Trinitas Mixed-Use Project

Draft

Environmental Impact Report

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Environmental Impact Report
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1. Introduction

Pursuant to California Public Resources Code §21082.1, the City of Napa (City) has independently reviewed and analyzed information contained in this Draft Environmental Impact Report (DEIR) prior to its distribution. Conclusions and discussions contained herein reflect the independent judgment of the City as to those issues known at the time of publication.

1.1 Purpose of the DEIR

This DEIR has been prepared as a Project EIR on behalf of the City of Napa to evaluate the environmental consequences, the mitigation measures, and the Project alternatives associated with the proposed Trinitas Mixed-Use development. The proposed Project requires the following discretionary actions:

City of Napa

- Planned Development Overlay
- Conditional Use Permit for a hotel in IP-A
- Conditional Use Permit for a winery in IP-B
- Major Design Review

Airport Land Use Commission

- Consistency Determination

It is intended that this DEIR be considered in the decision-making process for this Project, along with other information presented on the Project such as at public proceedings on the Project. Pursuant to California Environmental Quality Act (CEQA) Guidelines §15200, this DEIR will serve the following purposes of review.

1. Sharing expertise,
2. Disclosing agency analyses,
3. Checking for accuracy,
4. Detecting omissions,
5. Discovering public concerns, and
1.2 Statutory Authority

This DEIR has been prepared in accordance with the CEQA statutes, as amended (Public Resources Code §21000, et seq.). In accordance with CEQA Guidelines §15146, the degree of specificity required in an EIR must correspond to the actions sought to be covered by the EIR. In accordance with CEQA Guidelines §15050, the City of Napa is the Lead Agency for this DEIR.

The DEIR identifies and discusses every significant impact, mitigation measure, and Project alternative with relationship to this Project, using best efforts to forecast, while incorporating requests by the public and responsible agencies for consideration of specific mitigation measures and/or alternatives.

The mitigation measures included in this DEIR are designed to avoid or reduce the environmental impacts described herein. Mitigation measures are structured in accordance with §15370 of the CEQA Guidelines. This section refers to effects on the physical environment, as opposed to other types of effects (e.g., economic and social effects) that may arise as a result of this Project or that may be of interest to the public and decision makers generally. Accordingly, the mitigation measures have been structured to meet the following criteria:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing the impact by limiting the degree or magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

