the proposed project conforms with adopted architectural and/or design standards by the City, and whether the proposed project would reasonably maintain existing views and complement the existing adjacent structures in terms of materials, colors, size, and bulk. Another important consideration is the fact that the public viewpoint is from a cul-de-sac where few motorists, bicyclists, pedestrians travel. Thus, the alterations of this viewpoint would not affect a substantial number of the public. Therefore, although the visual character of the project site would be noticeably altered, the visual character of the area as seen looking northeast from the Pine Hollow Court cul-de-sac would not be substantially degraded with implementation of the proposed project.

View Looking Southeast from Pine Hollow Court

Figure 14 presents the potential future view of the project site looking southeast from Pine Hollow Court. The existing view is characterized by a storage shed, chain-link fencing, and scattered trees and ruderal vegetation. Views of the hillsides to the southeast of the project site are also available from this vantage point. As shown in Figure 14, the existing chain-link fence and storage shed would be replaced by a new driveway entrance into the project site. Project views from this vantage point would primarily be characterized by the driveway and a portion of the proposed parking area, as well as landscaping trees and vegetation.

Views of the southeastern hillsides from this vantage point would be substantially blocked by landscaping features and the proposed church facility; however, the densely planted landscaping trees and shrubs would provide screening to block the majority of the proposed structures and the proposed parking area from this view. Even though the proposed project would increase the amount of built development on the project site, the increase would not necessarily be considered a substantial degradation of the existing character or quality of the view; rather, new landscaping features would continue to provide natural features in harmony with the existing environment. Another important consideration is the fact that the public viewpoint is from a cul-de-sac where few motorists, bicyclists, pedestrians travel. Thus, the alterations of this viewpoint would not affect a substantial number of the public. Therefore, the visual character of the area as seen looking southeast from Pine

Hollow Court would not be substantially degraded with implementation of the proposed project.

Conclusion

As shown in the photo simulations, implementation of the proposed project would result in noticeable changes to the visual character of the area; however, modifications to the visual character or quality of the site and surrounding area as a result of the proposed project would not be considered a substantial *degradation*, which is the operative term for determining impact significance under CEQA. The proposed project would include landscaping and other design aspects consistent with the surrounding area and the City's policies and ordinances. Visual consistency of the project design would be ensured through the Site Plan Review approval process. Therefore, the changes to the visual character or quality of the site and its surroundings would result in a *less-than-significant* impact.

- d. **Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?Less-Than-Significant Impact**

Discussion (d.)

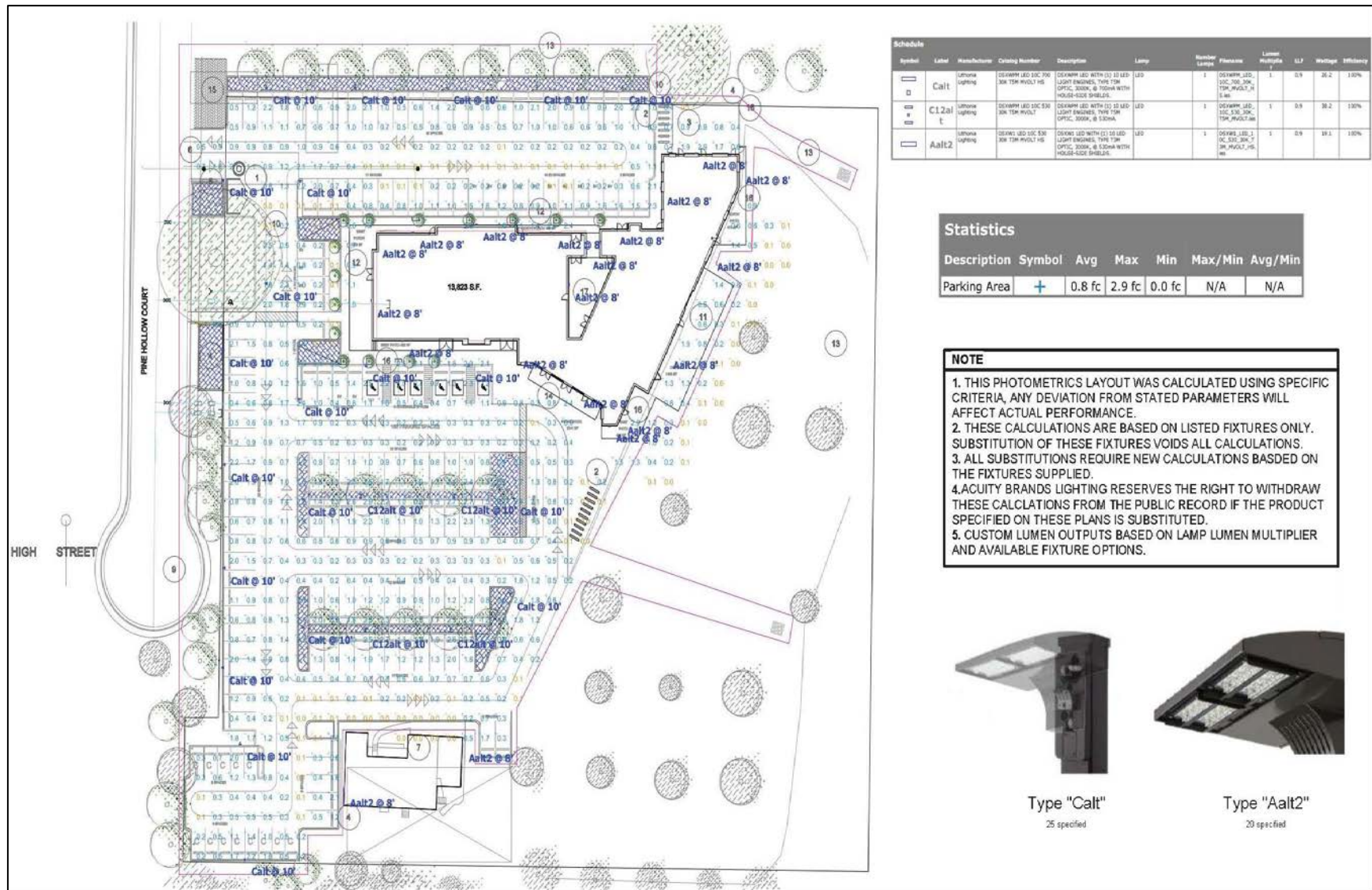
With the exception of the single-family residence and associated outbuildings in the southern portion of the project site, the site is primarily undeveloped. As such, existing sources of light and glare on the site are limited. Development of the proposed church would introduce new sources of light and/or glare to the site where few currently exist. Potential sources of nighttime light would include, but not be limited to, exterior light fixtures on the proposed church building and light poles within the proposed parking lot. During the day, sources of glare could include light reflected off of the church building windows.

The project would be required to comply with Chapter 8.09 of the City's Municipal Code, which prohibits the installation or maintenance of outdoor light fixtures that would cause an undue annoyance to persons on neighboring parcels in residential zoning districts. Compliance with Section 8.09 of the City's Municipal Code would be ensured during the Site Plan Review process mentioned previously. As shown in the photometric plan, many points along the western property line have light intensities as low as 0.2-, 0.4-, and 0.5-foot-candles (fc), and outdoor lighting fixtures within the parking areas would have an average light intensity of 0.8-fc, which would not be considered a substantial level of light or glare on sensitive receptors (see Figure 15). The nearest sensitive receptors to the project site would be the single-family residences located approximately 50 feet west of the project site, across Pine Hollow Court. The surrounding residences would be shielded from nighttime light generated by the proposed project by landscaping trees and shrubs within the project site, as well as existing landscaping along the frontages of the surrounding residences.

Because the proposed project would comply with local regulations governing outdoor lighting, the average light level generated by the proposed project would not be considered

substantial, and existing and proposed landscaping elements would otherwise help shield new sources of light or glare, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and a *less-than-significant* impact would occur.

Figure 15 Photometric Plan



2. AGRICULTURE RESOURCES.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i>					
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X
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"/>	X
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"/>	X

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use? No Impact**

Discussion (a.)

According to the California Department of Conservation Farmland Mapping and Monitoring Program, the proposed project site is classified as Urban and Built-Up Land.² The site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and, thus, the project would not convert such lands to non-agricultural use. Thus, ***no impact*** would occur as a result of the proposed project.

- b. **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? No Impact**

² California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservancy.ca.gov/DLRP/CIFF/>. Accessed August 2020.

Discussion (b.)

The project site is currently zoned R-40-H. While the “H” allows the keeping of equestrian livestock, the City has a separate Agricultural (A) zoning district, the purpose of which is to allow all types of agriculture including general farming, horticulture, floriculture, non-retail nurseries and greenhouses, aviaries, apiaries, forestry, and similar agricultural uses. In addition, the site is not under a Williamson Act contract. As such, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Thus, a *less-than-significant* impact would occur as a result of the proposed project.

- 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))?**..... **No Impact**
- d. **Result in the loss of forest land or conversion of forest land to non-forest use?** **No Impact**

Discussion (c. and d.)

The project site is not considered forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526), and the site is not zoned Timberland Production (as defined by Government Code section 51104[g]). The site contains an existing single-family residence and is surrounded by existing development. Therefore, the proposed project would have *no impact* with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

- 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?**..... **No Impact**

Discussion (e.)

With the exception of the single-family residence within the southwest portion of the site, the project site is primarily characterized as open land with ruderal vegetation and scattered trees, and has been subject to a recent grass fire within a portion of the project site. The project site is located near existing residential development and an elementary school. While an orchard was formerly located on-site, agricultural activities do not currently occur on the site, nor do such activities occur in any areas near the project site. Therefore, the proposed development would not involve other changes in the existing environment, due to their location or nature, that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use and, thus, *no impact* would occur.

3. AIR QUALITY.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X	<input type="checkbox"/>
c.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	X	<input 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"/>	X	<input type="checkbox"/>

a. **Would the project conflict with or obstruct implementation of the applicable air quality plan?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?Less-Than-Significant Impact**

Discussion (a. and b.)

The City of Clayton is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM_{2.5}), and State respirable particulate matter 10 microns in diameter (PM₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM_{2.5}.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education,

and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017. The 2017 Clean Air Plan was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀ standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 Clean Air Plan. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. For development projects, BAAQMD establishes significance thresholds for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀ and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr). The thresholds are listed in Table 2. Thus, by exceeding the BAAQMD's mass emission thresholds for emissions of ROG, NO_x, PM₁₀, or PM_{2.5}, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 2			
BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10
<i>Source: BAAQMD, CEQA Guidelines, May 2017.</i>			

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 - a Statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information is applied in the model. The proposed project's modeling assumed the following:

- Construction would begin in January of 2022;
- Construction would occur over approximately 1.5 years;
- A total of 4.42 acres of land would be disturbed during grading;
- Material import or export would not be required;
- Based on the Traffic Study prepared for the proposed project, the project trip generation rates were adjusted according to the following:
 - Weekdays: 5.24 daily trips per 1,000 square feet (ksf);
 - Saturdays: 0.97 daily trips per ksf;
 - Sundays: 23.59 daily trips per ksf;
- The project site is located within 0.3-mile of the nearest bus stop;
- The project would comply with the commercial recycling standards required under AB 341; and
- The project would comply with all applicable provisions of the 2019 California Building Standards Code (CBSC), the 2019 CALGreen Code, and the Model Water Efficiency Landscape Ordinance (MWELO).

The proposed project's estimated emissions associated with construction and operations and the project's contribution to cumulative air quality conditions are provided below. All CalEEMod results are included as Appendix A to this IS/MND.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's construction emissions would be below the applicable thresholds of significance for ROG, NO_x, PM₁₀, and PM_{2.5}.

Table 3			
Maximum Construction Emissions (lbs/day)			
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	3.23	54	NO
NO _x	33.12	54	NO
PM ₁₀ (exhaust)	1.61	82	NO
PM ₁₀ (fugitive)	18.21	None	N/A
PM _{2.5} (exhaust)	1.48	54	NO
PM _{2.5} (fugitive)	9.97	None	N/A
<i>Source: CalEEMod, January 2021 (see Appendix A)</i>			

Although thresholds of significance for mass emissions of fugitive dust PM₁₀ and PM_{2.5} have not been identified by BAAQMD, the proposed project's estimated fugitive dust emissions have been included for informational purposes. All projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's Basic Construction Mitigation Measures, which include the following:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project's implementation of the BAAQMD's Basic Construction Mitigation Measures would further minimize construction-related emissions.

Because the proposed project would be below the applicable thresholds of significance for construction emissions, project construction would not result in a significant air quality impact.

Operational Emissions

Emissions modeling for the proposed project was based on the weekly operation of the project, including the most intense Sunday activities, using ITE rates provided by TJKM. According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 4. As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance. Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would be considered to result in a less-than-significant air quality impact during operations.

<p align="center">Table 4 Unmitigated Maximum Operational Emissions</p>					
Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	0.51	0.10	54	10	NO
NO _x	0.55	0.13	54	10	NO
PM ₁₀ (exhaust)	0.01	0.00	82	15	NO
PM ₁₀ (fugitive)	0.37	0.09	None	None	N/A
PM _{2.5} (exhaust)	0.01	0.00	54	10	NO
PM _{2.5} (fugitive)	0.10	0.02	None	None	N/A
<i>Source: CalEEMod, January 2021 (see Appendix A)</i>					

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 2 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 2, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be expected to result in a cumulatively considerable contribution to the region's existing air quality conditions.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2017 Clean Air Plan. According to BAAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be considered to conflict with or obstruct implementation of regional air quality plans.

Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered ***less than significant***.

c. **Would the project expose sensitive receptors to substantial pollutant concentrations? Less-Than-Significant Impact with Mitigation Incorporated**

Discussion (c.)

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest off-site existing sensitive receptors to the site would be the single-family and multi-family residences that are located to the west, south, and east of the site, the closest of which is located approximately 50 feet to the west of the project site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminants (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

According to the Contra Costa Transportation Authority (CCTA) Congestion Management Plan (CMP), any land development application generating less than 100 peak hour trips is not required to prepare a study of its traffic impacts on the CMP network as such projects

are expected to have minimal impacts on the CMP network.³ As discussed in further detail in Section 17, Transportation, of this IS/MND, the proposed project would result in an estimated average of 105 new daily vehicle trips per day, with the vast majority of trips occurring on Sundays. Considering the project is anticipated to generate an average of 105 trips per day, the trips occurring during peak hours would be substantially fewer. As such, the project trip generation would be below the CCTA CMP threshold of 100 new peak hour trips and, thus, the project would be considered to be consistent with the CCTA CMP.

As discussed above, the project is not expected to generate a significant increase in peak hour trips. Based on an Engineering and Traffic Survey and Recommendation Summary conducted by Harris & Associates in 2020, the roadway segments of Main Street and Center Street between Oak Street and Marsh Creek Road, both located directly east of the project site, experience traffic counts of 1,877 and 2,626 average daily trips, respectively. In addition, the roadway segment of Mitchell Canyon Road between Clayton Road and Herriman Road is located west of the project site, and experiences an average of 2,432 daily trips.⁴ The proposed church would contribute an average of 105 trips per day, which would constitute a nominal increase in local traffic levels, and would not increase traffic volumes at any nearby intersection to more than 44,000 vehicles per hour. As such, the proposed project would not increase traffic volumes at nearby intersections to more than the hourly traffic volumes set forth in the BAAQMD's localized CO screening criteria. Furthermore, intersections where vertical and/or horizontal mixing is limited are not located in the project vicinity.

Based on the above, per the BAAQMD's screening criteria for localized CO emissions, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. The nearest off-site sensitive receptors are the single-family residences located approximately 50 feet to the west of the project site, across Pine Hollow Court.

³ Contra Costa Transportation Authority. 2019 *Update of the Contra Costa Congestion Management Program* [page 72]. Adopted December 18, 2019.

⁴ Harris & Associates, Inc. 2020 *City of Clayton Engineering and Traffic Survey and Recommendation Summary*. September 3, 2020.

The proposed project does not include any operations that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities could result in the generation of TACs, primarily DPM, from on-road haul trucks and off-road equipment exhaust emissions. Although DPM emissions from on-road haul trucks would be widely dispersed throughout the project area, as haul trucks move goods and material to and from the site, exhaust from off-road equipment would primarily occur within the project site. Consequently, the operation of off-road equipment within the project site during project construction could result in exposure of nearby residents to DPM.

BAAQMD has established thresholds for local community risk and hazard impacts that may be used when siting new sources of pollution. The BAAQMD's thresholds for analyzing health risks from new sources of emissions are presented below:

- Non-compliance with a qualified risk reduction plan;
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a cumulatively considerable contribution; or
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) annual average $\text{PM}_{2.5}$ would be a cumulatively considerable contribution.

As stated above, the foregoing thresholds are generally intended for use when analyzing the operation of new proposed sources of TACs. However, the proposed project would not involve the on-going operation of any permanent sources of TACs. Although the proposed project would not involve the siting or operation of any permanent sources of TACs, in the absence of specific thresholds for use when analyzing health risks from short-term emissions, the foregoing BAAQMD thresholds are applied to the project, for construction specifically.

To analyze potential health risks to nearby residents that could result from DPM emissions from off-road equipment at the project site, total DPM emissions from project construction were estimated. DPM is considered a subset of $\text{PM}_{2.5}$, thus, the CalEEMod estimated $\text{PM}_{2.5}$ emissions from exhaust during construction was conservatively assumed to represent all DPM emitted on-site. The CalEEMod estimated $\text{PM}_{2.5}$ exhaust emissions were then used to calculate the concentration of DPM at the maximally exposed sensitive receptor near the project site. DPM concentrations resulting from project implementation were estimated using the American Meteorological Society/Environmental Protection Agency (AMS/EPA) Regulatory Model (AERMOD) dispersion model. The associated cancer risk and non-cancer hazard index were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the risk assessment guidelines of the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.⁵ The modeling was performed in

⁵ Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.

accordance with the USEPA's User's Guide for the AERMOD⁶ and the 2015 OEHHHA Guidance Manual.

Based on the foregoing methodology, and the methodology presented in response to questions 'a' and 'b' regarding the estimation of construction emissions, the cancer risk and non-cancer hazard indices were estimated and are presented in Table 5.

Table 5			
Maximum Unmitigated Cancer Risk and Hazard Index Associated with Project Construction DPM			
	Cancer Risk (per million persons)	Acute Hazard Index	Chronic Hazard Index
Construction DPM Health Risks	20.96	0.00	0.02
Thresholds of Significance	10	1.0	1.0
Exceed Thresholds?	YES	NO	NO
<i>Source: AERMOD and HARP 2 RAST, January 2021 (see Appendix A).</i>			

As shown in Table 5, construction of the proposed project would not result in acute or chronic hazards in excess of BAAQMD's standards. However, project construction would conservatively have the potential to result in cancer risks in excess of BAAQMD's 10 cases per million threshold. Thus, construction of the proposed project could result in exposure of nearby receptors to substantial pollutant concentrations.