1.3 CEQA Process

CEQA requires agencies to prepare EIRs and other environmental documentation “as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment” (CEQA Guidelines §15004(b)). The first step in the CEQA process is the preparation of an Initial Study (IS). However, if the lead agency can determine that an EIR will clearly be required for the project, an initial study is not required (CEQA Guidelines §15063(a)). An Initial Study Checklist was prepared specifically for the purpose of identifying which environmental topics would be analyzed in the EIR. A Notice of Preparation (NOP) was prepared and distributed for review on June 30, 2017 and is provided as Appendix A herein. Time limits mandated by state law required a 30-day review period; therefore, the review period ended on July 31, 2017. The purpose of the NOP was to provide public information and to elicit responses on matters to be studied in the DEIR. The comment letters are
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<tr>
<td>General compatibility of proposed land uses with airport operations</td>
<td>Section 5.7 - Hazards and Hazardous Materials</td>
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<td>Potential for hazards to flight; Exposure to risk for persons occupying the Project; and overflight compatibility.</td>
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<td>Footprints of permanent Project features and temporarily impacted areas, such as staging areas and access routes.</td>
<td>Section 5.3 - Biological Resources</td>
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<td>Encroachments into riparian habitats, wetlands or other sensitive areas.</td>
<td>Section 5.3 - Biological Resources</td>
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<td>Area and plans for any proposed buildings/structures, ground-disturbing activities, fencing, paving, stationary machinery, landscaping, and storm water systems.</td>
<td>Section 5.3 - Biological Resources</td>
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<td>Conduct surveys for potentially occurring special status species.</td>
<td>Section 5.3 - Biological Resources</td>
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<tr>
<td>Conduct botanical surveys during the blooming period for special-status plant species, including those listed by the California Native Plant Society.</td>
<td>Section 5.3 - Biological Resources</td>
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<td>Identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts on Biological Resources associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project’s contribution to the impact (CEQA Guidelines, §15355).</td>
<td>Section 5.3 - Biological Resources</td>
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<td>If suitable Swainson’s hawk nesting habitat is present within or surrounding the proposed Project area, the draft EIR should specify that protocol-level surveys will be conducted during the hawk nesting season. Take measures to preserve or mitigation in the event that habitat is present.</td>
<td>Section 5.3 - Biological Resources</td>
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<td>Obtain a Lake and Streambed Alteration Agreement (LSAA) for Project-related activities within any 1600-jurisdictional waters within the proposed Project area.</td>
<td>Section 5.3 – Biological Resources</td>
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<td>Compliance with AB52 for tribal consultation and implementation of requirements.</td>
<td>Section 5.14 – Tribal Cultural Resources</td>
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<td>Compliance with SB18 for Best Practices.</td>
<td>Section 5.4 – Cultural Resources Section 5.14 – Tribal Cultural Resources</td>
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<td>Compliance with NAHC Recommendations for Cultural Resources Assessments.</td>
<td>Section 5.4 – Cultural Resources Section 5.14 – Tribal Cultural Resources</td>
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<td>Prepare a Mitigation Monitoring Program including provisions for inadvertently discovered archeological resources, cultural resources, and human remains.</td>
<td>Section 5.4 – Cultural Resources Section 5.14 – Tribal Cultural Resources</td>
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<td>Provide a Traffic Impact Study and travel demand analysis of vehicle miles traveled.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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<td>Provide queue analysis to determine if existing Northbound left-turn lanes and Southbound right turn lanes at the intersection of SR 221 and Napa Valley Corporate Way have sufficient storage for new vehicle trips generated by the Project.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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<td>Incorporate Caltrans recommended measures to help promote smart mobility and reduce regional vehicle miles traveled.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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<td>Identify potential safety issues for all road users should be identified and fully mitigated.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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<td>Evaluate the Project's primary and secondary effects on pedestrians, bicycles, disabled travelers and transit performance. Include countermeasures and trade-offs resulting from mitigating vehicle miles traveled increases.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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<td>Identify Project-generated traffic and estimate the costs of public transportation improvements necessitated by the proposed Project; viable funding sources such as development and/or transportation impact fees should also be identified.</td>
<td>Section 5.13 – Transportation/Traffic</td>
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In addition, a Scoping Meeting was held July 24, 2017, in the City of Napa Council Chambers to allow local residents and interested persons an opportunity to review the proposed Project and provide input on issues to be addressed in the DEIR. At that meeting, the process for commenting on the DEIR was described and attendees were notified that a public meeting would be held by the City Council to consider the DEIR.

The Scoping Meeting was only attended by City staff, along with the applicant. Comments were solicited from the meeting attendees. There were no responses provided during the Scoping Meeting.

This DEIR will be distributed to affected agencies, surrounding cities, and interested parties for a 45-day review and comment period in accordance with CEQA Guidelines §15087. Upon completion of the 45-day public review period, written responses will be prepared to all comments received on the DEIR during the public review period. These comments and responses, along with the Mitigation Monitoring and Reporting Program for the Project, will constitute the Final EIR for the Project. In accordance with CEQA Guidelines, written responses to comments from public agencies will be made available to those agencies at least
10 days prior to the public hearing with the City Council, at which time certification of the Final EIR would be considered.

It should be noted that the environmental impacts of a project may not always be mitigated to a less than significant level. When this occurs, impacts are considered significant unavoidable impacts. If a public agency approves a project that has significant unavoidable impacts, the Lead Agency shall state in writing the specific reasons for approving the project based on the Final EIR and any other information in the public record for the project. This is termed a “Statement of Overriding Considerations” in accordance with CEQA Guidelines §15093, and is used to explain the specific reasons the benefits of the proposed Project make its significant unavoidable impacts acceptable. The Statement of Overriding Considerations is prepared after the Final EIR has been completed, but before action to approve the project has been taken.

1.4 Incorporation by Reference

Certain documents are to be incorporated by reference into this DEIR pursuant to CEQA Guidelines §15150. Where a document is incorporated by reference, its pertinent sections will be briefly summarized and referenced in the relevant sections in this DEIR. The following documents are among those incorporated by reference herein:

- City of Napa General Plan
- City of Napa General Plan EIR
- City of Napa Zoning Ordinance
- City of Napa Standard Mitigation Measures
- Napa Valley Commons Design Guidelines

The City’s General Plan Program EIR (PEIR) considered the anticipated growth and build-out of the Project vicinity based on the industrial park designation. Contributions to environmental impacts based on the anticipated development of the entire area were identified, and mitigation was provided in the PEIR. Copies of all documents incorporated by reference are available for public review at the City of Napa, Community Development Department, 1600 First Street, Napa, CA 94559.

1.5 Issues to be Resolved

CEQA Guidelines §§15123(b)(2) and (3) require that the DEIR summary identify areas of controversy known to the lead agency, issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts.
Issues to be resolved that are known or have been called to the attention of the City during the NOP process are noted below. Issues raised during the NOP comment period are:

- Provide Vehicle Miles Traveled (VMT) analysis compared to Level of Service (LOS) (Caltrans)
- Examine Tribal Cultural Resources (NAHC)

It is recognized that other issues may be raised during the review and hearing process that were not and could not have been known at the time of the publication of this DEIR. These will be addressed to the extent required by law in the preparation of the Final EIR and in the deliberation process.

1.6 Disagreement among Experts

This DEIR contains substantial evidence to support all of the conclusions presented herein. That is not to say that there will not be disagreements with these conclusions. The CEQA Guidelines and, more particularly case law, clearly provide the standards for treating disagreement among experts. Where evidence and opinions of experts conflict on an issue concerning the environment, and the agency knows of these controversies in advance, the DEIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision-makers to take intelligent account of the environmental consequences of their action.

It is also possible that evidence will be presented during the DEIR review that might create disagreement. This evidence is considered by the decision-makers during the public hearing process. In rendering a decision on a project where there is disagreement among experts, the decision-makers are not obligated to select the most conservative or environmentally protective option. They may give more weight to one expert than another, and resolve a dispute among experts through the exercise of their collective good faith judgment. In their proceedings, they must consider the comments received and address objections, but need not follow said comments or objections so long as they state the basis for their decision and that decision is supported by substantial evidence.

1.7 Thresholds of Significance

The state does not require that local agencies adopt their own thresholds of significance. In this regard, the City relies on the state’s CEQA Environmental Checklist. In addition, in some areas, the City relies on its General Plan, codes, and ordinances as thresholds of significance.
1.8 Project Alternatives

Chapter 6 of this Draft EIR presents alternatives that have been designed to alleviate identified environmental impacts. These alternatives consist of the No Project Alternative and the Reduced Intensity/Reduced Hotel Size Alternative. Both alternatives have been measured against the stated objectives of the proposed Project and in accordance with CEQA Guidelines §15126.6, the alternatives must be able to attain most of the basic objectives of the Project.

The alternatives focus on approaches capable of eliminating significant environmental impacts associated with the proposed Project including, but not limited to, air quality, aesthetics, and traffic, or reducing them to a level of insignificance. Consistent with CEQA Guidelines §15126.6, an EIR need only address those alternatives that are actually capable of reducing or eliminating one or more significant physical environmental effects brought on by the project, as proposed. A comprehensive analysis of project alternatives, including the identification of the environmentally superior alternative, is provided in Chapter 6.

1.9 Availability of Draft EIR, Technical Appendices, and Administrative Record

The DEIR, Technical Appendices, and the Administrative Record for the proposed Project are available at the City of Napa, Community Development Department, 1600 First Street, Napa, CA 94559.

This DEIR may also be viewed on the City’s website at:

www.cityofnapa.org
2. Executive Summary

2.1 Project Location

The Project site is located at the southern boundary of the City of Napa, near the junction of State Route 29 (SR 29) and State Route 221 (SR 221) as shown on Exhibit 2-1, Regional Map and Exhibit 2-2, Vicinity Map. The site is approximately 4 miles south of downtown Napa and is located in a corporate park known as the Napa Valley Commons. The immediate surrounding area is largely built-out with low-rise office and industrial development. The Kaiser Data Center is located northerly of the site across a vacant parcel. Vineyards are located easterly of the site across SR 221.