Criteria Pollutants

The BAAQMD thresholds of significance were established with consideration given to the health-based air quality standards established by the NAAQS and CAAQS, and are designed to aid the district in achieving attainment of the NAAQS and CAAQS.⁷ Although the BAAQMD's thresholds of significance are intended to aid achievement of the NAAQS and CAAQS for which the SFBAAB is in nonattainment, the thresholds of significance do not represent a level above which individual project-level emissions would directly result in public health impacts. Nevertheless, a project's compliance with BAAQMD's thresholds of significance provides an indication that criteria pollutants released as a result of project implementation would not inhibit attainment of the health-based regional NAAQS and CAAQS. Because project-related emissions would not exceed the BAAQMD's thresholds, and, thus, would not inhibit attainment of regional NAAQS and CAAQS, the criteria pollutants emitted during project implementation would not be anticipated to result in measurable health impacts to sensitive receptors. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of criteria pollutants.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to excess concentrations of localized CO or criteria pollutants during construction or operation. However, construction of the project could result in exposure of nearby

⁶ U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.

⁷ Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.

receptors to cancer risks in excess of the BAAQMD's standards. Consequently, the proposed project would result in a ***potentially significant*** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measure(s)

As shown in Table 6, implementation of the following mitigation measure would ensure that emissions from construction equipment do not result in increased health risks to nearby receptors in excess of BAAQMD's standards. Consequently, with implementation of the following mitigation measure, the proposed project would not have the potential to expose sensitive receptors to substantial pollutant concentrations and a *less-than-significant* impact would occur.

Table 6 Maximum Mitigated Cancer Risk and Hazard Index Associated with Project Construction DPM			
	Cancer Risk (per million persons)	Acute Hazard Index	Chronic Hazard Index
Construction DPM Health Risks	9.95	0.00	0.01
Thresholds of Significance	10	1.0	1.0
Exceed Thresholds?	NO	NO	NO
<i>Source: AERMOD and HARP 2 RAST, January 2021 (see Appendix A).</i>			

Mitigation Measure 1.

Prior to the initiation of ground disturbance, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used in the construction of the project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 Interim or cleaner.

In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the Off-Road Diesel Fueled Fleet Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the Community Development Director for the City of Clayton.

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

Discussion (d.)

Emissions such as those leading to odors have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections “a” through “c” above. Therefore, the following discussion focuses on emissions of odors and dust.

Pursuant to the BAAQMD CEQA Guidelines, odors are generally regarded as an annoyance rather than a health hazard.⁸ Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on several variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantification of significant odor impacts is relatively difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would include the construction and operation of a sewer lift station, which would be located in the northwest portion of the project site. The proposed sewer lift station would have the potential to result in odors within the project area. The nearest sensitive receptors to the project site would be the single-family residences located approximately 50 feet west of the project site, across Pine Hollow Court.

The City of Concord Public Works Department performs preventative maintenance and makes routine repairs to the pump stations and sewer collection systems throughout the cities of Concord and Clayton. The City of Concord maintains a complaint hotline for the public to report any foul odor locations. If odors are reported, the staff investigates each report and takes the appropriate actions to eliminate the odor source. Methods used to deal with odors include carbon/permanganate air scrubber systems, pump station operation changes, and chemicals added to the force mains such as nitrate solutions, air injection, caustic soda or hydrogen peroxide. While not anticipated, if adverse odors were to occur in the project area associated with the proposed sewer lift station, the City of Concord Public Works Department would respond accordingly and install odor control facilities, if required. Furthermore, the prevailing wind direction in the City is Clayton is from the west.⁹ As such, odors associated with the proposed sewer lift station would likely be blown in the westward direction, away from the nearest sensitive receptors.

Considering the above, the City of Concord Public Works Department has regulations in place to ensure that adverse odors do not affect nearby sensitive receptors. In addition, due to the prevailing wind direction in the area, nearby sensitive receptors would not be located downwind of the proposed sewer lift station. Consequently, operation of the proposed lift station would not result in the exposure of sensitive receptors to substantial odors. Apart

⁸ Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines* [pg. 7-1]. May 2017.

⁹ Weather Spark. *Average Weather in Clayton California, United States*. Available at: <https://weatherspark.com/y/1067/Average-Weather-in-Clayton-California-United-States-Year-Round>. Accessed January 14, 2021.

from the proposed sewer lift station, operations of the proposed project would involve activities typical to church facilities, and, consequently, would not be anticipated to result in the creation of substantial odors.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary and operation of construction equipment would be restricted to the hours of 7:00 AM to 5:00 PM, Monday through Friday, per Section 15.01.101 of the City's Municipal Code. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities.

As noted previously, all projects under the jurisdiction of BAAQMD are required to implement the BAAQMD's Basic Construction Mitigation Measures. The aforementioned measures would act to reduce construction-related dust by ensuring that haul trucks with loose material are covered, reducing vehicle dirt track-out, and limiting vehicle speeds within the project site, among other methods, which would ensure that construction of the proposed project does not result in substantial emissions of dust. Following project construction, the project site would not include any exposed topsoil. Thus, project operations would not include any substantial sources of dust.

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and a *less-than-significant* impact would result.

4. BIOLOGICAL RESOURCES.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	X	<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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input 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"/>	X	<input type="checkbox"/>
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- 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 Game or U.S. Fish and Wildlife Service? Less-Than-Significant With Mitigation Incorporated**

Discussion (a.)

This section is based upon a Biological Resources Assessment (BRA) prepared for the project site by Madrone Ecological Consulting¹⁰ (see Appendix B).

The following discussion describes the sensitive biological resources that have the potential to be present within the project site based on the BRA. Sensitive biological resources include habitats and/or individual plant and animal species that have special recognition by federal, State, or local conservation agencies. For purposes of this analysis, special-status

¹⁰ Madrone Ecological Consulting. *Biological Resources Assessment, Clayton Community Church*. December 1, 2020.

animal species are defined as animals protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively), or other regulations, and species that are considered rare by the scientific community. Special-status plant species are defined as plants that are protected under the CESA and FESA or listed as rare by California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Special-status species include:

- Animals and plants listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 et seq.; 14 CCR §670.1 et seq.) or the FESA (50 CFR 17.11);
- Animals and plants that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- Animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Animals that are designated as "species of special concern" by CDFW (2016);
- Animal species that are designated as "fully protected" under California (Fish and Game Code 3511, 4700, 5050, and 5515);
- Bat Species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as Medium or High Priority species; and
- Plants that are listed by CNPS Rare Plant Program as rank 1A – plants presumed extirpated in California and either rare or extinct elsewhere, 1B – plants rare, threatened or endangered in California or elsewhere, 2A – plants presumed extirpated in California but common elsewhere, 2B – plants rare, threatened or endangered in California by common elsewhere, 3 – plants about which more is needed and 4 – plants of limited distribution.

In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal. The presence of species with legal protection under the Endangered Species Act often represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

The project site is located within the boundaries of the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP)*, which is intended to provide an effective framework to protect natural resources in the County. However, the project site is designated as "urban" by the ECCCHCP/NCCP; therefore, the proposed project would be considered exempt from the provisions of the ECCCHCP/NCCP, pursuant to Section 16.55.030 of the Clayton Municipal Code. Mitigation measures identified in this IS/MND would be required to avoid possible inadvertent take of federally and state-designated special-status species which may occur on or near the project site.

Madrone Ecological conducted a field survey of the project area on June 30, 2020. During the field survey, the biologist walked the entire project site in meandering transects to evaluate biological resource conditions at the site. According to the field survey findings,

the western portion of the project site is a relatively flat terrace, which drops down a relatively steep hill through an abandoned walnut orchard to Mitchell Creek, just east of the project site. The majority of the project site is comprised of annual brome grassland, which is dominated by ripgut brome (*Bromus diandrus*) and wild oat (*Avena fatua*). A number of non-native forbs are also prevalent, including mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), prickly wild lettuce (*Lactuca serriola*), filaree (*Erodium botrys*), rose clover (*Trifolium hirtum*), salsify (*Tragopogon porrifolius*), and bindweed (*Convolvulus arvensis*). The majority of the on-site trees are valley oaks and blue oaks. Several fruit trees exist around the on-site residence, as well as scattered black walnut trees which appear to be stump sprouts from the historic orchard, and a few very large Italian stone pines. During the course of the field survey, a grass fire broke out on the site, causing the biologist to leave the site due to safety concerns; however, because the burning grass was dormant for the season, conditions are assumed to have remained largely the same following the fire and the affected grasses are expected to return to similar conditions by the next spring. As further discussed in Question 'e' of this section, several trees were burned during the fire.

As part of the BRA, the California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) database, the CNPS Rare and Endangered Plant Inventory, the Western Bat Working Group (WBWG) Species Matrix, and the East Bay Chapter of the CNPS's *Database of Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties*, were used to determine what special-status species are known to have occurred within a five-mile radius of the project area.

Of the special-status species occurrences identified in the database searches, Madrone Ecological determined that five plant species and ten wildlife species have a low to moderate potential to occur within the project site based on habitat requirements. In addition, the BRA noted that birds protected under the MBTA could occur within existing trees in the project area. Such species are discussed in further detail below.

Special-Status Plants

The following discussions summarize the potential for the proposed project to result in adverse effects to special-status plants.

Bent-flowered fiddleneck (*Amsinckia lunaris*)

Bent-flowered fiddleneck is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This plant species is an herbaceous annual that occurs in chaparral, cismontane woodland, and valley and foothill grasslands. Bent-flowered fiddleneck blooms from March through June and is known to occur at elevations ranging from approximately 10 feet to 1,640 feet above mean sea level (MSL). Bent-flowered fiddleneck has not been documented within five miles of the project site; however, marginally suitable habitat for this species is present in the annual brome grasslands throughout the project site.

Mt. Diablo Fairy Lantern (*Calochortus pulchellus*)

Mt. Diablo fairy lantern is not federally or state listed, but it is classified as a CRPR List 1B.2 species. This species is a perennial bulb that occurs in chaparral,

cismontane, and riparian woodlands, and valley and foothill grasslands. Mt. Diablo fairy lantern blooms April through June and is known to occur from approximately 98 feet to 2,755 feet above MSL. Nineteen occurrences of Mt. Diablo fairy lantern have been documented within five miles of the project site in the CNDDDB, the nearest of which is located approximately 1.5 miles south of the site in Mitchell Canyon. Marginally suitable habitat for this species is present in the annual brome grasslands throughout the project site.

Fragrant Fritillary (*Fritillaria liliacea*)

Fragrant fritillary is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is a perennial bulbiferous herb that is found in cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often on serpentine soils. Fragrant fritillary blooms from February through April and is known to occur from 10 feet to 1,345 feet above MSL. Fragrant fritillary has not been documented in the CNDDDB within five miles of the project site; however, there is one record of the species in CalFlora approximately five miles southwest of the project site. Marginally suitable habitat for this species is present in the annual brome grasslands throughout the project site.

Showy Golden Madia (*Madia radiata*)

Showy golden madia is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in cismontane woodland and valley and foothill grasslands. Showy golden madia blooms between March and May and is known to occur at elevations ranging from 82 feet to 3,986 feet above MSL. One CNDDDB record of showy golden madia has been documented approximately 4.5 miles east of the project site, and several records in the same general location are documented in the California Consortium of Herbaria (CCH). However, all of these records are from the late 1800's and early to mid-1900's; the species has not been documented in the Bay Area since 1941. Marginally suitable habitat for this species is present in the annual brome grasslands throughout the project site.

Shining Navarretia (*Navarretia nigelliformis* ssp. *radians*)

Shining navarretia is not federally or state listed, but the species is classified as a CRPR List 1B.2 species. Shining navarretia is an annual herb primarily associated with forb-rich openings in cismontane woodland and valley and foothill grassland, often on clay soils. Shining navarretia occurs at elevations between approximately 210 feet and 3,280 feet, and typically blooms from April through July. The species has not been documented in the CNDDDB within five miles of the project site; however, marginally suitable habitat for the species is present within the annual brome grasslands throughout the project site.

Special-Status Wildlife

The following discussions summarize the potential for the proposed project to result in adverse effects to special-status wildlife.

Crotch Bumble Bee (*Bombus crotchii*)

In California, the crotch bumble bee inhabits open grasslands and scrub habitats. This species was historically common in the Central Valley of California, but now appears to be absent from most of the region, including within the center of the species' historic range. There is one documented occurrence of crotch bumble bee within five miles of the project site, located approximately 2.5 miles north within the City of Antioch. The occurrence was documented in 1926 and the exact location is unknown. One CNDDDB record of crotch bumble bee was documented approximately four miles southeast of the project site in 1951.

The annual grasslands within the project site appear to support minimal floristic diversity, and very few ground squirrel burrows are present to represent potential nesting and overwintering habitat. Given the isolation of the low-quality site from other, more suitable habitats, the site represents extremely marginal habitat for the species. Because crotch bumble bee is currently absent from most of the Central Valley of California, there is a very low potential for the species to be present within the project site.

Western Bumble Bee (*Bombus occidentalis*)

While the western bumble bee was historically known throughout the mountains and northern coast of California, it is now largely confined to high elevation sites and a small handful of records on the northern California coast. Meadows and grasslands with blended floral resources are appropriate habitats for the western bumble bee.

Four records of western bumble bee have been documented within five miles of the project site, the most recent of which is from 1974. The annual grasslands within the project site appear to support minimal floristic diversity, and very few ground squirrel burrows are present to represent potential nesting and overwintering habitat. Given the isolation of the low-quality site from other, more suitable habitats, the site represents extremely marginal habitat for the species. Because western bumble bee is currently absent from most of the Central Valley of California, there is a very low potential for the species to be present within the project site.

Western Burrowing Owl (*Athene cunicularia*)

The western burrowing owl is designated by CDFW as a Species of Special Concern. Burrowing owls are found in open arid and semiarid habitats with short or sparse vegetation, including grasslands, deserts, agricultural fields, ruderal areas and open, landscaped areas. The species is dependent on mammals such as the California ground squirrel that dig underground burrows, which the owls occupy. Some burrowing owls have adapted to urban landscapes, and in some instances, open lots, roadsides, and landscaped areas can provide suitable habitat. Breeding typically occurs from February 1 through August 31.

Three documented occurrences of burrowing owl are located within five miles of the project site. The small, isolated nature of the site, the density of the grassland, and the almost complete lack of ground squirrel burrows make the annual brome

grasslands within the project site extremely marginal habitat for western burrowing owl.

Swainson's Hawk (*Buteo swainsoni*)

Swainson's hawk is a raptor species that is not federally listed, but is listed as threatened by the CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors and forage in grassland, irrigated pasture, and cropland with a high density of rodents. The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter.

One documented occurrence of Swainson's hawk nesting is located within five miles of the project site in the CNDDDB from 1898. The eBird database contains a number of more recent records within five miles of the project site, but all of the records are foraging records. Due to the small, isolated nature of the site, and the trees scattered throughout the habitat, the annual brome grasslands within the project site represent extremely marginal foraging habitat for Swainson's hawk.

White-tailed kite (*Elanus leucurus*)

White-tailed kite is not federally or state-listed, but is a CDFW fully-protected species. This species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands. White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range.

White-tailed kite has not been documented within five miles of the project site in the CNDDDB; however, foraging white-tailed kites have been documented numerous times in the eBird database. This species has not been documented in the vicinity of the project site. Due to the small, isolated nature of the site, the annual brome grasslands within the project site represent marginal foraging habitat for white-tailed kite.

Loggerhead shrike (*Lanius ludovicianus*)

The loggerhead shrike is not listed and protected pursuant to either the California or federal ESAs, but is considered a CDFW Species of Special Concern. Loggerhead shrikes nest in small trees and shrubs in woodland and savannah vegetation communities, and forage in open habitats throughout California. The nesting season ranges from March through June.

Loggerhead shrikes have not been documented within five miles of the project site in the CNDDDB; however, the species has been documented several times in the eBird database. Due to the small, isolated nature of the site, the annual brome grasslands within the project site represent marginal foraging habitat for loggerhead shrike, and the trees and shrubs within the project site represent marginal nesting habitat.

Pallid Bat (*Antrozous pallidus*)

Pallid bat is not federally or state listed, but is considered a CDFW Species of Special Concern and is classified by the WBWG as a high-priority species. Pallid bat favors roosting sites in crevices of rock outcrops, caves, abandoned mines, hollow trees, and human-made structures such as barns, attics, and sheds. Although Pallid bats are gregarious, they tend to group in smaller colonies of 10 to 100 individuals.

Two documented occurrences of pallid bat are located within five miles of the project site. Tree hollows and exfoliating bark on trees within the project site, as well as the barn located in the northwestern portion of the project site, provides suitable roosting habitat for pallid bat.

Townsend's Big-eared Bat (*Corynorhinus townsendii*)

Townsend's big-eared bat is not listed pursuant to either the federal or California ESAs; however, the species is considered a Species of Special Concern by the CDFW. The species has been reported from a wide variety of habitat types and elevations from sea level to 10,927 feet. Habitats used include coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. The distribution of Townsend's big-eared bat is strongly associated with the availability of caves and cave-like roosting habitat, including abandoned mines, buildings, bridges, rock crevices, and hollow trees. Foraging habitat for this species generally consists of edge habitats along streams adjacent to and within a variety of wooded habitats. The species often travels long distances when foraging and large home ranges have been documented in California.

Two documented occurrences of Townsend's big-eared bat are located within five miles of the project site. However, both of the records are from the 1920s and 1930s. The barn located in the northwestern portion of the project site provides marginally suitable roosting habitat for Townsend's big-eared bat due to the frequency of human use.

Western Red Bat (*Lasiurus blossevillei*)

Western red bat is not federally or state listed, but is considered a CDFW species of special concern, and is classified by the WBWG as a high-priority species. Western red bat is typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat, particularly willows, cottonwoods, and sycamores, used for foraging.

Western red bat has not been documented in the CNDBB within five miles of the project site. Trees throughout the project site represent suitable roosting habitat for western red bat. The open areas within the project site also provide suitable foraging habitat for the species.

Hoary Bat (*Lasiurus cinereus*)

The hoary bat is not federally or state listed, but the species is classified by the WBWG as a medium-priority species. Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches at the edge of a clearing. The species may also occasionally roost in caves, beneath a rock ledge, in a woodpecker hole, in a grey squirrel nest, under a wood plank, or clinging to the side of a building.

One occurrence of hoary bat has been documented within five miles of the project site in the 1950s. Trees throughout the project site represent suitable roosting habitat for hoary bat. The open areas within the project site provide suitable foraging habitat for the species.

Birds Protected by the MBTA

Per the BRA, the trees present on the proposed project site could serve as nesting locations for common and sensitive passerine and raptor species protected under the MBTA. Site construction activities, including tree removal during the active nesting season (February 1 to August 31) would have the potential to cause the failure or abandonment of active nests of migratory birds. Impacts to nesting birds, their eggs, and/or young caused by implementation of the project would be regarded as a potentially significant impact.

Conclusion

Based on the above, in the absence of appropriate mitigation, construction activities associated with the proposed project could result in adverse effects to special-status plant and wildlife species, as well as nesting raptors and songbirds birds protected by the MBTA. Thus, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impacts to a *less-than-significant* level.

Special-status Plant Species

Mitigation Measure 2.

Special-status plant surveys shall be conducted in accordance with CNPS and CDFW protocols throughout the project site within two years prior to the commencement of construction. The CNPS and CDFW protocols require that the surveys be conducted at the time of year that the target species are most identifiable; this often requires multiple survey visits to capture the identifiable period of all target species. If special-status plant species are not found, further mitigation would not be required. If special-status plants are found and will be impacted, mitigation for those impacts shall be determined in coordination with CDFW. If the plant found is a perennial, then mitigation could consist of digging up the plant and transplanting it to a suitable nearby avoided area prior to construction. If the plant found is an annual,

then mitigation could consist of collecting seed-bearing soil and spreading it in a suitable nearby avoided area prior to construction.

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If special-status plant species are not found, further mitigation is not required.

Crotch and Western Bumble Bee

Mitigation Measure 3.

Within 14 days prior to construction activities, a qualified biologist shall conduct a take avoidance survey for active bumble bee colony nesting sites. In order to maximize detection of active bee colonies, the take avoidance survey shall be conducted during the spring, summer, or fall during appropriate weather (not during cool overcast, rainy, or windy days). The biologist shall walk the entire area proposed for grading and inspect all rodent burrows for bumble bee activity. If any bumble bees are detected during the survey, the species shall be identified. Active colonies of crotch bumble bee or western bumble bee shall be avoided and work shall not occur within 50 feet of the colony. If the colony is in a location proposed for development, consultation for the CDFW shall be necessary and an Incidental Take Permit from the CDFW may be required prior to disturbance.

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If crotch bumble bee or western bumble bee nests are not found, further mitigation is not required.

Western Burrowing Owl

Mitigation Measure 4.

A targeted take avoidance burrowing owl nest survey shall be conducted within all accessible areas within 250 feet of the proposed construction area within 14 days prior to construction activities utilizing 60-foot transects, as outlined in the 2020 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation. If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW to determine if the nest buffer can be reduced. During the non-breeding season (late September through the

end of January), the applicant may choose to conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance, exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined by the CDFW.

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If western burrowing owl nests are not found, further mitigation is not required.

Nesting Raptors, Songbirds, and Other Birds Protected by the MBTA

Mitigation Measure 5(a). *A preconstruction nesting bird survey shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, no more than 14 days prior to the initiation of construction. If there is a break in construction activity of more than two weeks, subsequent surveys shall be conducted.*

If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer shall be established. The no-disturbance buffers may be reduced if a smaller buffer is proposed by the project biologist, and approved by the City, after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (if there are visual or acoustic barriers between the proposed activity and the nest). A qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.

A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If raptor or songbird nests or nests of birds protected by the MBTA are not found, further mitigation is not required.

Mitigation Measure 5(b). *Should construction activities cause a nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest as a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall*

remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction activities may only resume within the buffer zone after a follow-up survey by the Project Biologist has been conducted and a report has been prepared and submitted to the City, indicating that the nest (or nests) are no longer active and that new nests have not been identified.

Roosting Bats

Mitigation Measure 6.

A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features within the proposed development footprint. The habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction. A report summarizing the survey shall be provided to the City of Clayton within 14 days of the completed survey. If roosting bats are not found, further mitigation is not required.

If potential roosting habitat is identified within the areas proposed for development, the biologist shall survey the potential roosting habitat. Ideally, this survey should be conducted during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees Fahrenheit) to determine the presence of roosting bats. The surveys are recommended to be conducted using methods that are considered acceptable by the CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras, or a combination thereof.

If roosting bats are identified within any of the trees or buildings planned for removal, or if presence is assumed, then the qualified bat biologist shall specify appropriate exclusion methods according to where the roosting bats are located and what season the exclusion must occur. These exclusion methods may include two-step tree removal or building exclusion as detailed below.

In general, the trees/buildings shall be removed outside of pup season only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Building exclusion methods may include such techniques as installation of passive one-way doors, or the installation of

netting when the bats are not present to prevent their reoccupation. Once the bats have been excluded, tree removal may occur. Removal of trees/buildings where roosting habitat is not identified during the survey is recommended to be conducted from January through March on days with temperatures in excess of 50 degrees Fahrenheit to avoid potential impacts to foliage-roosting bat species.

- 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, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?**
.....Less-Than-Significant

- 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?**
.....Less-Than-Significant

Discussion (b. and c.)

Wetland, riparian, or other sensitive natural communities do not exist on the proposed project site. The site is located in a developed area with public uses and residential developments surrounding the site on all sides. Mitchell Creek, which runs adjacent to the eastern border of the project site, would not be disturbed by development of the proposed project. The nearest improvements taking place in proximity to Mitchell Creek would be the two proposed drain pipes and associated outfalls, which would be installed on the easterly slope facing Mitchell Creek. The outfalls would include flared end sections and rock slope protection immediately above and below the outfalls to prevent erosion and provide for energy dissipation. Stormwater would flow overland to Mitchell Creek, which is consistent with the existing conditions. Flow restrictors would ensure that the rate and amount of runoff entering the creek would not exceed pre-development levels. Therefore, treated stormwater generated by the proposed project would be able to sheet flow down the slope as stormwater currently does under existing conditions. Therefore, physical changes to the site would not involve filling, removal, degradation, or hydrological interruption of federally protected wetlands, riparian habitats, or sensitive communities.

Based on the above, the project would not have a substantial adverse effect on any riparian habitat, or other sensitive natural community or in federally protected wetlands on or near the project site. Consequently, a ***less-than-significant*** impact related to such natural resources would occur.

- d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with**

established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?Less-Than-Significant Impact

Discussion (d.)

The proposed project site is bordered by Pine Hollow Court to the west and is surrounded by existing development on all sides. Such features present a partial barrier to wildlife movement. The site does not contain any existing waterways that would provide habitat for native resident or migratory fish. Mitchell Creek, which runs along the eastern border of the project site, would not be disturbed by development of the proposed project, nor would the easterly slope of the project site be developed, such that wildlife could continue to move through the Mitchell Creek corridor area upon implementation of the proposed project. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and a *less-than-significant* impact would occur.

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

Discussion (e.)

The proposed project would be required to comply with all relevant policies and ordinances of the City of Clayton, including the Tree Protection Ordinance (Chapter 15.70 of the Municipal Code). The Tree Protection Ordinance calls for the protection of certain species of trees, and a Tree Removal Permit when removal of any tree with a trunk diameter of six inches or greater is proposed.

An updated Arborist Report was prepared by Tree, Bugs, Dirt Landscaping Consulting and Training after a recent grass fire damaged a total of 32 trees.¹¹ The Arborist Report evaluated a total of 59 live trees.¹² Of the 59 live trees, 56 are considered Protected Trees under the Tree Ordinance. The Updated Arborist Report recommends preserving 11 protected trees, and removing 48 trees due to their health, structure, form, condition, and species. Per the City's Tree Protection Ordinance, removal of healthy, protected trees would require replacement based on cumulative trunk diameter. Seven of the 48 trees are protected under the City's Ordinance and considered by the arborist to be in good or fair health. The cumulative trunk diameter of these trees is approximately 116 inches. Thus, a minimum of 58 inches (50%) of replacement trees would be required.

Recommendations for tree preservation provided by the arborist include, but are not limited to, the implementation of Tree Protection Zones (TPZs), fencing, temporary irrigation systems, and pruning. In addition, because the proposed project would result in impacts to Protected Trees, the applicant would be required to mitigate for the loss of Protected Trees

¹¹ Trees, Bugs, Dirt Landscape Consulting and Training. *Updated Arborist Report: Clayton Community Church, 1027 Pine Hollow Court, Clayton, CA*. December 15, 2020.

¹² There are also five dead trees on the project site.

by planting replacement trees and/or paying an in-lieu fee. In addition, to protect any trees that are located within 50 feet of construction from indirect impacts, the applicant would be required to prepare a Tree Protection Plan as outlined in the Tree Ordinance. Without implementation of the aforementioned protection measures, the proposed project could conflict with policies protecting biological resources, and could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Mitigation Measure 7. *The following tree protection measures shall be implemented pursuant to the recommendations listed in the Arborist Report, to the extent feasible:*

- *The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the existing trees to be retained, as identified in the Arborist Report;*
- *The project applicant shall include all recommendations provided in the Updated Arborist Report by Trees, Bugs, Dirt Landscape Consulting and Training within the Tree Protection Plan. The Tree Protection Plan shall meet the standards provided in Section 15.70.45 of the Municipal Code, and shall include, but not necessarily be limited to, the establishment of TPZs and protective fencing around trees to be preserved; temporary irrigation systems to be provided for each tree; the installation and maintenance of at least two inches of wood chip mulch within the protected soils within each TPZ; air spade trenching; root pruning and clearance pruning; and the prohibition of oil, gas, chemicals, vehicles, construction equipment, machinery, and other construction materials within the dripline of trees to be preserved.*

Mitigation Measure 8. *A tree replacement plan for the removal of 58 inches of cumulative trunk diameter of protected tree species shall be prepared in accordance with Municipal Code Section 15.070.040 A1. or A.2., or, subject to determination by the Community Development Director or Planning Commission, the applicant must pay an in-lieu fee to the City for the purchase and installation of trees of equivalent value.*

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other

**approved local, regional, or state habitat
conservation plan? Less-Than-Significant-Impact**

Discussion (f.)

The ECCCHCP/NCCP was prepared in 2007 and the City of Clayton became a signatory in January 2008. The ECCCHCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the ECCCHCP/NCCP. The ECCCHCP/NCCP provides streamlined permits from the USFWS and CDFW for covered species for new urban development projects and a variety of public infrastructure projects. Development fees within the ECCCHCP/NCCP area are assessed based on fee zones and land cover types.

Although the City of Clayton is a participating agency and the project site is located within the ECCCHCP/NCCP boundaries, the proposed project is exempt because the project site is identified as an Urban land cover type in the ECCCHCP/NCCP. Because the project is exempt as a regulated development project under the ECCCHCP/NCCP, conformance with the adopted plan is not required, conflicts with the Plan are not anticipated, and fees would not be assessed. However, the project has been designed or conditioned through mitigation specified in this Initial Study to avoid possible inadvertent take of special-status species, which would be consistent with the general goals of the ECCCHCP/NCCP. Based on the above, a *less-than-significant* impact would occur.

5. CULTURAL RESOURCES.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
c.	Disturb any human remains, including those interred outside of dedicated cemeteries.	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

- a. **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?****Less-Than-Significant Impact**

Discussion (a.)

An Archaeology Survey Report was conducted for the project site by Alta Archaeological Consulting (Alta), which included a Cultural Resources Survey conducted on July 16, 2020 (see Appendix C).¹³ As part of the Archaeology Survey Report, Alta requested a records search at the Northwest Information Center (NWIC). The NWIC search found that previous studies have not been conducted for the proposed project site, but seven cultural resource studies within 0.25-mile from the project site were conducted in the past. Four cultural resources were found during those studies; one of the cultural resources is considered to be of the historic era, while three of the cultural resources are considered to be of the prehistoric era.

The three historic and one mixed-component sites identified are located approximately 500-feet northeast of the project area above Mt. Diablo Creek. One of the sites, identified as P-07-000105, is a very large multi-component site consisting of a large habitation site and is composed of midden, burials, hearths, and a complex of artifacts that indicate habitation to approximately 2,800 B.P. The site is also considered significant due to its association with Joel Clayton and George Keller, who settled on the land circa 1910 and had the house and barn constructed on the land. However, due to the distance between the project site and the identified sites, substantial adverse impacts to the historic resources identified in the previous cultural studies are not anticipated.

The existing single-family home located on the project site was built circa 1950.¹⁴ The existing on-site barn was built in the early 1920s. The barn was built by Will Frank (1884-1969), with the help of some of his eight brothers, on the Frank family farm of almost 20 acres at the time. The original barn on the property was built in the 1850's, and was in poor condition by 1920, when Will Frank needed a larger, better constructed barn.¹⁵

¹³ Alta Archaeological Consulting. *Archaeological Survey Report: Clayton Community Church Project, Clayton, Contra Costa County, California*. December 12, 2020.

¹⁴ Personal communication between Janet Easton and Nick Pappani, Vice President, Raney Planning and Management, Inc. December 17, 2020.

¹⁵ Ibid.

The Frank family ranch is discussed on Page 26 of the Clayton Heritage Preservation 1994 Task Force Report. The City of Clayton relies on this report, prepared by the Heritage Preservation Task Force and accepted by the City Council, to determine whether structures are considered historically significant. The Task Force, which was comprised of Historical Society members and former representatives of Clayton City Council and Planning Commission, had a stated mission to “identify the remaining things of historical importance to Clayton, to prioritize them, and to develop plans to preserve those that can be preserved.” As such, the Task Force Report generally supplements and, in some cases, provides more detailed guidance on historical resources than what the General Plan may provide alone.

The Task Force Report refers to a collection of historic houses on Pine Hollow Court, which does not include the 1950s-era residence on the subject site. The Task Force Report also refers to “structures” on Pine Hollow Court, but does not give any description of which structures are being referred to. The Report is broken into various sections, one of which is entitled, “Privately Owned Historic Buildings”, where, according to the Table of Contents, “Will Frank Family Houses” is listed. This suggests the focus of the Task Force Report is on the homes associated with the Will Frank Family ranch, not the “structures” that are generally referenced on page 26 of the Report. This, coupled with the fact that the current barn is a replacement of the original 19th century barn on the Frank family property, supports the conclusion that the current barn is not considered historically significant.

Therefore, the project would have a *less-than-significant* impact with respect to causing a substantial adverse change in the significance of a historical resource.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? Less-Than-Significant With Mitigation Incorporated.....**
- c. Disturb any human remains, including those interred outside of formal cemeteries.. Less-Than-Significant With Mitigation Incorporated**

Discussion (b., c.)

On July 16, 2020, Alta conducted a field survey of the entire project site. Ground surface visibility was varied, with some areas providing good visibility (around 80 percent) in areas that had been subject to a recent fire and vegetation clearing, while other areas less so, with visibility around 25 percent due to heavy grass cover. The project site was surveyed using intensive pedestrian survey coverage with transects no greater than 10-meter intervals. A total of eight shovel and boot scrapes were used to scrape the ground survey to expose mineral soils; the top five to 10 centimeters of project site soils were determined to be composed of some organics and highly compacted clayey loam. The downslope portion of the project site was not subject to survey because development is not proposed in the eastern slope area. Overall, the field survey did not detect archaeological resources, nor human remains.

It should also be noted that, in general, most Pleistocene-age landforms have little potential for harboring buried archaeological resources as they developed prior to human migration

into North America. However, Pleistocene surface buried below younger Holocene deposits do have a potential for containing archaeological deposits. The project site is located within pre-Pleistocene deposits and is underlain by alluvial terrace deposits and Perkins loam. As such, the project site would be considered to have a very low probability of containing buried archaeological deposits.

As part of the archaeological report, Alta contacted the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands file and to request a list of Native American contacts in the area. The response letter provided by the NAHC indicated that the search of the Sacred Lands file had a positive result. On July 2, 2020, Alta sent notification letters to the Chairpersons of each tribal group associated with the project site as provided by the NAHC. A response was received by the Wilton Rancheria and the Guidiville Rancheria indicating that the tribes did not have concerns regarding the proposed project. Two additional responses from Andrew Galvan of the Costanoan tribe and Corrina Gould of the Confederated Villages of Lisjan requested the information provided by the NAHC. The NAHC results were distributed to the tribes upon request; further communication from the Native American tribes has not been received to date.

The entire project area has undergone previous disturbance as a result of the grading for orchard farming that has occurred off and on for over a century on the parcel. Further, the upper terrace location, above Mitchell Creek, and the presence of CA-CCO-222 northeast at the confluence of Mitchell Creek and Mt. Diablo Creek, suggests that the focus of prehistoric settlement was at that location and not the project parcel.

Despite the negative findings for prehistoric archaeological resources, the proximity to Mitchell Creek and the presence of archaeological sites upstream and east of the project area, increases the probability of encountering additional evidence of prehistoric occupation along this riverine corridor. Therefore, the proposed project could have a ***potentially significant*** impact to archaeological resources.

Mitigation Measure(s)

The following mitigation measures would reduce the impact from the proposed project to a *less-than-significant* level.

Mitigation Measure 9.

Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, tribal cultural resources, or human remains, are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the

discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.

Mitigation Measure 10.

Pursuant to State Health and Safety Code §7050.5(c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.

6. ENERGY

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Result in 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"/>	X	<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"/>	X	<input type="checkbox"/>

- a. **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?Less-Than-Significant**
- b. **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?Less-Than-Significant**

Discussion (a. and b.)

The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code (CALGreen Code) and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2019 CALGreen Code is a portion of the CBSC, otherwise known as the CALGreen Code (CCR Title 24, Part 11), which became effective on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration, repair, improvement, and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of electric vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;

- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 sf to ensure that all are working at their maximum capacity according to their design efficiencies; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards resulting in a 30 percent reduction in energy consumption from the 2016 standards for commercial structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

The CARB prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan),¹⁶ which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of church uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed project.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the CALGreen Code and the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. In addition, California has set energy-use reduction goals targeting zero-net-energy use in all new non-residential buildings by 2030. Compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy, including the provision of 10 electric vehicle (EV) charging spaces. In addition, as discussed in Section 17, Transportation, of this IS/MND, the project area is currently provided transit service by the Central Contra Costa Transit Authority. Pedestrians and bicyclists could access the

¹⁶ California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

closest transit stops on Clayton Road through a continuous path of sidewalks and crosswalks from the project site. Transit would provide access to the proposed project from residential neighborhoods throughout the City of Clayton. Furthermore, as the proposed project is only intended to serve the Clayton community, vehicle miles traveled (VMT) would not be increased due to vehicle trips from larger areas. The inclusion of EV charging spaces and the site's access to public transit and proximity to surrounding residences would reduce (VMT) and, consequently, fuel consumption associated with the proposed project. Therefore, the proposed project would provide for increased electric vehicle use and pedestrian connectivity with the surrounding area, resulting in reduced vehicle use and reduced emissions generation.

Conclusion

Based on the context above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a ***less-than-significant*** impact would occur.

7. GEOLOGY AND SOILS.

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

a-i. Would the project 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 based on other substantial evidence of a known fault?Less-Than-Significant Impact

a-ii. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?Less-Than-Significant Impact

- a-iii. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?Less-Than-Significant Impact**

Discussion (a-i., a-ii, aiii.)

A Geotechnical Investigation was prepared for the proposed project by Cornerstone Earth Group,¹⁷ and a Peer Review of the Geotechnical Investigation was prepared by Geocon Consultants¹⁸ (see Appendix D). According to the Geotechnical Investigation, the proposed project site is not located within an Alquist-Priolo Fault Zone; however, large earthquakes have historically occurred in the San Francisco Bay Area. The nearest active fault is the Greenville Fault, located 1.1 miles from the site. Other active faults in the region include the Concord-Green Valley, North Calaveras, Hayward, West Napa, and Rodgers Creek faults. Given that none of the faults cross the project site, the potential for ground rupture is low.

An earthquake of moderate to high magnitude generated within the project region could cause considerable ground shaking at the site. Nonetheless, all structures proposed for the project would be designed in accordance with the requirements of the adopted edition of the California Building Code (CBC) in place at the time of construction. Structures built according to the seismic design provisions of current building codes should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some nonstructural damage; and 3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Consequently, as the proposed project would comply with all applicable CBC recommendations, the project would not be anticipated to be substantially affected by ground shaking.

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (i.e., lateral spreading). Limited field and laboratory data are available regarding ground deformation due to settlement; however, in clean sand layers, settlement on the order of two to three percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap.