A planned redevelopment project known as Napa Pipe is located westerly of the site. The Napa County Airport and the Airport Industrial Park are located approximately 4 miles to the south, and the Project site is within the Napa County Airport Land Use Compatibility Plan (ALUCP).

2.2 Project Description

The Trinitas Mixed Use Project proposes a hotel, a winery, and an office building within the Napa Valley Commons corporate park. The Project site is made up of three vacant parcels and is bound by Napa Valley Corporate Way and Napa Valley Corporate Drive, and Highway 221 is located immediately easterly of the Project site. The proposed Project’s three distinct components are shown on Exhibit 2-3, Site Plan.

The hotel is proposed as a 4-story, 253-guest-room, dual-branded Marriott hotel featuring an AC Hotel (153 rooms) and a Residence Inn (100 rooms). The dual-branded hotel will be constructed as a single building with several shared features, but will operate to provide distinct experiences. The building architecture will be different for each brand, with separate arrival and lobby areas. The AC Hotel includes a breakfast area, a lounge, a library, and two small media areas that serve as meeting rooms. The Residence Inn includes a breakfast-serving area along with a hearth and a study area, and a small meeting room. The hotels will share a pool area, a fitness room, and an event lawn. As a select service operation, the hotels will not include a restaurant or room service, but will provide limited breakfast service, as mentioned above. The hotel building is proposed to be 56 feet 8\(\frac{1}{8}\) inches in height.

The proposed winery is a single-story 26,214-square-foot building that will include production and storage facilities, a conference room, a small tasting area, and a sales office. The winery also includes administrative offices, a wine lab, a storage area, restrooms, and associated mechanical areas with an exterior lawn for small events and tastings. The winery is anticipated to be either a single-tenant or a custom crush operation. The winery building is proposed to be 28 feet high with architectural features extending to 38 feet in height.
Exhibit 2-1  Regional Map
Chapter 2. Executive Summary
Draft Environmental Impact Report

2.2 – Project Description

January 2018
Trinitas Mixed-Use Project

Exhibit 2-2  Vicinity Map

AC Hotel & Residence Inn | Napa Valley Mixed Use
DESIGN CONCEPT PACKAGE | January 27, 2016 | Project No. 154164
Exhibit 2-3  Site Plan
The proposed office building is a 2-story, 29,878-square-foot building with highly modular office space with an outdoor courtyard. The office building is proposed to be 24 feet in height with architectural features extending to 32 feet in height.

Vehicular access to the Project site will be provided from the existing driveway on Napa Valley Corporate Way, and a new right in/right out driveway is proposed on Napa Valley Corporate Drive. Visitors accessing the hotel and the winery are anticipated to utilize the Napa Valley Corporate Way entry point, while the office traffic is anticipated to utilize the Napa Valley Corporate Drive access point.

Once on-site, vehicles accessing the property from Napa Valley Corporate Way will be prompted by internal signage to proceed easterly towards the AC Hotel and the Residence Inn arrival areas, and the winery. Delivery trucks entering from Napa Valley Corporate Way will be directed through the property to the winery and the hotel delivery areas via an internal access road. The office building will be primarily accessed from Napa Valley Corporate Drive where internal signage will direct vehicles to parking areas. Surface parking throughout the Project site will allow patrons and guests to park close to their destination. The Project will provide 441 on-site parking spaces.

The Project is intended to complement and operate in association with The Meritage Resort (TMR), which is an existing hotel located south of the Project site, and Meritage Commons (MC), which is an expansion of TMR and currently under construction. All three hotels will be under common ownership. The hotels will have shared components including back of house services, laundry, and guest-serving components such as a shuttle between the new hotel component and TMR/MC and to the downtown.

The undeveloped Project site is rough graded where the site is predominantly characterized by a sparse covering of oat grass, and is frequently mowed for fire control.

The Project has applied for Planned Development Zoning to address over-height architectural features related to the winery and office developments and to allow for shared parking between the Project components. In addition, the Floor Area Ratio (FAR) is proposed to be blended across the TMR and MC properties to allow for a Project-specific increase in square footage, while ensuring the overall Project site is consistent with the 0.4 FAR established by the General Plan. This FAR balancing is proposed consistent with Zoning Code §17.52.120. A detailed description of the Project is provided in Chapter 4.