Per the Geotechnical Investigation, the project site consists primarily of medium stiff to stiff cohesive soils underlain by bedrock. A localized layer of loose clayey sand was encountered in one soil boring; however, the layer appears to be localized and relatively shallow. In addition, the static design ground water level is anticipated to be greater than 30 feet below site grades. Based on the above, Cornerstone Earth Group concluded that the potential for liquefaction to occur at the project site would be low.

¹⁷ Cornerstone Earth Group. *Geotechnical Investigation: Clayton Community Church, 1027 Pine Hollow Court, Clayton, California, Project Number 352-2-2*. March 9, 2017.

¹⁸ Geocon Consultants, Inc. *Clayton Community Church, 1027 Pine Hollow Court, Clayton, California, Geotechnical Peer Review*. November 23, 2020.

Based on the above the proposed project would not expose people or structures to substantial adverse effects including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map, strong seismic ground shaking, and seismically-induced liquefaction, resulting in a *less-than-significant* impact.

a-iv. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related landslides?
..... Less-Than-Significant Impact With Mitigation Incorporated

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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
..... Less-Than-Significant Impact With Mitigation Incorporated

Discussion (a-iii. and c.)

A previous feasibility-level investigation performed by Cornerstone Earth Group, dated March 22, 2016, was focused on the eastern-facing slope. Six exploratory test pits within the eastern slope encountered approximately six- to 12-inch, thick layers of clayey topsoil mantling the slope that was soft to medium stiff and contained abundant organics. Below the surficial topsoil, a layer of stiff to very stiff sandy lean clay with varying percentages of gravel was observed to depths ranging from four to five feet. In test pits TP-1, 4, and 5, the stiff clay layer was underlain by weathered bedrock consisting of claystone with varying percentages of sand. The claystone was generally friable and intensely fractured. Bedrock was not encountered to the maximum depths explored in TP-2, 3, and 6. More recent explorations were undertaken on the relatively level, western half of the site, which is blanketed by four to six feet of soft to very stiff, moist to wet lean clay and sandy lean clay. The upper six- to 12-inches of the near-surface clays within the western portion of the project site contained significant organics. The upper clay was underlain by loose to medium dense clayey sand to the maximum depth explored at 10 feet. Perched ground water was observed flowing through sandy clay/clayey sand soil at a depth of about three feet below the surface in Boring EB-4.

Based on the above site observations and a review of historical aerial photographs, Cornerstone Earth Group determined that indications of landslides or slope movement on the eastern-facing slope do not exist. While similar sites in the area with natural or cut slopes steeper than 3:1 may be susceptible to shallow sloughing or minor debris flow movement within the upper clay soils mantling the hillside, the existing 3:1 slope within the eastern portion of the project site is considered to have a low to moderate chance of landslide.

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face, such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers

near the bottom of an exposed slope. The eastern property boundary is approximately 40 to 80 feet from a seasonal stream. Although the stream is likely underlain by Holocene-aged alluvial soils, the Geotechnical Investigation determined that the potential for liquefaction at the site appears to be low. Therefore, the potential for lateral spreading to impact the proposed project would be low.

Subsidence, or settlement, occurs when the earth's surface sinks due to settlement of soils during earthquake shaking, excessive groundwater extraction, and/or loose soil conditions. The static high ground water level is anticipated to be approximately 30 to 40 feet below current grades. During field explorations, the surficial clayey soils encountered within the proposed building area were wet to moist and soft to medium stiff. The surficial soils were determined to be moderately compressible and would not provide uniform support for the proposed structure, which could cause differential settlement for new foundations. To reduce the potential for differential settlement, the Geotechnical Investigation recommends that the shallow surficial soils be over-excavated and re-compacted prior to placing new fill in the building area.

The Geotechnical Peer Review performed by Geocon Consultants indicated that the potential for slope creep was not evaluated within the 2019 Cornerstone Group Geotechnical Investigation. Slope creep is a natural geologic process where relatively loose/soft weathered materials migrate downslope over time. Slope creep in clayey soils is often exacerbated by seasonal shrink and swell cycles that result in desiccation cracking in dry periods, followed by the ready infiltration of runoff and saturation of the slope face during winter rains. Upon re-evaluation of the updated building plans, Cornerstone Earth Group determined that the potential for gradual slope creep along the eastern edge of the project site would be moderate to high; therefore, shallow footings supporting the eastern building wall would need to bear on natural, undisturbed soil, be at least 24 inches wide, and extend at least 36 inches below the lowest adjacent grade.¹⁹ The recommendations provided in Cornerstone Earth Group's Geotechnical Response to Review Comments would ensure that impacts related to soil creep would not be significant.

In light of the potential for soil creep, the Geotechnical Peer Review performed by Geocon Consultants also recommended that soil conditions associated with bedrock and moderately to highly plastic clays be reviewed relative to the anticipated deck and balcony foundations located on the eastern side of the proposed church. Upon review, Cornerstone Earth Group concluded that, due to the potential for long-term soil creep in that area, the shallow footing recommendations presented in the 2019 Geotechnical Report would not be suitable; rather, the proposed deck would need to be supported on drilled, cast-in-place friction piers which extend below the potential soil creep zone. Drilled pier recommendations for the deck are presented within Cornerstone Earth Group's response to Peer Review comments.

Without adherence to the recommendations provided in the Geotechnical Investigation and the Geotechnical Response to Review Comments performed by Cornerstone Earth Group, a ***potentially significant*** impact related to landslide, lateral spreading, subsidence, liquefaction or collapse could occur as a result of the proposed project.

¹⁹ Cornerstone Earth Group. *Geotechnical Response to Review Comments. Clayton Community Church. 1027 Pine Hollow Court. Clayton, California.* December 14, 2020.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Mitigation Measure 11.

Prior to approval of the improvement plans for the project, all recommendations from the Geotechnical Investigation prepared by Cornerstone Earth Group (2019) and the Geotechnical Response to Comments prepared by Cornerstone Earth Group (2020) shall be incorporated into the improvement plans to the satisfaction of the City Engineer.

In addition, the applicant shall retain a California Registered Geotechnical Engineer to review the geotechnical aspects of the project's structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing plans for construction. The geotechnical engineer shall perform field observations during earthwork and foundation construction to confirm project compliance with project plans, project specifications, and the recommendations provided in Cornerstone's Geotechnical Investigation and Geotechnical Peer Review Response Memo. The on-site geotechnical engineer shall have the authority to provide supplemental recommendations as necessary based on site conditions. Compliance with the recommendations of the Geotechnical Engineer shall be provided to the City Engineer.

b. Would the project result in substantial soil erosion or the loss of topsoil? .. Less-Than-Significant With Mitigation Incorporated

Discussion (b.)

Construction of the proposed project would involve grading of the development footprint to accommodate the proposed site improvements. Minimal ground disturbance would occur on the eastern slope due to installation of two storm drain pipes and associated outfalls. After grading, but prior to the overlaying of the ground surface with structures, topsoil of the disturbed portions of the site would be exposed, and the earth surfaces would be susceptible to erosion from wind and water. During the grading and excavation phases of construction, appropriate measures consistent with the Clayton Stormwater Management Ordinance and other applicable regulations (e.g., State Regional Water Quality Control Board National Pollutant Discharge Elimination System regulations) would be required to be implemented in order to control erosion on the site and minimize the impacts related to loss of topsoil. See Section 9, Hydrology and Water Quality, of this IS/MND for further discussion regarding the relationship of erosion to water quality. Because the proposed project could result in soil erosion or the loss of topsoil associated with grading and excavation of the project site during construction, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Mitigation Measure 12.

Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- *Hydro-seeding;*
- *Placement of erosion control measures within drainage ways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric”;*
- *The placement of straw wattles along slope contours;*
- *Use of a designated equipment and vehicle “wash-out” location;*
- *Use of siltation fences;*
- *Use of on-site rock/gravel road at construction access points; and*
- *Use of sediment basins and dust palliatives.*

- d. **Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property?**
.....**Less-Than-Significant Impact**

Discussion (d.)

Expansive soils are subject to shrinking and swelling as a result of seasonal fluctuations in soil moisture content, potentially resulting in heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Per the Geotechnical Report, the on-site soils were indicated to have low plasticity and expansion potential to wetting and drying cycles. Potential building damage due to volume changes associated with expansive soils may be reduced through proper foundation design. As noted above, under question ‘aiv’ and ‘c’, the project would be required to implement Mitigation Measure 11 which requires recommendations from the Geotechnical Report be incorporated into the project improvement plans. Implementation of Mitigation Measure 11 would ensure that the recommendations within the Geotechnical Report related to expansive soils are properly implemented during construction. Thus, the proposed project would not create substantial direct or indirect risks to life or property related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), and a *less-than-significant* impact would occur.

- 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? No Impact**

Discussion (e.)

The proposed church structure would be connected to the City of Clayton's sewer system and would not require the installation or use of septic tanks. Therefore, the proposed project would have ***no impact*** regarding having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

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

Discussion (f.)

Unique geologic features within the City of Clayton are not noted within the City's General Plan. Consequently, implementation of the proposed project would not be anticipated to have the potential to result in direct or indirect destruction of unique geologic features. The City's General Plan does not indicate the presence of any paleontological resources within the City Planning Area.

The majority of the surrounding area is developed and paleontological resources are not known to have not been encountered in the vicinity. Although existing paleontological resources are not expected to occur on the site, the potential exists for previously unknown paleontological resources to exist within the project site. Therefore, Mitigation Measures 9 and 10 require the appropriate actions be taken should any cultural resources, human remains, or bone of unknown origin be found within the project site during construction activities. With the implementation of Mitigation Measures 9 and 10, the proposed project would not result in the direct or indirect destruction of a unique paleontological resource, and a ***less-than-significant*** impact would occur.

8. GREENHOUSE GAS EMISSIONS

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X	<input type="checkbox"/>

- a. **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?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?Less-Than-Significant Impact**

Discussion (a. and b.)

Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO_{2e}/yr).

The proposed project is located within the jurisdictional boundaries of BAAQMD. The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 MTCO_{2e}/yr or 4.6 MTCO_{2e}/yr per service population (population + employees). BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions

above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations.

The quantitative thresholds above were adopted by BAAQMD in order to demonstrate a project's compliance with statewide emissions reduction targets established by the state legislature in Assembly Bill 32. Since adoption of the BAAQMD's thresholds of significance, the state legislature has passed Senate Bill (SB) 32, which established further statewide emissions targets. BAAQMD has not yet adopted thresholds that may be used to determine a project's compliance with SB 32. In the absence of adopted GHG emissions thresholds to assess compliance with SB 32, the BAAQMD has directed jurisdictions to qualitatively assess a project's compliance with the recommended mitigation measures within the *California's 2017 Climate Change Scoping Plan* (2017 Scoping Plan) as an alternative means of assessing a project's potential impacts related to GHG emissions.²⁰

The proposed project's GHG emissions were quantified with CalEEMod using the same assumptions as presented in Section 3, Air Quality, of this IS/MND, and compared to the thresholds of significance noted above. The proposed project's required compliance with the 2019 California Building Energy Efficiency Standards Code was assumed in the modeling. In addition, the CO₂ intensity factor within the model was adjusted to reflect the PG&E's anticipated CO₂ emissions factor for the year 2024. All CalEEMod results are included in Appendix A to this IS/MND.

BAAQMD Thresholds

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, nor do they require quantification. Nonetheless, the proposed project's construction GHG emissions have been estimated. The CalEEMod emissions estimates prepared for the proposed project determined that unmitigated project construction would result in total emissions of 580.19 MTCO_{2e} over the course of the construction period.

The estimated maximum annual GHG emissions related to operations of the proposed project are presented in Table 7 below. As shown in Table 7, the project's maximum annual unmitigated operational GHG emissions were estimated to be approximately 145.61 MTCO_{2e}/yr. Thus, implementation of the proposed project would result in operational emissions well below the BAAQMD's applicable 1,100 MTCO_{2e}/yr threshold of significance for GHG emissions. Even if the total construction emissions are added to the annual operations emissions for a conservative comparison, the sum would be 725.80 MTCO_{2e}, which remains below the BAAQMD threshold of significance.

²⁰ Flores, Areana. Environmental Planner, Planning and Climate Protection. Personal communication [phone] with Jacob Byrne, Senior Associate/Air Quality Technician, Raney Planning and Management, Inc. September 17, 2019.

Table 7	
Operational GHG Emissions	
Source	GHG Emissions (MTCO₂e/yr)
Area	0.00
Energy	31.17
Mobile	92.70
Waste	20.80
Water	0.94
Total Annual Operational GHG Emissions	145.61
BAAQMD Threshold	1,100 MTCO₂e/yr
Exceeds Threshold?	NO
<i>Source: CalEEMod, January 2021 (see Appendix A).</i>	

Consistency with 2017 Scoping Plan

Appendix B to the CARB's 2017 Scoping Plan provides examples of potentially feasible mitigation measures that could be considered to assess a project's compliance with the State's 2030 GHG emissions reductions goals. Thus, general compliance with the Local Actions within the 2017 Scoping Plan could be considered to demonstrate the project's compliance with SB 32. The project's consistency with the applicable Local Actions within the 2017 Scoping Plan is assessed in Table 8 below.

Table 8	
Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Construction	
Enforce idling time restrictions for construction vehicles.	CARB's In-Use Off-Road Vehicle Regulations include restrictions that limit idling time to five minutes under most situations. Construction fleets and all equipment operated as part of on-site construction activities would be subject to CARB's idling restrictions. As such, the proposed project would be required to comply with this measure.
Require construction vehicles to operate with the highest tier engines commercially available.	The City does not require contractors to use construction equipment that complies with the highest tier engines commercially available, unless warranted by mitigation, which is not the case for this project, as construction emissions would fall below the BAAQMD's thresholds.
Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible.	The CALGreen Code requires the diversion of construction and demolition waste, and the proposed project would be required to comply with the requirements within the most up-to-date CALGreen Code. Thus, the project would be considered to comply with the suggested measure.
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance.	The proposed project would include the removal of 48 trees. However, pursuant to Chapter 15.70.040, Tree Replacement Plan, of the City's Municipal Code, the Landscaping Plan for the project site includes the provision of new trees as a means of replacement, which would mitigate the loss of existing trees. As such, the project would comply with the suggested measure.

Table 8 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators.	The contractor would use existing grid electricity to the extent feasible. However, the possibility exists that temporary generators would be used for electricity in instances where grid electricity is not accessible. Overall, the project would be considered to generally comply with the suggested measure.
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available.	The City does not require the use of alternatively fueled construction equipment, unless warranted by mitigation, which is not the case for this project. Furthermore, the commercial availability of renewable diesel in the project area is currently unknown.
Operations	
Comply with lead agency's standards for mitigating transportation impacts under SB 743.	As noted in Section 17, Transportation, of this IS/MND, because the proposed project would be considered a Small Project per the CCTA Guidelines, the project would result in a less-than-significant impact related to vehicle miles traveled (VMT). Thus, the project would be considered to comply with the suggested measure.
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals.	The proposed project would include 10 EV charging spaces and, thus, the project would comply with this suggested measure.
Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan.	The proposed project would connect to existing pedestrian facilities and would extend the existing sidewalk on Pine Hollow Court to cover the entire project frontage. Pedestrian circulation on-site would primarily be through five-foot walkways surrounding the proposed buildings, pedestrian crossings on the main drive aisle connecting the project frontage to the building entrances, as well as pedestrian walkways along the drive aisle fronting the main entrance. Therefore, the project would comply with the suggested measure. Additional discussion of bicycle, pedestrian, and transit facilities is provided in Section 17, Transportation, of this IS/MND.
Require on-site renewable energy generation.	The 2019 CBSC requires that non-residential structures be constructed with solar-ready rooftops. As such, the proposed church would have a reserved solar-ready zone and the applicant may opt to include solar panels.
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size development.	The proposed project would not include wood-burning fireplaces. Thus, the proposed project would comply with the suggested measure.
Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing.	The 2019 Building Energy Efficiency Standards contains requirements for the thermal emittance, three-year aged reflectance, and Solar Reflectance Index (SRI) of roofing materials used in new construction and re-roofing projects. Such standards, with which the

Table 8 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
	project would be required to comply, would help to reduce heating and cooling costs associated with the proposed project. Therefore, the proposed project would generally comply with the suggested measure.
Require solar-ready roofs.	The 2019 CBSC requires that new non-residential structures be built with rooftop solar infrastructure for at least 15 percent of the roof area. Therefore, the proposed project would comply with this suggested measure.
Require organic collection in new developments.	Solid waste, recycling, and yard waste collection services are provided to the City of Clayton by Republic Services. Thus, the proposed project would have access to such organic collection services, and the project would generally comply with the suggested measure.
Require low-water landscaping in new developments (see CALGreen Divisions 4.3 and 5.3 and the Model Water Efficient Landscape Ordinance [MWELo], which is referenced in CALGreen). Require water efficient landscape maintenance to conserve water and reduce landscape waste.	Landscaping within the project site would be required to comply with the CALGreen Code and all water efficiency measures therein, including the MWELo or any similar regulations adopted by the City of Clayton. Accordingly, the proposed project is anticipated to comply with this measure.
Achieve Zero Net Energy performance building standards prior to dates required by the Energy Code.	The project applicant has not committed to achieving Zero Net Energy. Thus, compliance with the suggested measure is uncertain at this time. It should be noted that neither the CBSC nor the City of Clayton requires new commercial development to achieve Zero Net Energy at this time.
Expand urban forestry and green infrastructure in new land development.	The project would include landscaping throughout the site, and would include the planting and maintenance of green infrastructure, including several new trees, shrubs, and other plants. Therefore, the project would generally comply with the suggested measure.
Require each residential and commercial building equip buildings [sic] with energy efficient AC units and heating systems with programmable thermostats/timers.	The proposed project would be required to comply with all energy efficiency standards set forth in Title 20 and Title 24 of the California Code of Regulations. As such, the project would generally comply with the suggested measure.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets (see CALGreen Divisions 4.3 and 5.3 as well as Appendices A4.3 and A5.3).	The proposed project would be required to comply with the non-residential water efficiency regulations within the CALGreen Code. Thus, the proposed project would comply with the suggested measure.
Require the use of energy-efficient lighting for all street, parking, and area lighting.	All proposed exterior lighting would be LED type, consistent with the 2019 Building Energy Efficiency Standards. Thus, the proposed project would comply with the suggested measure.
Require the development project to propose an off-site mitigation project which should generate carbon credits	The suggested mitigation measures included in the 2017 Scoping Plan are not considered to be requirements for local projects under CEQA, but instead represent

Table 8 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district. The project may alternatively purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district.	<p>options for projects to demonstrate compliance with the 2017 Scoping Plan. The inclusion of GHG off-set mitigation projects or the purchase of carbon credits is typically dependent on a project's exceedance of the previously identified quantitative GHG thresholds. However, BAAQMD has not identified quantitative SB 32 thresholds that could be used to determine whether the project's anticipated emissions would be such that an off-site mitigation project or purchase of GHG reduction credits would be required in order to comply with SB 32.</p> <p>Considering that the project has been shown to be generally consistent with the foregoing measures, the City, in its discretion as lead agency, has chosen not to require the project to implement an off-site mitigation project or purchase GHG reduction credits.</p>
<i>Source: California Air Resources Board. AB 32 Scoping Plan [Appendix B]. Accessible at: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed August 2020.</i>	

As shown in the table above, the proposed project would generally comply with the suggested measures and, thus, the proposed project would be considered generally consistent with the 2017 Scoping Plan. Because the 2017 Scoping Plan is the CARB's strategy for meeting the State's 2030 emissions goals established by SB 32, the project would be considered to comply with the goals of SB 32.

Consistency with Plan Bay Area 2040

The San Francisco Bay Area's Plan Bay Area 2040 has been prepared jointly by the San Francisco Bay Area MTC and ABAG. Plan Bay Area 2040 is a regional plan intended to provide a strategy for the reduction of GHG emissions and air pollutants within the San Francisco Bay Area. The Plan Bay Area 2040 is a long-range plan that serves as a Regional Transportation Plan and Sustainable Communities Strategy (SCS). As an SCS, the Plan Bay Area 2040 is required to comply with regional targets for reducing GHG emissions through the integration of transportation and land use planning. ABAG has not provided a specified means of identifying an individual development project's compliance with the Plan Bay Area 2040. For the purposes of this analysis, the proposed project is compared to the overall goal of the Plan Bay Area 2040, which is to reduce regional GHG emissions through the reduction of transportation-related emissions.

By providing access to a church in a central location within Clayton and in close proximity to existing residences, the project would shorten the drive distances currently needed for local residents to have access to such facilities. The proposed project would connect to existing pedestrian facilities and would extend the existing sidewalk on Pine Hollow Court to cover the entire project frontage, thus improving pedestrian connections to the project site. The proposed project would also have adequate bicycle access to the project site from the surrounding area, and pedestrians and bicyclists could access the closest transit stops, located approximately 0.25-mile to the north on Clayton Road, through a continuous path

of sidewalks and crosswalks. The transit service within the immediate project vicinity, County Connection, provides two bus routes which travel between the Concord BART station and Downtown Clayton (Bus Routes 10 and 310). The transit service operates within capacity and additional trips generated by the proposed project could be accommodated by existing bus services. As such, implementation of the proposed project could be anticipated to reduce local VMT and thereby reduce mobile-sourced GHG emissions associated with the project.

Based on the above, the proposed project would not conflict with the Plan Bay Area 2040.

Conclusion

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and impacts would be considered *less than significant*.

9. HAZARDS AND HAZARDOUS MATERIALS.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	X		<input type="checkbox"/>
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
g.	Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?.....Less-Than-Significant Impact**

Discussion (a.)

The proposed project would develop the project site with a community church. The proposed church uses would not involve the routine transport, use, or disposal of hazardous materials. Operations would likely involve use of common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount utilized on the site, occasional use of such products would not represent a substantial risk to public health or the environment. Thus, during operations, the proposed project would not create any hazards to the public or the environment through routine transport, use, disposal, or reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a *less-than-significant* impact would occur.

- b. **Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?**.....
..... **Less-Than-Significant Impact With Mitigation Incorporated**

Discussion (b.)

The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

Construction

Construction activities would involve the use of heavy equipment, which would contain fuels, oils, and hydraulic fluid. In addition, various other products such as concrete, paints, and adhesives would likely be used on-site. However, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the temporary handling, storage, and transportation of hazardous and toxic materials, as overseen by the California Environmental Protection Agency (EPA) and Department of Toxic Substances Control (DTSC). Should an accidental release of hazardous materials occur during construction, the City (or City crews) and/or contractor, is required to notify the Contra Costa Fire Protection District (CCCFPD), who would then monitor the conditions and recommend appropriate remediation measures.

Existing On-Site Hazardous Conditions

A Phase I Environmental Site Assessment (ESA) was prepared by Geocon Consultants, Inc. for the purpose of identifying potential recognized environmental conditions (RECs) associated with the project site (see Appendix E).²¹ The Phase I ESA included a survey of the site and a review of historical documentation, aerial photography, regulatory agency files, and environmental sites radius reports. According to the Phase I ESA, an orchard was cultivated at the site starting in at least 1939. While a portion of the orchard trees remain on-site, the site is no longer used for agricultural purposes. The Phase I ESA did not identify any evidence of stained soil or pavement, stressed vegetation, or evidence of hazardous substances or petroleum products. In addition, evidence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) was not observed at the site. The site is not located within the vicinity of any properties that would pose an environmental hazard to the project site. The project site is included on the HAZNET and HWTS databases for the generating, proper storing, and offsite disposal of 50 gallons of waste oil and 300 pounds of organic solids in 2013. Violations were not reported, and the listing does not present a current hazard at the site.

Potential hazards and hazardous materials identified on the project site as part of the Phase I ESA are described in the following sections.

²¹ Geocon Consultants, Inc. *Phase I Environmental Site Assessment Report, Clayton Community Church, 1027 Pine Hollow Court, Clayton, California*. October 8, 2020.

Contaminated Soils

Because of previous orchard operations at the project site, the potential exists that residual pesticides or heavy metals associated with prior herbicide application could be present within the shallow on-site soils. Furthermore, early 20th century aerial photographs depict agricultural activities taking place within properties surrounding the project site up until 1979; nearby agricultural fields were not completely replaced by residential housing until at least 1993.

It is important to recognize that, in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (CBIA), the California Supreme Court held that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions.” (*Id.* at pp. 377-378.) As a result, the existence of contaminated soil or groundwater within the vicinity of a proposed project, “without any accompanying disturbance or other physical change” to the contamination, is not considered “a significant impact requiring CEQA review and mitigation.” (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 781 [holding development of a project on a site identified on the Cortese list and that included contaminated soil would only constitute a significant impact for the purposes of CEQA if the proposed project disturbed the contaminated soil].) For example, in *East Sacramento Partnerships for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, the petitioner argued that the EIR failed to analyze health risks associated with “potential for off-site subsurface gas (methane) migration” from an adjacent former landfill site. (*Id.* at pp. 295-297.) Citing the CBIA decision, the Third District Court of Appeal rejected petitioner’s argument because concerns that a project would be “an unhealthy place to live” exceeds CEQA’s scope. (*Id.* at p. 296.) In reaching its holding, the court stated “nowhere in the [CEQA] statute is there any provision ... plainly delegating power for the agency to determine whether a project must be screened on the basis of how the environment affects its residents or users.” (*Ibid.*, quoting CBIA, *supra*, 62 Cal.4th at p. 387.)

In light of the California Supreme Court’s recent decision and related appellate decisions discussed above, the potential presence of residual pesticides or heavy metals would only be considered to result in a significant CEQA impact if the proposed project would exacerbate an existing condition. While soil sampling for residual pesticides has not been performed, the proposed project would not involve substantial excavation, with maximum depth being approximately seven feet for utilities, and all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day during construction, pursuant to BAAQMD rules, thus ensuring that fugitive dust does not become airborne. As a result, construction and operation of the proposed project would not exacerbate existing conditions beneath the project site with respect to mobilizing residual soil contaminants should they be present.

Water Well

A water well-house is located within the southeastern corner of the project site. It is unknown when the well was last used, although the property owner has stated that the well has not been used within the last seven years that Clayton Community Church has owned the property. Prior to development of the proposed project, the existing water well would need to be properly abandoned in accordance with regulatory permitting requirements if not planned for use during site grading operations and subsequent redevelopment. Improper abandonment of a water well could result in groundwater quality issues if surface water runoff, containing urban or other pollutants, enters the well. In addition, any undocumented subsurface structures encountered during site clearing/grading operations (i.e., USTs, septic systems, water wells, etc.) would similarly need to be properly removed or abandoned in place in accordance with applicable Contra Costa permit requirements.

Lead-Based Paint

Existing on-site structures include a single-family residence within the southern portion of the project site, a barn structure along the western project boundary, and an additional storage structure along the northern project boundary. The structures were built prior to 1970, and it is reasonable to assume that the structures were also painted prior to 1970. Therefore, the potential exists for asbestos-containing materials (ACM) and lead-based paint (LBP) to be present in building materials. Because the proposed project would include demolition of the two existing barn/storage structures, the potential exists for construction workers to be exposed to ACM and LBP.

Based on the above, the potential exists for the proposed project to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. A ***potentially significant*** impact could occur.

Mitigation Measure(s)

The following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Mitigation Measure 13. *Prior to initiation of any ground disturbance activities, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from Contra Costa Health Services and properly abandon the on-site well to the satisfaction of the Contra Costa Health Services Department. Proof of abandonment shall be provided to the City of Clayton Community Development Department and City Engineer.*

Mitigation Measure 14. *Prior to issuance of a demolition permit for any on-site structures, the Developer shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the City of Clayton Community Development Director an asbestos and lead survey. If ACMs or lead-containing materials are not discovered during the survey,*

further mitigation related to ACMs or lead containing materials will not be required. If ACMs and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site ACMs and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all California Environmental Protection Agency regulations, prior to the demolition and/or removal of the on-site structures. The applicant shall submit the work plan to the City for review and approval.

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

Discussion (c.)

The nearest school relative to the project site is Mt. Diablo Elementary School, which is located directly north of the site. As discussed under question ‘a’ above, construction of the proposed project could include the use of small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment); however, the project contractor would be required to comply with all State and local City ordinances regulating the use of such products. In addition, churches do not typically include the use of or emission of hazardous materials. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and a *less-than-significant* impact would occur.

- d. **Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? No Impact**

Discussion (d.)

The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5,²² and would not create a significant hazard to the public or the environment. Therefore, *no impact* would occur.

- 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**

²² California Department of Toxic Substances Control. *EnviroStor*. Available at: <https://www.envirostor.dtsc.ca.gov/public/>. Accessed January 2021.

or public use airport, would the project result in a safety hazard for people residing or working in the project area? No Impact

Discussion (e.)

The nearest airport to the proposed project site is the Buchanan Field Airport, located approximately 7.10 miles to the west of the site. Therefore, the proposed project site is not located within an airport land use plan or within the vicinity of a public or private airport. As such, the project would not result in a safety hazard for people residing or working in the project area, and *no impact* would occur.

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

Discussion (f.)

The City of Clayton has an adopted Emergency Operations Plan, dated January 2012, which identifies the City's emergency planning, organizational, and response policies and procedures. The Emergency Operations Plan addresses how the City would respond to extraordinary events or disasters, including departmental Standard Operating Procedures. The primary exit routes out of the City to the north are Pine Hollow Road, Clayton Road, and Concord Boulevard. To the south, the primary exit route out of the City is Marsh Creek Road.

Although the proposed project would involve improvements to Pine Hollow Court, the improvements would not significantly impede vehicle traffic in the event of a major evacuation; rather, the widening of Pine Hollow Court to incorporate two traffic lanes would effectively improve emergency and evacuation access to and from the project site. Furthermore, during project construction, all equipment and materials would be staged on-site and would not substantially interfere with existing roadway operations. Therefore, the proposed project would result in a *less-than-significant* impact associated with impairing implementation of, or physically interfering with, an adopted emergency response plan or emergency evacuation plan.

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

Discussion (g.)

According to the Diablo Fire Safe Council, the City of Clayton is located within a wildland urban interface (WUI). The WUI is defined as an area in which wildlands and communities are sufficiently close to each other to present a credible risk of fire spreading from one to another.²³ Chapter 7A of the CBC includes specific requirements related to the design and construction of new buildings located within a WUI. For example, Chapter 7A specifies

²³ Diablo Fire Safe Council. *Clayton Morgan Territory Wildfire Action Plan: Public Review Draft*. January 25, 2016.

that a fire sprinkler system is required to be installed in order to protect against fire hazards in a WUI. In compliance with the CBC (specifically Section 903.2.1.3, Group A-3), the design of the church would include automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to California Fire Code (CFC) requirements. Such features would help to address fire situations within the site, which would reduce the demand for fire protection services from the project site. Fire services to the Clayton area are provided by the Contra Costa County Fire Protection District (CCCFPD), with the nearest station located approximately 0.4-mile east of the site.

The proposed church is required to be designed in compliance with all applicable State and local standards and recommendations for new development, such as the CCCFPD's requirements for providing a water supply system for fire protection, and providing adequate emergency and fire access. In addition, the project would be required to provide "defensible space" around on-site structures consistent with CCCFPD guidelines. Adequate provision of defensible space is enforced by the CCCFPD Exterior Hazard Control Division. Therefore, the proposed project would not expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires, and ***less-than-significant*** impact would occur.

10. HYDROLOGY AND WATER QUALITY

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X	<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"/>	X	<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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Result in substantial erosion or siltation on- or off-site;			X	
ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
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			X	
iv.	Impede or redirect flood flows?			X	
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?.....Less-Than-Significant Impact**

Discussion (a. and ciii.)

Water quality and runoff issues associated with construction and operation of the proposed project are discussed in detail below.

Construction

During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The City's National Pollutant Discharge Elimination

System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. Because the proposed project would disturb more than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit, which would minimize the potential for polluted runoff to leave the site during construction activities.

The State's General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site and implemented during construction. The SWPPP would be kept on site during construction activity and made available upon request to a representative of the City of Clayton or the San Francisco Bay RWQCB. In addition, a Notice of Intent (NOI) would be filed with the RWQCB. In accordance with the Construction General Permit, the project site would also be inspected during construction before and after storm events and every 24 hours during extended storm events in order to identify maintenance requirements for the implemented BMPs and to determine the effectiveness of the implemented BMPs. As a "living document", the site-specific SWPPP that would be prepared for the proposed project would be modified, if necessary, as construction activities progress. A Qualified SWPPP Practitioner (QSP) would ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The QSP for the project would amend the SWPPP and revise project BMPs, as determined necessary through field inspections, to protect against substantial erosion or siltation on- or off-site.

Operation

The proposed church uses would not involve operations typically associated with the generation or discharge of polluted water. Thus, operations on the project site would not violate any water quality standards or waste discharge requirements, nor degrade water quality. However, the addition of the impervious surfaces on the site would result in the generation of urban runoff, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides.

All municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. The City of Clayton has adopted the County C.3 Stormwater Standards, which require new development and redevelopment projects that create or alter 10,000 sf or more of impervious area to contain and treat all stormwater runoff from the project site. Given that the proposed project would create more than 10,000 sf of impervious area, the proposed project would be subject to the requirements of the SWRCB and the Regional Water Quality Control Board (RWQCB), including the C.3 Standards, which are included in the City's NPDES General Permit. Compliance with such requirements would ensure that impacts to water quality standards or waste discharge requirements would not occur during operation of the proposed project.

In compliance with the C.3 Guidebook, the project site would be divided into six drainage management areas (DMAs) (see Figure 10). DMAs 1 through 5 would drain to seven different bio-retention areas within the site, while DMA 6 would consist of self-treating landscape areas.

Stormwater from the DMAs within the northern portion of the site would be directed to one of the bio-retention areas for treatment on-site. The bio-retention areas would provide for treatment by filtering stormwater through layers of vegetated soils and gravel, which would provide for the removal of pollutants. Treated stormwater would be captured by perforated underdrains and routed to underground 60-inch drainage pipes within the proposed parking areas, which would provide for on-site detention. The underground drainage pipes would discharge treated stormwater, through flow restrictors, to new outfalls within the slope to the east of the proposed development area. Consistent with C.3 Standards, the proposed bio-retention areas would be sized to meet or exceed the minimum volume requirement necessary to adequately handle all runoff from the proposed impervious surfaces and landscaping. Thus, during operation, the proposed project would comply with all relevant water quality standards and waste discharge requirements, and would not degrade water quality.

Conclusion

Based on the above, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, a *less-than-significant* impact would occur.

- 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?.....Less-Than-Significant Impact**
- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?Less-Than-Significant Impact**

Discussion (b. and e.)

The Contra Costa Water District (CCWD) provides domestic water service to Clayton. The primary source of CCWD water is the Sacramento River Contra Costa Water District Canal – the CCWD does not rely extensively on groundwater supplies. The construction of the proposed church building and associated improvements would result in a net increase in impervious surfaces; however, the surface area would not be large enough to significantly affect groundwater recharge. Additionally, the bio-retention areas within the site would allow for stormwater to infiltrate into the surrounding soil, thereby allowing the continued contribution to groundwater recharge at the site.

Based on the above, the proposed project would not substantially deplete groundwater supplies or recharge at the site such that the project may impede sustainable groundwater management of the basin and would not conflict with an applicable groundwater management plan or water quality control plan. Thus, a *less-than-significant* impact would occur.

- ci. 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?Less-Than-Significant Impact

cii. 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 offsite?Less-Than-Significant Impact

ciii. 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 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?Less-Than-Significant Impact

Discussion (ci., cii., and ciii.)

As discussed above, runoff from impervious surfaces created by the proposed development would be collected and conveyed to a series of new on-site bio-retention basins. Each of the bio-retention basins would be designed and constructed according to criteria from the Contra Costa Clean Water Program Stormwater C.3 Guidebook. Treated stormwater leaving the bio-retention basins would flow to underground 60-inch drainage pipes within the proposed parking areas, which would provide for on-site detention. The underground drainage pipes would discharge treated stormwater, through flow restrictors, to two new outfalls within the slope to the east of the proposed development area. After exiting the outfalls, the treated runoff would flow downslope into Mitchell Creek, as site runoff currently does today. Consistent with the C.3 Standards, the flow restrictors would ensure that the rate and amount of runoff entering the creek would not exceed pre-development levels.

In order to ensure that the proposed project's stormwater treatment facilities remain adequate, long-term maintenance would be required. Routine maintenance of the facilities is necessary to ensure that infiltration of water is unobstructed, erosion is prevented, and soils are held together by biologically active plant roots. Proper operation and maintenance of the stormwater management facilities would be the sole responsibility of the property owner. In accordance with Clayton Municipal Code Section 13.12.050, implementation of an approved SWCP and submittal of an approved Stormwater Control Operation and Maintenance Plan by the applicant shall be a condition precedent to a final building

inspection or the issuance of a certificate of occupancy. All inspections and remedial actions would be logged in a Stormwater BMP Inspection and Maintenance Log.

Based on the above, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Consequently, the proposed project would result in a *less-than-significant* impact.

- civ. **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 create or contribute runoff water which would Impede or redirect flood flows?Less-Than-Significant Impact**

Discussion (civ.)

Based on the FEMA Flood Insurance Rate Map (FIRM), (Map Number ID: 06013C0304G), the proposed development area is within Zone X, which is described by FEMA as an area determined to be outside the 0.2 percent annual chance floodplain. In addition, dams or levees are not located upstream of the proposed project site; thus, flooding due to dam or levee failure would not occur. Because the proposed development area is not within a 100-year floodplain, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would impede or redirect flood flows. Therefore, impacts would be *less-than-significant*.

- d. **Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? No Impact**

Discussion (d.)

A seiche is defined as a wave generated by rapid displacement of water within a reservoir or lake, due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. The project site is not located near a water body that is susceptible to seiche hazard. Furthermore, due to the distance from the project site to the nearest coastline the project site would not be subject to tsunami hazards. As discussed above, the project site is not located in a FEMA-designated flood hazard area.

Therefore, the proposed project would not risk release of pollutants due to project inundation by flooding, tsunami, or seiche, and *no impact* would occur.

11. LAND USE.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X	<input type="checkbox"/>

- a. **Would the project physically divide an established community? No Impact**

Discussion (a.)