### 2.3 Discretionary Actions

This DEIR is intended to provide complete and adequate CEQA coverage for all actions and approvals associated with ultimate development of the proposed Project, including but not limited to:

1. City of Napa: Major Design Review, Planned Development Overlay for over-height features and shared parking, a Use Permit for a hotel in IP-A zoning district, and a Use Permit for a winery in IP-B zoning district
2.4 Summary of Environmental Impacts

Section 5.1 through Section 5.15 of the DEIR include environmental analysis related to the proposed Project. Chapter 5 provides a detailed analysis of the potential impacts of the proposed Project related to aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation and traffic, tribal cultural resources, and utilities and service systems. Chapter 6 provides an analysis of several alternatives to the Project as it is currently proposed. Chapter 7 and Chapter 8 describe the potential for the proposed Project to result in cumulative impacts and growth-inducing impacts, respectively. Chapter 9 provides a complete inventory of mitigation measures proposed for the Project under this DEIR. Chapter 10 summarizes the potentially significant adverse impacts of the proposed Project that cannot be avoided or mitigated to a level of “less than significant.”

The environmental analyses in this DEIR are focused on the environmental topics that could be significantly adversely affected by the proposed Project. Information below briefly discusses the environmental topics addressed herein.

1. Aesthetics

The Project site is a vacant parcel within the boundaries of the Napa Valley Commons corporate park. The proposed Project is consistent with the predominantly one- and two-story commercial and industrial developments located within Napa Valley Commons and surrounding the Project site. The Project site has been previously graded. The proposed Project would have a less than significant impact on the scenic resources, visual character, and light and glare. The Project is consistent with Napa Valley Commons Design Guidelines. Mitigation measures included in Section 5.1, Aesthetics would reduce potential impacts due to light and glare to a less than significant level.

2. Air Quality

The Project is within the jurisdiction of the San Francisco Bay Area Air Basin. The climate ranges from average maximum summer temperatures in the low 80s to the low 90s. Winter temperatures range from the high 50s/low 60s to the high to mid-30s. The Project is in an area currently designated non-attainment for the state 1-hour and 8-hour ozone standards, non-attainment for the state 24-hour and annual PM10 standards, and non-attainment for the state annual PM2.5 standard. It is also designated as non-attainment for the national 8-hour ozone standard and the national 24-hour PM2.5 standard. Analysis has shown that the Project will not exceed air quality thresholds for long-term operational conditions and no mitigation measures are required. However, it is anticipated that fugitive dust will result from soil disturbance and truck transport of soils during grading and site preparation activities. The mitigation measure included in Section 5.2, Air Quality will be implemented to ensure that...
BAAQMD-recommended construction best management practices to reduce emissions to a less than significant level.

3. **Biological Resources**

A Biological Survey was conducted for the proposed Project identifying that the Project will not result in significant impacts to native vegetation, special-status plants, special-status animals or critical habitat. A mitigation measure has been included in Section 5.3, Biological Resources to ensure that no impacts will result from construction activities to nesting birds.

A Tree Protection Guidelines and Long-Term Maintenance Plan was prepared to identify trees on the Project site which are subject to the City of Napa tree preservation standards and guidance for the protection and preservation of trees during all phases of construction as well as on-going maintenance to ensure future health and stability of the existing trees to be preserved. Adherence to mitigation measures and compliance with the best management practices identified in Section 5.3, Biological Resources and in the Tree Protection Guidelines Report (Appendix F) will result in a less than significant impact to trees. With implementation of mitigation and best management practices, potential impacts will be reduced to a less than significant level.

Potential seasonal wetlands were identified on the Project site. These potential wetlands may be a result of record rainfall during the 2016-17 season, where rainfall was more than double the average rainfall. As such, the Project may result in direct impacts to approximately 0.06 acre of wetlands. Additional wetland analysis will be required. Given the potential wetlands, vernal pool fairy shrimp may occur on the Project site. While unlikely because the observed ponds do not contain the required depth to sustain fairy shrimp, the Project has the potential to result in significant impacts to the federally listed threatened fairy shrimp. Mitigation measures are included to reduce these potential impacts to below a level of significance.