The site includes an occupied single-family residence in the southwestern portion of the project site. The project site is bordered by Mt. Diablo Elementary School to the north, Pine Hollow Court and single-family residential homes to the west, single-family residential homes to the south, and Mitchell Creek and Oak Street to the east. The existing single-family residence located within the southwestern portion of the project site would remain and be used by church staff. The proposed project would not involve any features that would divide an established community, such as construction of major highways or roadways, storm channels, bridges, or utility transmission lines. As such, the proposed project would not physically divide an established community, and ***no impact*** would occur.

- 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?..... Less-Than-Significant Impact**

Discussion (b.)

The proposed project would require approval of a Use Permit, Site Plan Review Permit, and Tree Removal Permit. The project site has been anticipated for development in the City's General Plan. In addition, the proposed project would not conflict with any City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect. For example, the proposed project would comply with the City of Clayton Noise Element, as demonstrated in Section 13 of the IS/MND. Additionally, as discussed in Section 4, Biological Resources, the proposed project would comply Chapter 15.70, Tree Protection, of the City's Municipal Code. As such, the project would not conflict with any applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, and a ***less-than-significant*** impact would occur.

12. MINERAL RESOURCES.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X
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"/>	X

- 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? No Impact**
- 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? No Impact**

Discussion (a. and b.)

According to the Contra Costa County General Plan, the nearest mineral resource or mineral resource recovery site within the City of Clayton is the Cemex Quarry, located approximately 0.65-mile southwest of the project site. Because the project site is not within the immediate vicinity of the Cemex Quarry or any of the other identified areas of important mineral deposits, the project would not interfere with existing access to such deposits. Therefore, the proposed project would have ***no impact*** to mineral resources.

13. NOISE.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in:</i>					
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"/>	X		<input type="checkbox"/>
b.	Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X

- 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?**
..... Less-Than-Significant With Mitigation Incorporated

Discussion (a.)

The following discussion is based on an Environmental Noise & Vibration Assessment (ENA) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Appendix F).²⁴

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq). The Leq is the foundation of the day-night average noise descriptor, DNL (or Ldn), and shows very good correlation with community response to noise.

²⁴ Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment Clayton Community Church. City of Clayton, California BAC Job #2020-099. January 28, 2021.*

The DNL is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Noise-Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

The noise-sensitive land uses which would potentially be affected by the proposed project consist of residential uses. Specifically, single-family residential land uses are located to the south and west of the project site. Existing commercial and school uses are located to the east and north of the project site. However, commercial and school uses are typically considered to be noise-generating, rather than noise-sensitive.

Existing Ambient Noise Levels

The existing ambient noise environment within the project vicinity is defined primarily by noise from traffic on nearby surface streets and by activities at the elementary school to the north. To generally quantify the existing ambient noise environment at the project site, BAC conducted long-term (48-hour) ambient noise level measurements at three locations on July 15th and July 16th, 2020 (see Figure 16). The results of the noise level measurement survey are summarized in Table 9. As shown in the table, the measured day-night average and average hourly noise levels were generally consistent at each measurement site throughout the monitoring period. In addition, the measured day-night average and average hourly noise levels were highest at Site 1, which was located on the north end of the project site.

Table 9						
Summary of Long-Term Noise Survey Measurement Results						
Site	Date	DNL²	Average Measured Hourly Noise Levels (dBA)¹			
			Daytime (7 AM to 10 PM)		Nighttime (10 PM to 7 AM)	
			L_{eq}	L_{max}	L_{eq}	L_{max}
Site 1: North end of project site	7/15/2020	51	50	65	41	54
	7/16/2020	55	53	65	47	60
Site 2: Northwest end of project site	7/15/2020	46	44	60	39	50
	7/16/2020	47	47	62	38	50
Site 3: Southwest end of project site	7/15/2020	45	44	59	37	47
	7/16/2020	46	46	63	36	49
Notes: ¹ dBA: A-weighted decibels, a weighted scale for measuring loudness that corresponds to the hearing threshold of the human ear ² Day Night Average dB Level						
Source: Bollard Acoustical Consultants, Inc., 2020.						

Figure 16
Noise and Vibration Survey Locations



Noise Standards

For transportation noise sources (traffic, rail, aircraft) affecting new developments, the Noise Element of the City of Clayton General Plan establishes an exterior noise level standard of 60 decibels (dB) DNL, applied at outdoor activity areas. The intent of this standard is to provide an acceptable exterior noise environment for outdoor activities. Additionally, the City of Clayton utilizes an interior transportation noise level standard of 45 dB DNL or less for new development.

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project-related noise level increases. The criteria shown in Table 10 were developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a conservative approach to impact assessment for the proposed project.

Table 10	
FICON Significance of Changes in Cumulative Noise Exposure	
Ambient Noise Level Without Project (DNL or CNEL)	Change in Ambient Noise Level Due to Project
< 60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
> 65 dB	+1.5 dB or more
<i>Source: Federal Interagency Committee on Noise (FICON)</i>	

Construction Noise Analysis

During project construction, heavy equipment would be used for grading excavation, paving, and building construction/structure rehabilitation, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. Noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. The nearest existing off-site noise-sensitive use has been identified as a residence located approximately 50 feet from where construction activities would occur on the project site.

Table 11	
Construction Equipment Noise Emission Levels	
Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82

Concrete Vibrator	76
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Rail Saw	90
Saw	76
Shovel	82
<i>Source: Bollard Acoustical Consultants, Inc, 2020.</i>	

Standard construction equipment, such as graders, backhoes, loaders, and trucks would be used for the proposed construction work. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 11 above. The noise values represent maximum noise generation, or full power operation of the equipment. As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. Not all of the types of construction equipment included in Table 11 would be required for construction of the proposed project. Based on the estimated equipment noise levels, the worst-case on-site project construction equipment noise levels at the nearest off-site existing noise-sensitive land use located 50 feet from the project site is expected to range from approximately 76 dB to 85 dB. Thus, it is possible that a portion of the project construction equipment could result in substantial short-term increases over ambient maximum noise levels at the nearest existing off-site receptors.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic²⁵

Traffic data in the form of Sunday AM peak hour movements for Existing and Existing Plus Project conditions in the project area roadway network were obtained from the project transportation impact analysis completed by TJKM Traffic Consultants. Sunday daily traffic (ADT) volumes were conservatively estimated by applying a factor of 10 to Sunday AM peak hour conditions.

²⁵ Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required California Environmental Quality Act (CEQA) review. “[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project.” (*Ballona Wetlands Land Trust v. City of Los Angeles*, (2011) 201 Cal.App.4th 455, 473 (*Ballona*).) The California Supreme Court recently held that “CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project’s future users or residents. What CEQA does mandate... is an analysis of how a project might exacerbate existing environmental hazards.” (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 197 [“identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA’s legislative purpose nor required by the CEQA statutes”], quoting *Ballona*, *supra*, 201 Cal.App.4th at p. 474.) Therefore, for the purposes of the CEQA analysis, the relevant inquiry is not whether the proposed project’s future users will be exposed to preexisting environmental noise-related hazards, but instead whether project-generated noise will exacerbate the pre-existing conditions.

Existing versus Existing Plus Project traffic noise levels on the local roadway network are shown in Table 12. According to Table 12, the proposed project's contribution to traffic noise level increases would be predicted to exceed the FICON cumulative noise increase significance criteria along five roadway segments evaluated in the existing conditions analysis (segments 2, 4, 7, 8 and 15). Specifically, the traffic noise level increases at those segments are calculated to range from 6.2 to 14.0 dB DNL. Upon analysis of the project roadway network, residences were identified along all five of those roadway segments. Importantly, however, the traffic noise modelling estimates are for traffic noise only, and do not also account for ambient noise sources. Baseline ambient conditions are considerably higher than baseline traffic noise levels alone. When the project traffic noise generation is compared to measured ambient day-night average levels within the project area (calculated average of 47 dB DNL, site 2), no project-related traffic noise level increases are calculated to occur along the five identified roadway segments. Rather, project-generated traffic noise levels along the five roadway segments are calculated to be less than the measured ambient noise level of 47 dB DNL at site 2, which would be a more accurate representation of actual project-related noise level increases than the "traffic only" increases.

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing vs. Existing Plus Project Comprehensive Conditions

Segment	Intersection	Direction	Average Measured DNL at Project Area	Predicted Traffic Noise Level at 100 ft, DNL ²			Substantial Increase Relative to FICON?
				E	E+P	Increase	
1	Pine Hollow Court/Pine Hollow Rd	North	47	--	--	--	--
2		South		31.9	45.9	14.0	YES
3		East		--	--	--	--
4		West		31.9	45.9	14.0	YES
5	Mt. Zion Dr/Pine Hollow Rd.	North	47	37.4	40.9	3.5	NO
6		South		38.8	38.0	0.0	NO
7		East		31.9	45.8	13.9	YES
8		West		39.5	46.0	6.5	YES
9	Mt. Zion Dr/Clayton Rd	North	47	--	--	--	--
10		South		36.2	40.4	4.2	NO
11		East		53.9	54.2	0.3	NO
12		West		53.9	54.0	0.1	NO
13	Mitchell Canyon Rd/Pine Hollow Rd	North	47	46.9	48.8	1.9	NO
14		South		46.1	46.3	0.2	NO
15		East		39.9	46.1	6.2	YES
16		West		46.5	46.7	0.2	NO
17	Mitchell Canyon Rd/Clayton Rd	North	47	39.7	40.5	0.8	NO
18		South		47.7	49.3	1.6	NO
19		East		57.9	58.0	0.1	NO
20		West		57.7	58.1	0.4	NO

¹ Average measured DNL at BAC measurement site adjacent to Pine Hollow Court (site 2).

² Blank cell = no traffic data was provided.

Source: FHWA-RD-77-108 with inputs from TJKM; Bollard Acoustical Consultants 2020.

Thus, project-related increases in traffic noise levels would not substantially exceed measured ambient noise conditions in the project area relative to the applicable FICON

criteria. Furthermore, it should be noted that the predicted Existing Plus Project traffic noise levels of approximately 46 dB DNL at a distance of 100 feet along the five roadway segments is well below the Clayton General Plan exterior noise level standard of 60 dB DNL applicable to traffic noise affecting noise-sensitive uses.

It should be noted that the utilization of measured day-night average noise levels at the project site (47 dB DNL, site 2) would be considered a conservative approach in the comparison of project-related increases in ambient noise levels relative to existing no-project conditions given the location of the measurement site (i.e., removed from busy roadways). It is expected that existing ambient conditions along roadway segments located farther from the project site would be higher than those measured within the project area, which would subsequently result in lower project-related traffic noise level increases.

Based on the analysis presented above, off-site traffic noise impacts related to increases in traffic resulting from implementation of the proposed project would not be considered significant.

Off-site Noise Impacts Associated with On-Site Operations

The primary noise sources associated with the proposed project have been identified as church-related on-site traffic circulation, parking lot activities (vehicles arriving and departing, doors opening and closing, etc.), and playground activities. An assessment of each project-related noise source at the nearest existing off-site residential use is discussed below.

In order to calculate project noise generation due to on-site traffic circulation, parking activities, and playground noise relative to the Clayton General Plan day-night average noise level criteria, the hours in which church services would be offered on a given Sunday must be known. According to the weekly operational plan indicated in the project description, the proposed project proposes events Monday through Thursday and Sundays beginning as early as 9:00 A.M. and ending as late as 9:00 P.M. However, the weekly operational plan indicates that the highest attendance for project events on any given day would occur on Sundays. Specifically, the proposed events on Sundays consist of worship services from 9:00 A.M. to 12:00 P.M. and AA meetings from 7:00 P.M. to 8:00 P.M. Day-night average noise level exposure associated with project on-site traffic circulation, parking activities, and playground activities were calculated based on proposed events on Sundays, or worst-case on-site traffic activity expected to occur within a day.

On-Site Traffic Circulation Noise at Existing Off-Site Sensitive Uses

According to the project traffic impact study, the worst-case project trip generation is expected to occur on Sundays. Specifically, the project is expected to generate 401 total Sunday trips, including 145 peak hour trips. Based on the trip information above, and assuming an on-site vehicle speed of less than 25 mph (through the parking areas), project worst-case on-site traffic circulation noise exposure at the nearest existing off-site residential uses was calculated. The results of those calculations are presented in Table 13.

As indicated in Table 13, noise levels generated by project on-site traffic circulation are predicted to satisfy the Clayton General Plan 60 dB DNL exterior noise level standard at the outdoor areas (yards) of the nearest existing off-site residential uses. The Table 13 data

also indicate that on-site traffic circulation noise levels at the building facades of the nearest existing off-site residences are predicted to range from 41 to 44 dB DNL. With windows in the open configuration, standard residential building construction is estimated to provide an exterior to interior noise level reduction of approximately 15 dB. The resulting project on-site traffic circulation noise levels of 26 to 29 dB DNL within the interior areas of the nearest existing off-site residences would satisfy the Clayton General Plan 45 dB DNL interior noise level standard. Finally, the predicted exterior day-night average noise levels shown in Table 13 are below measured ambient day-night average noise levels within the vicinity of the nearest existing residential uses to the south and west.

Table 13 Predicted Worst-Case On-Site Traffic Noise at Nearest Existing Off-Site Sensitive Uses				
Nearest Sensitive Use	Distance from Nearest Drive Aisle (feet)		Predicted Exterior Noise Levels, DNL (dB)	
	Yard	Building Facade	Yard	Building Facade
Residential-South	150	80	40	44
Residential-West	180	125	39	41
<i>Source: Bollard Acoustical Consultants, 2020</i>				

Parking Lot Activity Noise at Existing Off-Site Sensitive Uses

As a means of determining potential noise exposure due to project parking lot activities, a series of individual noise measurements were conducted of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and persons conversing as they entered and exited the vehicles. The results of those measurements revealed that individual parking lot movements generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet. The maximum noise level associated with parking lot activity typically did not exceed 65 dB L_{max} at the same reference distance.

According to the project site plan, the project proposes at total of 156 parking spaces. It was conservatively assumed for the purposes of this analysis that all of the 156 parking stalls could fill or empty during a given Sunday AM peak hour (worst-case). Using the methodology outlined in the Noise Report (see Appendix F), worst-case project parking activity noise exposure at the nearest off-site residential uses was calculated and the results of those calculations are presented in Table 14.

Table 14 Predicted Worst-Case Parking Activity Levels at Nearest Existing Off-Site Sensitive Uses				
Nearest Sensitive Use	Distance from Parking Area (feet)		Predicted Exterior Noise Levels, DNL (dB)	
	Yard	Building Facade	Yard	Building Facade
Residential-South	300	240	37	39
Residential-West	250	200	38	40
<i>Source: Bollard Acoustical Consultants, 2020</i>				

The Table 14 data indicates that noise levels generated by worst-case project parking activities are predicted to satisfy the Clayton General Plan 60 dB DNL exterior noise level standard at the outdoor areas (yards) of the nearest existing off-site residential uses. In addition, project parking area noise levels at the building facades of the nearest existing off-site residences are predicted to range from 39 to 40 dB DNL. With windows in the open configuration, standard residential building construction is estimated to provide an exterior to interior noise level reduction of approximately 15 dB. The resulting worst-case parking area noise levels of 24 to 25 dB DNL within the interior areas of the nearest existing off-site residences would satisfy the Clayton General Plan 45 dB DNL interior noise level standard. Finally, the predicted exterior day-night average noise levels shown in Table 14 are below measured ambient day-night average noise levels within the vicinity of the nearest existing residential uses to the south and west.

Playground Noise at Existing Off-Site Sensitive Uses

According to the project site plan, the project includes a playground near the northeast end of the project property. For the assessment of playground noise impacts, noise level data collected by BAC staff at various outdoor play areas in recent years was utilized. The primary noise source associated with play area use is shouting children. BAC file data indicate that average noise levels of similar sized outdoor play areas is approximately 55 dB Leq at a distance of 50 feet from the focal point of the play area during school recess. Based on the reference noise level presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), playground noise exposure at the nearest off-site residential uses was calculated and the results of those calculations are presented in Table 15.

Table 15 Predicted Worst-Case Playground Noise Levels at Nearest Existing Off-Site Sensitive Uses				
Nearest Sensitive Use	Distance from Playground Area (feet)		Predicted Exterior Noise Levels, DNL (dB)	
	Yard	Building Facade	Yard	Building Facade
Residential-South	500	440	31	32
Residential-West	420	400	33	33
<i>Source: Bollard Acoustical Consultants, 2020</i>				

As indicated in Table 15, noise levels generated by project playground activities are predicted to satisfy the Clayton General Plan 60 dB DNL exterior noise level standard at the outdoor areas (yards) of the nearest existing off-site residential uses. The Table 15 data also indicate that playground noise levels at the building facades of the nearest existing off-site residences are predicted to range from 32 to 33 dB DNL. With windows in the open configuration, standard residential building construction is estimated to provide an exterior to interior noise level reduction of approximately 15 dB. The resulting playground noise levels of 17 to 18 dB DNL within the interior areas of the nearest existing off-site residences would satisfy the Clayton General Plan 45 dB DNL interior noise level standard. Finally, the predicted exterior day-night average noise levels shown in Table 15 are below measured ambient day-night average noise levels within the vicinity of the nearest existing residential uses to the south and west.

Other On-Site Operations Noise Sources at Existing Off-Site Sensitive Uses

It is possible that the proposed church could have amplified music (instruments or choir) or speech emanating from within the church building (sanctuary). In addition, the proposed church building would likely have mechanical equipment (HVAC) for the regulation of indoor environments.

Due to the variability of sound system configurations, it is difficult to quantify amplified music or speech that could occur from within the church building. However, Section 9.30.040(A)(1) of the Clayton Municipal Code prohibits noise from electronic devices and musical instruments from being plainly audible at a distance of 50 feet from any building or structure from which the noise is emanating from, or a distance of 50 feet from the device if outside. Based on the interior to exterior noise level reduction provided by standard building construction (approximately 25 dB with the windows in the closed position and 15 dB with windows in the open position), it is expected that noise associated with amplified music or speech emanating from within the church building sanctuary would not exceed the noise criteria identified in Section 9.30.040(A)(1).

The heating, ventilating, and air-conditioning (HVAC) requirements for the church building will likely be met using packaged roof-mounted equipment. It is the experience of BAC that such roof-top mounted equipment is typically screened from view at nearby ground locations by building parapets, which would provide a degree of noise level attenuation. Clayton Municipal Code Section 9.30.040(C) requires that noise levels associated with mechanical equipment (HVAC) not result in excessive noise at residential uses during the hours of 10:00 p.m. and 7:00 a.m. (nighttime hours). According to the weekly operational plan indicated in the project description, the project does not propose events during nighttime hours. Based on this information, it is reasonably assumed that HVAC equipment associated with the church building would not be in operation during nighttime hours. In addition, based on the large setbacks from the proposed church building to nearby existing residential uses, it is expected that noise associated with daytime operation of the church building HVAC equipment would easily satisfy the Clayton General Plan exterior and interior day-night average (DNL) noise level criteria at the nearest residential uses.

Cumulative (Combined) Noise Levels from On-Site Operations at Existing Off-Site Sensitive Uses

The calculated cumulative (combined) noise levels of project on-site operations at the nearest existing off-site sensitive uses to the south and west are presented in Table 16 and Table 17, respectively. Overall, cumulative on-site operations noise levels are predicted to satisfy the Clayton General Plan 60 dB DNL exterior noise level standard at the outdoor areas (yards) of the nearest existing off-site residential uses to the south and west of the project parcel. In addition, cumulative on-site operations noise levels at the building facades of the nearest existing off-site residences are predicted to range from 44 to 45 dB DNL. With windows in the open configuration, standard residential building construction is estimated to provide an exterior to interior noise level reduction of approximately 15 dB. The resulting cumulative on-site operations noise levels of 29 to 30 dB DNL within the interior areas of the nearest existing off-site residences would satisfy the Clayton General Plan 45 dB DNL interior noise level standard. Finally, the predicted cumulative exterior day-night average noise levels shown in Table 16 and Table 17 are below measured ambient day-night average noise levels within the vicinity of the nearest existing residential

uses to the south and west.

Table 16 Predicted Cumulative Project Noise Levels at Nearest Existing Off-Site Sensitive Uses to the South				
Location	Predicted Project Operations Exterior Noise Levels, DNL (dB)			
	On-site Traffic	Parking	Playground	Cumulative
Yard	40	37	31	42
Building Façade	44	39	32	45
Source: Bollard Acoustical Consultants, 2020				

Table 17 Predicted Cumulative Project Noise Levels at Nearest Existing Off-Site Sensitive Uses to the West				
Location	Predicted Project Operations Exterior Noise Levels, DNL (dB)			
	On-site Traffic	Parking	Playground	Cumulative
Yard	39	38	33	42
Building Façade	41	40	33	44
Source: Bollard Acoustical Consultants, 2020				

Conclusion

Based on the above, traffic generated by the proposed project would not substantially increase traffic noise levels on roadways in the surrounding vicinity, including Pine Hollow Court. In addition, when analyzed as both independent noise sources and cumulatively, noise generated from future on-site traffic circulation, parking areas, playground areas, and other on-site operations would not be considered to have a substantial impact on off-site sensitive receptors in the project vicinity. As such, the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

However, the proposed project could result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance during construction. Therefore, considering the potential for construction activities to result in temporary increases in noise levels in the project area, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure that the above potential impact is reduced to a *less-than-significant* level.

- Mitigation Measure 15.** *To the maximum extent practical, the following measures should be incorporated into the project construction plans:*
- *Pursuant to Section 15.01.101 of the Clayton Municipal Code, all grading and excavation, construction, demolition, renovation, and other works of improvement shall occur only between the*

hours of 7:00 A.M. and 5:00 P.M., Monday through Friday.

- The project shall utilize temporary construction noise control measures, including the use of temporary noise barriers, or other appropriate measures as mitigation for noise generated during construction of projects.*
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.*
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.*
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.*
- Project area and site access road speed limits shall be established and enforced during the construction period.*
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.*

The requirements above shall be included, via notation, on the final grading plan submitted for review and approval by the Community Development Director prior to grading permit issuance.

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?Less-Than-Significant Impact**

Discussion (b.)

Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities (PPV) in

inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 18, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures. As shown in the table, the threshold for architectural damage to residential structures is 0.30 in/sec PPV, and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors, as detailed in 19.

During a site visit on July 15, 2020, vibration levels were below the threshold of perception at the project site. Nonetheless, to quantify existing vibration levels at the project site, BAC conducted short-term (10-minute) vibration measurements at the three locations identified on Figure 14. The results are summarized below in Table 20. The Table 20 data indicates that the measured average vibration levels during the monitoring period were less than 0.001 in/sec Peak Particle PPV.

Table 18		
Guideline Vibration Damage Potential Threshold Criteria		
Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile, historic buildings, ruins, ancient monuments	0.12	0.08
Fragile Buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. PPV = Peak Particle Velocity <i>Source: Caltrans, Transportation and Construction Vibration Guidance Manual (2013).</i>		

Table 19 Guideline Vibration Annoyance Potential Criteria		
Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.40	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40
<i>Source: Caltrans, Transportation and Construction Vibration Guidance Manual (2013).</i>		

Table 20 Summary of Ambient Vibration Level Survey Results		
Site Description	Time	Average Measured Vibration Level, PPV (in./sec)
Site 1: North end of project site	11:37 AM	<0.001
Site 2: Northwest end of project site	11:18 AM	<0.001
Site 3: Southwest end of project property	11:54 AM	<0.001
<i>Source: Bollard Acoustical Consultants, 2020.</i>		

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any uses or operations that would generate substantial groundborne vibration. Although noise and vibration associated with construction of the project would add to the noise and vibration environment in the immediate project vicinity, construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Because the proposed project would not cause continuous, long-term vibrations, the project would not be expected to result in extended annoyance to the nearby sensitive receptors.

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest existing off-site sensitive uses are the residential structures to the west and southwest of the project site, located at least 50 feet from construction activities which would occur within the project parcel. Table 21 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. The Table 21 data also include predicted equipment vibration levels at the nearest existing off-site residence to the project site located approximately 50 feet away.

As indicated in Table 21, vibration levels generated from on-site construction activities at the nearest existing residences are predicted to be well below the strictest Caltrans thresholds for damage to residential structures of 0.30 in/sec PPV. Further, the predicted vibration levels are also below the Caltrans thresholds for annoyance presented in 19. Therefore, on-site construction within the project parcel would not result in excessive groundborne vibration levels at nearby existing off-site residential uses.

<p align="center">Table 21 Vibration Levels for Various Construction Equipment</p>		
Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Hoe Ram	0.089	0.032
Large Bulldozer	0.089	0.032
Caisson Drilling	0.089	0.032
Loaded Trucks	0.076	0.027
Small Bulldozer	0.003	0.011
Jackhammer	0.035	0.012
<p><i>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018</i></p>		

Conclusion

The nearest existing building is located approximately 50 feet west of the project site boundary, across Pine Hollow Court. At a distance of 50 feet, the PPV from even the most vibration-intensive equipment would be substantially diminished, and below the 0.2 PPV threshold for building damage. Furthermore, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per the City of Clayton Municipal Code Section 15.01.101, and would likely only occur over portions of the improvement area at a time. Therefore, persons are not predicted to be exposed to excessive vibration or groundborne noise levels associated with the proposed project, and a *less-than-significant* impact would occur.

- c. **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 expose people residing or working in the project area to excessive noise levels? No Impact**

Discussion (c.)

The nearest airport to the proposed project site is the Buchanan Field Airport, located approximately 7.0 miles to the west of the site. Aircraft-related noise, if audible at the project site, would be extremely minimal. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic and *no impact* would occur.

14. POPULATION AND HOUSING.

ISSUES	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X

- a. **Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?Less-Than-Significant Impact**

Discussion (a.)

Prior to COVID-19, Clayton Community Church held regular services at Diablo View Middle School on Clayton Road. With development of the proposed church facilities at the project site, church services would shift to the new facilities. The proposed project would only employ nine people, many of whom would be relocated from their positions at the existing Town Center church office location. In addition, the proposed church would not induce substantial growth due to the operation of new church services, as existing church services at Diablo View Elementary School (pre-COVID-19) would cease upon development of the proposed project. Thus, while the project would include construction of a new church building, the project would not result in growth associated with proposing a new business. The project would not include construction of new homes. Therefore, the proposed project would not induce substantial unplanned population growth either directly or indirectly, and a *less-than-significant* impact would occur.

- b. **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? No Impact**

Discussion (b.)

The site includes an occupied single-family residence in the southwestern portion of the project site, as well as storage structures associated with the existing residence in the northwestern portion of the site. The proposed project would retain the existing single-family residence located within the southwestern portion of the project site. Thus, the proposed project would not displace substantial numbers of housing or people, necessitating the construction of replacement housing elsewhere, and *no impact* would occur.

15. PUBLIC SERVICES.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

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

Discussion (a. and b.)

The CCCFPD provides fire prevention, suppression, and emergency medical response for advanced and basic life support to nine cities, including Clayton, and much of the unincorporated territory in the central and western portions of Contra Costa County. The nearest fire station is located at 6500 Center Street, approximately 0.4-mile east of the project site. Police protection services would be provided for the project by Clayton Police Department. The Clayton Police Department is headquartered at Clayton City Hall, approximately 0.15-mile from the project site.

The threshold for the impact, as identified in Appendix G of the CEQA Guidelines, is related to whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered fire or police facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or performance objectives. In the court case *City of Hayward v. Board of Trustees of the California State University*, the First District Court of Appeal affirmed that the focus of CEQA analysis should be limited to physical environmental impacts related to a project.²⁶ The court held that, “The need for additional fire protection services is not an *environmental* impact that CEQA requires a Project Proponent to mitigate.”

²⁶ First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4th 833.

The proposed church would not result in new population growth and, thus, would not substantially increase demand for fire and police protection services such that construction of new facilities or expansion of any existing facilities would be required. Furthermore, pursuant to Chapter 3.18 of the City of Clayton Municipal Code, the proposed project would be subject to payment of the City's Fire Development Protection impact fee, which is used to fund new and expanded fire protection facilities.

Because the project would not necessitate new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire or police protection, a *less-than-significant* impact would result.

- c. **Schools?.....Less-Than-Significant Impact**
- d. **Parks?.....Less-Than-Significant Impact**
- e. **Other public facilities?Less-Than-Significant Impact**

Discussion (c.)

The City of Clayton is located within the Mt. Diablo Unified School District (MDUSD). Mt. Diablo Elementary and Diablo View Middle Schools serve the City of Clayton.

The proposed project would not result in population growth and would not include construction of housing. Thus, the project would not increase demands for schools, parks, or other public facilities. Furthermore, the proposed project would include new on-site playground facilities for churchgoers as a recreational amenity. Therefore, the project would not create a need for new or physically altered school facilities, park facilities, or other government facilities, and a *less-than-significant* impact would occur.

16. RECREATION.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X	<input 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"/>	X	<input 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?Less-Than-Significant Impact**
- 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?Less-Than-Significant Impact**

Discussion (a. and b.)

The proposed project would not result in population growth and would not include construction of housing. Thus, the project would not increase demands for existing park facilities in the project region, such as Clayton Community Park and Mt. Diablo State Park. Furthermore, the project would include a new on-site playground as an amenity for the proposed church.

Based on the above, the proposed project would result in a *less-than-significant* impact related to increasing the use of existing parks or recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, or requiring the construction or expansion of recreational facilities.

17. TRANSPORTATION.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X	<input type="checkbox"/>
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
e.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?Less-Than-Significant Impact**
- b. **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?.....Less-Than-Significant Impact**

Discussion (a. and b.)

The following discussion is based primarily on a Traffic Impact Study Analysis (TIA) prepared by TJKM Traffic Consultants (see Appendix G).²⁷

Upon development of the proposed project, primary access to the project site would be provided by Pine Hollow Court, a short north-south local street fronting the project site. On-street parking along Pine Hollow Court is generally prohibited, and the roadway narrows to a single-lane approximately 150 feet south of the east-west street Pine Hollow Road. The intersection of Pine Hollow Road and Pine Hollow Court to the north of the project site is uncontrolled, with Pine Hollow Court acting as an extension of Pine Hollow Road. Other surrounding roadways in the immediate vicinity of the project site include Clayton Road, Mitchell Canyon Road, Mt. Zion Drive, and Tiffin Road; the surrounding roadways vary between local, two-lane collector, and four-lane divided arterial roads.

²⁷ TJKM Traffic Consultants. *Draft Traffic Impact Study Report, Clayton Community Church*. February 2021.

To determine project effects on existing roadway and intersection operations, the existing operations of five study intersections were evaluated in October 2020. The intersections were analyzed according to Level of Service (LOS), a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The operational LOS determinations are given letter designations from A through F, with A representing free-flow operating conditions and F representing severely congested flow with high delays. Typically, LOS C is considered an ideal condition, as it represents stable flow and efficient use of the transportation facility. Although intersection LOS can no longer be used for identifying significant transportation impacts under CEQA (see CEQA Guidelines Section 15064.3), as of July 1, 2020, LOS is still used to determine conformity with an adopted general plan or congestion management plan. Because the Circulation Element of Clayton's General Plan includes policies based on LOS, a discussion of the proposed project's potential impacts on LOS is included below.

The five study intersections analyzed during the AM peak hour for a typical Sunday, as part of the TIA, included the following intersections:

1. Pine Hollow Court and Pine Hollow Road;
2. Mt. Zion Drive/Tiffin Drive and Pine Hollow Road;
3. Mt. Zion Drive and Clayton Road;
4. Mitchell Canyon Road and Pine Hollow Road; and,
5. Mitchell Canyon Road and Clayton Road

The peak period observed on Sunday was between 8:30AM and 11:00AM, when church-related traffic is typically highest. Due to changes in traffic resulting from COVID-19, observed traffic volumes were increased by 20 percent to estimate non-pandemic conditions. TJKM determined that, under existing conditions, all of the study intersections operate at an acceptable LOS A or B during the Sunday peak hour.

TJKM developed project trip generation for the proposed project based on published trip generation rates from the Institute of Traffic Engineer's (ITE) *Trip Generation Handbook (10th Edition)*. The ITE handbook was used to estimate weekday AM, PM, and daily trip generation forecasts for the proposed project. As shown in Table 22, implementation of the proposed project would be expected to result in 101 daily vehicle trips on the average weekday and 87 daily vehicle trips on Saturdays. A total of 401 daily trips, including approximately 145 peak hour trips, would occur on Sundays. TJKM compared the ITE trip generation estimate to a separate trip generation estimate based specifically on the church's proposed operational plan. Compared to the proposed operations schedule, the ITE average rates produce a higher total number of trips for Sundays and a similar number of Sunday peak hour trips. Thus, the ITE trip generation estimate was used for this analysis.

Table 22											
Project Trip Generation – ITE Trip Generation Handbook (10th Edition)											
Land Use	Weekday Daily		Saturday Daily		Sunday Daily		Sunday Peak Hour				
	Rate	Trips	Rate	Trips	Rate	Trips	Rate	In: Out	In	Out	Total
Church	6.95	101	5.99	87	27.63	401	9.99	48:52	70	75	145
New Trips		101		87		401			70	75	145
<i>Source: TJKM Traffic Consultants, 2020.</i>											

TJKM performed a project trip distribution and assignment to analyze the impact of estimated vehicle trips generated by the proposed project on existing roadways and intersections. Trip distribution is a process that determines in what proportion vehicles would be expected to travel between the project site and various destinations outside the project study area. Assignment determines the various routes that vehicles would take from the project site to each destination using the estimated trip distribution. For the purposes of trip distribution and assignment, new trips from Table 22 were used and distributed as follows:

1. 50 percent to/from Clayton Road to the west;
2. 35 percent to/from Clayton Road to the east;
3. Five percent to/from Mitchell Canyon Road to the north;
4. Five percent to/from Mitchell Canyon Road to the south; and
5. Five percent to/from Pine Hollow Drive to the west.

Table 23 presents the results of the existing roadway and intersection operations plus project conditions. Based on the project trip distribution and assignments, all of the study intersections would continue to operate at an acceptable LOS A or B during the Sunday peak hour with development of the proposed project.

Because the proposed project would be located next to Mt. Diablo Elementary School, TJKM also reviewed the daily bell schedule and drop-off/pickup times for the existing school to identify any overlapping peak times when traffic for both uses might interact. While the majority of school traffic occurs on weekdays before and after school, the majority of church-related traffic would occur on Sunday mornings, with a smaller amount of traffic on weekdays. As such, the interaction of weekday traffic from each use is of greatest concern.

Table 23						
Intersection Level of Service Analysis – Existing Plus Project Conditions						
Study Intersections	Control	Existing Conditions		Existing Plus Project Conditions		Change in Delay
		Delay¹	LOS	Delay¹	LOS	
Pine Hollow Court & Pine Hollow Road	Uncontrolled	0.0	A	0.0	A	0.0
Mt. Zion Drive/Tiffin Dr. & Pine Hollow Road	All-Way Stop	7.1	A	7.8	A	0.7
Mt. Zion Drive & Clayton Road	Two-Way Stop	9.9	A	10.2	B	0.3
Mitchell Canyon Road & Pine Hollow Road	All-Way Stop	8.0	A	8.9	A	0.9
Mitchell Canyon Road & Clayton Road	Signal	15.3	B	15.6	B	0.3
Note: ¹ Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.						
<i>Source: TJKM Traffic Consultants, 2020.</i>						

The Mt. Diablo Elementary School start time is 7:40 AM, with students permitted to arrive no earlier than 7:30 AM. The end time is 2:15 PM on Mondays, Tuesdays, Thursdays, and Fridays. Wednesdays feature a modified bell schedule, with early release at 12:25 PM for grades 1-5. TK and Kindergarten, which are divided into early and late sessions, would include late arrivals at 9:45 AM (9:30 AM on Wednesdays) and early pick-ups at 11:15 AM (12:30 PM on Wednesdays). Based on the bell schedule and posted no-parking hours for the Pine Hollow Road loading zone, it is expected that the majority of drop-off traffic would be confined to approximately 7:30 to 8:15 AM Monday through Friday, and the majority of pick-up traffic would be confined to approximately 2:15 to 3:00 PM most days and 12:05 PM to 12:50 PM on Wednesdays. Based on the ITE trip generation rate for Elementary School in the school PM peak hour, which is 0.34 trips per student, and an estimated enrollment of 800 students, the school is expected to generate approximately 272 total trips during the afternoon pick-up period. The school also occasionally hosts evening events.

The proposed project plans to host weekday morning activities starting at 9:00 AM on Mondays, Tuesdays, and Wednesdays. On Wednesdays, the proposed project would also provide an after-school program for grades 2-5 from 12:00 PM to 2:30 PM, coinciding with the 12:25 PM early release time for these grades at the school. Currently, the “Crosswalk” after school program on Wednesday is held at the church offices on Main Street. All other weekday activities at the church would begin in the evening at 7:00 PM.

Based on the existing school bell schedule and planned church operations schedule, it is expected that traffic overlap would generally be minimal. The primary exception would be Wednesdays during the school pick-up time, which coincides with parents dropping off students for the after-school program. It is expected that any Mt. Diablo Elementary School students attending the program would walk. The 40-student program could add approximately 27 vehicles, or 54 trips, to the Wednesday pick-up period if all students were driven and none came on foot from the school. If approximately half of students attending the Crosswalk program were driven from other schools, generating 27 vehicle trips, this would constitute an increase of 10 percent compared to the estimated baseline after school pick-up traffic.

Because the school has been closed due to COVID-19 conditions, TJKM was not able to observe traffic conditions during full school operations. It is likely, however, that congestion does exist near the school during before- and after-school periods. TJKM concluded that, because of limited overlap between school and church activities, degradation of school-time congestion would not occur on most weekdays. While the Crosswalk program-related increase in after-school traffic on Wednesdays would be noticeable, the added vehicles would use the through lanes on Pine Hollow Road and would not need to enter the school’s back parking lot or loading zone on Pine Hollow Road, and the vehicles could avoid using Mt. Zion Drive entirely. As such, the added traffic is not expected to substantially exacerbate any existing operational problems during this period.

Based on the above, the proposed project is not anticipated to cause substantial delays on surrounding roadways and intersections beyond existing conditions. Therefore, the proposed project would not conflict with programs, plans, ordinances, or policies addressing roadway facilities, or an applicable congestion management program,

including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

The TIA also analyzed potential impacts to pedestrian, bicycle, and transit facilities in the project vicinity. The proposed project would connect to existing pedestrian facilities and would extend the existing sidewalk on Pine Hollow Court to cover the entire project frontage. Although existing pedestrian facilities near the proposed project include discontinuous sidewalks, the proposed project is not expected to create any disruptions or inconsistencies with existing pedestrian facilities or plans. Pedestrian circulation on-site would primarily be through five-foot walkways surrounding the proposed buildings, and pedestrian crossings on the main drive aisle connecting the project frontage to the building entrances, as well as pedestrian walkways along the drive aisle fronting the main entrance. The proposed project would also have adequate bicycle access to the project site from the surrounding area and is not expected to create any inconsistencies with bicycle facilities or plans. Lastly, pedestrians and bicyclists could access the closest transit stops on Clayton Road through a continuous path of sidewalks and crosswalks. The transit service within the immediate project vicinity, County Connection, provides two bus routes which travel between the Concord BART station and Downtown Clayton (Bus Routes 10 and 310). County Connection currently operates within capacity, and additional trips generated by the proposed project could be accommodated by existing bus services.

Based on the findings of the TIA, the proposed project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Furthermore, the proposed project would not be expected to substantially impact existing pedestrian, bicyclist, or transit facilities; therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Thus, a *less-than-significant* impact would occur.

- c. **Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (c)?.....Less-than-Significant Impact**

Discussion (c.)

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts.

According to Section 15064.3(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, LOS methodology does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving.

The proposed project would generate between 105 and 142 vehicle trips per day, depending on the trip generation methodology used. Using both sets of daily trips and an allowable VMT of 836²⁸, this allows average one-way trip lengths of 7.96 miles (836 VMT/105 vehicle trips) or 5.89 miles (836 VMT/142 vehicle trips). According to TJKM, one way-trip lengths of six miles or less would be a realistic assumption for the proposed project. The most distant Clayton addresses are approximately 3.5 miles from the project site, with most locations within approximately two to three miles of the church. The downtown Concord BART station is located approximately six miles from the project site, and all areas in Clayton and large portions of Concord and Walnut Creek lie within a six-mile driving radius. An even larger number of homes are located within the more realistic 7.96-mile range. Therefore, it is likely that staff and members of the proposed church would be located, on average, within six miles of the new church location. However, it should be noted that this methodology treats all trips and VMT as new, whereas many of the staff and church attendees would have attended Clayton Community Church at various locations within the community. Furthermore, operations of the existing community church (pre-COVID-19) would cease upon development of the proposed project, thus relocating services from the Diablo View Middle School area to a more central location within the City of Clayton. The replacement of vehicle trips, rather than the introduction of new vehicle trips, would effectively reduce the impact of VMT generated by the proposed project.

In June 2020, the Contra Costa County Board of Supervisors adopted Transportation Analysis Guidelines inclusive of technical guidance regarding assessment of VMT, thresholds of significance, and mitigation measures. The CCTA guidelines include a screening process, consistent with OPR's Technical Advisory on VMT, that describes five scenarios in which a project would be exempted from a VMT analysis requirement: 1) projects exempt from CEQA analysis; 2) small projects; 3) locally serving projects; 4) projects in transit priority areas; and 5) projects in low VMT areas. Based on the average number of daily trips generated by the proposed project and the expected trip lengths, TJKM determined that the proposed project's location and travel characteristics allow it to be classified as both a small project and a locally serving project under the proposed CCTA screening criteria, thus resulting in a less-than-significant VMT impact. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and a *less-than-significant* impact would occur.

- d. **Would the project result in inadequate emergency access?.....Less-Than-Significant Impact**
- e. **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?Less-Than-Significant Impact**

²⁸ According to "VMT Analysis Methodology for Land Use Projects in Contra Costa," by Fehr & Peers (July 2020), this threshold ties directly to the Office of Planning and Research (OPR) Technical Advisory which notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000-sf, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area (CEQA Guidelines §15301, subd. (e)(2).) Using statewide average data from the California Statewide Household Travel Survey (CHTS), the amount of daily VMT associated with 10,000-sf of non-residential space is 836 VMT.

Discussion (d. and e.)

Site access for vehicles and bicycles would be provided from Pine Hollow Court through one driveway along the western border of the project site. The two existing driveways would be eliminated. The proposed project would also include the widening of Pine Hollow Court to include two lanes and a new sidewalk which would be constructed along the project frontage. The new sidewalk would connect to a continuous pedestrian path which would extend from the project frontage to the building entrances.

The proposed 25-foot wide drive aisles are two-way with right-angle parking available on one or both sides. The small parking area on the southern end of the site near the existing single-family residence would include space for vehicles to turn around. The drive aisle north of the proposed building would also provide additional space for vehicles to turn around or maneuver in and out of parking spaces. Trucks and emergency vehicles would be able to enter the site, access both buildings, and turn around within the parking area south of the church building. While fire trucks accessing the north side of the building would not be able to turn around in the northern portion of the site, the trucks would be able to back out of the site.

Based on the above, the proposed project would not substantially increase hazards due to design features or incompatible uses, and emergency access to the site would be adequate. Therefore, the project would result in a *less-than-significant* impact.

18. TRIBAL CULTURAL RESOURCES

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:</i>					
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).	<input type="checkbox"/>	X	<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"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

- 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)?**.....
..... Less-Than-Significant Impact with Mitigation Incorporated

- 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?**
..... Less-Than-Significant Impact with Mitigation Incorporated

Discussion (a. and b.)

Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. In compliance with Assembly Bill 52 (AB 52) consultation requirements, notification letters were distributed through email to those tribes identified by the NAHC. Prior to formal AB 52 consultation, the archaeological consultant for the project sent notification letters to tribes identified by the NAHC to solicit information/interest regarding the project site. A response was received by the Wilton Rancheria and the Guidiville Rancheria indicating that the tribes did not have concerns regarding the proposed project. The Guidiville Rancheria requested a copy of the

Archaeological Survey Report prepared for the proposed project. Two additional responses from Andrew Galvan of the Costanoan tribe and Corrina Gould of the Confederated Villages of Lisjan requested the information provided by the NAHC. The NAHC results were distributed to the tribes upon request; however, further communication from the Native American tribes which would indicate the potential presence of tribal cultural resources located at the project site has not been received to date. As discussed above, formal AB 52 consultation notification letters have also been sent out by the City of Clayton.

Alta Archaeological Consulting requested a Sacred Lands File search be performed by the NAHC for the immediate project area as part of the Archaeological Survey Report.²⁹ The Sacred Lands File search returned positive results for the presence of Native American cultural resources in the project area. Additionally, a California Historical Resources Information System (CHRIS) search performed by the NWIC found that four cultural resources exist within a 0.25-mile of the project site; one of the sites, identified as P-07-000105, is a very large multi-component site consisting of a large habitation site, and is composed of midden, burials, hearths, and a complex of artifacts that indicate habitation to approximately 2,800 B.P. Given the positive results of the NAHC Sacred Lands File search and the findings of the CHRIS search, the possibility exists that development of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a *potentially significant* impact to tribal cultural resources could occur.

Mitigation Measure(s)

The following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Mitigation Measure 16. *Implement Mitigation Measure 9 and Mitigation Measure 10, within Section 5, Cultural Resources, of this IS/MND.*

²⁹ Alta Archaeological Consulting. *Archaeological Survey Report: Clayton Community Church Project, Clayton, Contra Costa County, California*. December 12, 2020.

19. UTILITIES AND SERVICE SYSTEMS.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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"/>	X	<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"/>	X	<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"/>	X	<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"/>	X	<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"/>	X	<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?.....Less-Than-Significant Impact**

Discussion (a.)

Brief discussions of water, sewer service, electrical, natural gas, and telecommunications that would serve the proposed project are included below.

Water

The proposed project would include a new potable water connection to an existing six-inch water main within Pine Hollow Court (see Figure 9). A water line to be used for irrigation services would also connect to the existing water main within Pine Hollow Court. In addition to the aforementioned domestic and irrigation water lines, a new six-inch water line from the existing water main within Pine Hollow Court would connect to the building for fire emergency purposes. Potable water service for the project would be provided by the CCWD upon completion of financial arrangements and installation of all necessary water facilities, in accordance with current CCWD and CCCFPD standards. Thus, the proposed project would not require the construction of new off-site water conveyance facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Sewer

As part of the proposed project, a new sanitary sewer line would be routed from the proposed building to a new lift station in the northwestern portion of the site. From the lift station, the sanitary sewer line would connect to existing sewer infrastructure within Pine Hollow Court. Given that the proposed project is consistent with the site's current General Plan land use and zoning designations, the proposed project would not result in substantially increased wastewater generation relative to what has been anticipated by the City and accounted for in local planning efforts. As such, the existing sewer infrastructure in the project vicinity would be adequate to serve the proposed project, and construction of substantial new or expanded off-site sewer infrastructure would not be required.

Stormwater Systems

Issues related to stormwater infrastructure are discussed in Section 10, Hydrology and Water Quality, of this IS/MND. As noted therein, the proposed project would not connect to City stormwater drainage infrastructure. The project site would include eight DMA's which would drain to seven different bioretention areas within the site. The landscaped portions of the project site would be self-treating areas and, thus, would not connect to the bioretention basins. The bioretention areas would provide for treatment by filtering stormwater through layers of vegetated soils and gravel. Treated stormwater would be captured by perforated underdrains and routed to underground 60-inch drainage pipes within the proposed parking areas, which would provide for on-site detention. After on-site treatment and detention in accordance with C.3 Standards, all stormwater runoff generated from impervious surfaces on the project site would be routed to two outfalls along the east slope of the project site, where treated stormwater would sheet flow towards Mitchell Creek as it does today. The project would not increase the rate or amount of runoff leaving the site relative to existing conditions. Thus, the proposed project would not require the construction of new off-site stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Other Utilities

Electricity, natural gas, and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. PG&E would provide electricity and natural gas services to the project site. The proposed project would not require major upgrades to, or extension of, existing infrastructure. Thus, impacts to electricity, natural gas, and telecommunications infrastructure would be less than significant.

Conclusion

Based on the above, the project would result in a ***less-than-significant*** impact related to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

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?.....Less-Than-Significant Impact**

Discussion (b.)

According to the CCWD's 2015 Urban Water Management Plan, the CCWD does not anticipate any supply deficits in normal years or single-dry years.³⁰ In future years, multiple dry-year conditions may result in supply shortfalls of up to approximately 30,000 acre-feet per year (af/yr), which equates to approximately 15 percent of the water demand. The CCWD's water supply reliability goal is to meet 100 percent of demand in normal years and a minimum of 85 percent of demand during a drought. Any potential supply shortfalls experienced during dry year conditions would be met through combination of a short-term conservation program or short-term water purchases. CCWD's currently available and planned supplies would be sufficient to meet the District's goal and estimated water demands during average, single-dry, and multiple-dry year conditions during the next 25 years. Given that the CCWD UWMP takes into account future buildout of the service area, and the proposed project is consistent with the site's General Plan land use designation, water use associated with development of the proposed project site would not substantially exceed the level that has been generally anticipated by the CCWD and the City. Furthermore, the project design would be required to adhere to CBSC requirements for water conservation, such as low-flow plumbing fixtures, as well as the City's water-conserving guidelines for landscaping, as set forth in Chapter 17.80 of the Municipal Code.

Based on the above, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Thus, a *less-than-significant* impact would occur.

- 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?.....Less-Than-Significant Impact**

Discussion (c.)

The wastewater collection system within the City of Clayton is owned by Clayton and maintained by the City of Concord. Concord has a contract with Central Contra Costa Sanitary District (CCCSD) to treat wastewater. The CCCSD treatment plant currently treats an average of 45 million gallons per day (MGD). The CCCSD treatment plant's permitted physical capacity is 54 MGD. According to the Growth Management Element of the City of Clayton's General Plan, the plant's maximum capacity of 54 MGD is projected to accommodate buildout until the year 2040.^{31, 32} Given that the proposed project is consistent with the site's current General Plan land use and zoning designations,

³⁰ Contra Costa Water District. *2015 Urban Water Management Plan for the Contra Costa Water District*. June 2016.

³¹ City of Clayton. *City of Clayton General Plan Section XI: Growth Management Element* [page 16]. Available at: <https://ci.clayton.ca.us/community-development/planning/long-range-planning/>. Accessed June 2020.

³² Email communication with Russell B. Leavitt. Engineering Assistant III. Central Contra Costa Sanitary District. May 04, 2016.

wastewater generation associated with buildout of the project site has been generally anticipated by the City and accounted for in the CCCSD's planning efforts.

Given the CCCSD treatment plant's current surplus capacity, and the fact that the project would result in a minimal increase in the demand for wastewater treatment capacity, adequate capacity exists to accommodate the slight increase in sewer demand that would be created by the proposed church. Therefore, the proposed project would not exceed treatment requirements of the RWQCB, and the CCCSD would be capable of serving the project's projected demand in addition to the CCCSD's existing commitments. Thus, a *less-than-significant* impact would occur.

- d. **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?Less-Than-Significant Impact**
- e. **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?Less-Than-Significant Impact**

Discussion (d. and e.)

Solid waste from the City of Clayton is disposed of at Keller Canyon County landfill. Keller Canyon Landfill covers 2,600 acres of land; 244 acres are permitted for disposal. The site currently handles 2,500 tons of waste per day, although the permit for the site allows up to 3,500 tons of waste per day to be managed at the facility. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Keller Canyon Landfill has a remaining capacity of 63,408,410 cubic yards out of a total permitted capacity of 75,018,280 or 85 percent remaining capacity.³³ As such, adequate capacity exists to accommodate the relatively modest amount of waste that would be generated by the proposed church.

It should be noted that the City is required by AB 939 to ensure that it achieves and maintains the diversion and recycling mandates of the State. Construction of the project would comply with the construction and demolition debris recycling requirements of Chapter 15.80 of the City's Municipal Code, which requires that a waste management plan be prepared for both demolition and new construction. The waste management plan must address all materials that would not be acceptable for disposal in the sanitary landfill. Therefore, as the project is required to comply with the City's Municipal Code, and sufficient capacity exists at the Keller Canyon Landfill, implementation of the proposed project would result in a *less-than-significant* impact related to solid waste services.

³³ California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Keller Canyon Landfill (07-AA-0032)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228>. Accessed October 2020.

20. WILDFIRE.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>					
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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"/>	X	<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"/>	X	<input type="checkbox"/>
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?Less-Than-Significant Impact
- 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?.....Less-Than-Significant Impact
- 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?.....Less-Than-Significant Impact
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?Less-Than-Significant Impact

Discussion (a., b., c., and d.)

According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within or near a state responsibility area or lands classified as a Very High Fire Hazard Severity Zone (VHFHSZ).³⁴ The nearest VHFHSZ is approximately 0.25-mile south of the project site. However, according to the Diablo Fire Safe Council, the City of

³⁴ California Department of Forestry and Fire Protection. *Contra Costa County, Very High Fire Hazard Severity Zones in LRA*. January 7, 2009.

Clayton is located within a Wildfire Urban Interface (WUI). The WUI is defined as an area in which wildlands and communities are sufficiently close to each other to present a credible risk of fire spreading from one to another.³⁵

Fire protection services for the Clayton area are provided by the CCCFPD, with the nearest station to the site located on Center Street, approximately 0.35-mile east of the project site. As such, the CCCFPD would be capable of quickly reaching the project site in the event of a wildfire. The potential for wildfire to reach the project site is relatively limited due to surrounding development to the north, east, south, and west, which would act as a fire break in the event of a wildfire.

The proposed church facilities would be designed in compliance with all applicable State and local standards and recommendations for new development, such as the CCCFPD's requirements for providing a water supply system for fire protection, and providing adequate emergency and fire access. The project would be required to provide "defensible space" around on-site structures consistent with CCCFPD guidelines. Adequate provision of defensible space is enforced by the CCCFPD Exterior Hazard Control Division. In addition, Chapter 7A of the CBC includes specific requirements related to the design and construction of new buildings located within a WUI. For example, Chapter 7A specifies that a fire sprinkler system is required to be installed in order to protect against fire hazards in a WUI. In compliance with the CBSC (specifically Section 903.2.1.3, Group A-3), the proposed church would include automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to CFC requirements. Such features would help to address fire situations within the site, which would reduce the demand for fire protection services from the project site. It is also noted that the proposed project does not include installation of any above-ground powerlines that could exacerbate wildfire risk if placed in close proximity to vegetation.

Contra Costa County does not have an adopted Emergency Response Plan; rather, the County has an adopted Emergency Operations Plan (2015) and Local Hazard Mitigation Plan (2011) with an update in process. These plans are broad in their content and recommended actions, and there is nothing specific within the plans suggesting that the project could pose a substantial impairment. The draft final Local Hazard Mitigation Plan Update (Vol. 1 2018) confirms that the City of Clayton does not have any population or structures within a VHFHSZ.³⁶

Based on the above, the proposed project would not be subject to substantial risks related to wildfires, and a *less-than-significant* impact would occur.

³⁵ Diablo Fire Safe Council. *Clayton Morgan Territory Wildfire Action Plan: Public Review Draft*. January 25, 2016.

³⁶ See <https://www.contracosta.ca.gov/DocumentCenter/View/48893/Contra-Costa-County-Draft-Local-Hazard-Mitigation-Plan-Volume-1-January-31-2018?bidId=>. Accessed February 3, 2021.

21. MANDATORY FINDINGS OF SIGNIFICANCE.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	X	<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?Less-Than-Significant Impact**

Discussion (a.)

As discussed in Section 4, Biological Resources, of this IS/MND, while a limited potential exists for crotch and western bumble bee, nesting raptors and songbirds, birds protected by the MBTA, and roosting bats to occur on-site, implementation of Mitigation Measure 2 through Mitigation Measure 6 would ensure that any impacts related to special-status species would be reduced to a less-than-significant level.

The project site contains an existing single-family residence and a barn structure. The residence would be preserved on-site to be used by the church's pastor during project operations. While the barn structure would be demolished, the barn structure is not considered a historical or prehistorical structure. Therefore, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measure 9 and Mitigation Measure 10 would ensure that in the event that prehistoric or historic resources are

discovered within the project site, such resources would be protected in compliance with the requirements of CEQA and other State standards.

Considering the above, the proposed project would not degrade the quality of the environment, substantially reduce or impact the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, a *less-than-significant* impact would occur.

- 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)?Less-Than-Significant Impact**

Discussion (b.)

The proposed project, in conjunction with other development within the City of Clayton, could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code standards, and other applicable local and State regulations.

All cumulative impacts related to air quality, noise, and transportation are either less than significant after mitigation or less than significant and do not require mitigation. Given the scope of the project, any incremental effects would not be considerable relative to the effects of all past, current, and probable future projects. In addition, the proposed project is consistent with the zoning and land use designations provided for the site in the General Plan; therefore, the proposed project would not result in greater impacts beyond that which has been anticipated in the City's planning documents. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts, and the project's incremental contribution to cumulative impacts would be *less than significant*.

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

Discussion (c.)

As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in Section 7, Geology and Soils, Section 9, Hazards and Hazardous Materials, and Section 13, Noise,

of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to hazardous materials and noise, after mitigation. Therefore, the proposed project would result in a *less-than-significant* impact.

VIII. STAFF AND SOURCES

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