4. **Cultural Resources**

An archaeological survey conducted for the Project revealed that no archaeological or paleontological resources were evident on the site. Research of historic reports and surveys showed that there are no known archaeological or built environment historic resources within the Project area. Mitigation has been included in the event any resources are discovered during Project implementation. With mitigation, Project impacts will be less than significant.

5. **Geology and Soils**

The site is an unpaved, topographically flat lot with natural drainage that sheet flows over the surface, concentrating in man-made surface drainage elements. No groundwater was observed on the site, and no subsurface conditions suggested the presence of materials that may be susceptible to seismically induced densification, liquefaction, or lurching. No faults are located on the site. The geotechnical report includes recommendations for seismic design criteria, foundation support, drainage, and paving details to ensure impacts are less than significant. Preparation of an erosion control plan has been included to prevent or minimize impacts from erosion or loss of topsoil. With mitigation as proposed, the Project impacts will be reduced to a less than significant level.
6. **Greenhouse Gas Emissions**

   The Project is located in the San Francisco Bay Area Air Basin. Ozone has been identified as an air pollutant of concern in the Project area, which has been designated as non-attainment for 1-hour and 8-hour state standards. The Bay Area Air Quality Management District (BAAQMD) has jurisdiction over the San Francisco Bay Area and is the lead agency in developing plans to address attainment and maintenance of air quality standards. Short-term construction GHG emissions are anticipated to be 950 metric tons of carbon dioxide equivalents (MTCO₂e) per year. The BAAQMD standard is 1,100 MTCO₂e or 4.6 MTCO₂e per capita, and the proposed Project would be below the threshold. Therefore, no mitigation is required for short-term construction emissions.

   The BAAQMD has established 1,100 metric tons (MT), or 4.6 MT per capita, as the GHG significance threshold. Analysis has shown that the Project’s operational emissions will exceed the threshold with total Project emissions of 2,277 MT and 12 MT per capita based on service population, which is established by the Greenhouse Gas Assessment as the total numbers of employees for the Project. Implementation of Mitigation Measure MM GHG-1 would reduce operational GHG emissions to 2,058 MTCO₂e per year or 10.8 MTCO₂e per capita based on service population, which would still exceed the BAAQMD threshold of 4.6 MTCO₂e per capita. The impact would remain significant and unavoidable.

7. **Hazards and Hazardous Materials**

   The Project site is undeveloped with no structures located on-site. No agricultural uses have been recorded on the site since the 1940s, with no additional development since at least 1958. A Phase I Environmental Site Assessment (ESA) was prepared for the Project site to identify potential and apparent sources of contamination. No sources of contamination were found on-site. Wildfire and aircraft hazards were considered and found not to be significant for this site. The Project is not within the Wildland Urban Interface Fire Hazard Area as shown on the City’s General Plan. The site’s proximity to the Napa Valley Airport, which is 4 miles away, places the Project within the Napa County Airport Land Use Compatibility Plan requiring referral to the Airport Land Use Commission for a determination of consistency. Mitigation has been included in the DEIR requiring submittal for the consistency determination.

   The Phase I ESA did not discover any hazards on the site requiring additional environmental analysis. No known or suspected on-site conditions warrant regulatory involvement. Therefore, the proposed Project, with incorporation of mitigation, will not result in an unavoidable adverse impact to the public or the environment, and impacts are less than significant.

8. **Hydrology and Water Quality**

   The original storm system within the Napa Valley Commons corporate park was designed for a commercial runoff coefficient and a 10-year storm event. Current city design standards require the on-site piping system to convey the 25-year storm event while not impacting the existing infrastructure. The Project will include an underground storage vault designed to detain the differential volume between the 25- and 10-year events.
The anticipated winery industrial wastewater would be approximately 200,000 gallons per year. The greatest amounts will occur during high crush season. The Project includes a subterranean tank beneath the winery to hold the industrial wastewater which would then be transferred through an underground piping system to an on-site wastewater treatment area. Solids and liquids will be separated, and the solids will be dewatered and disposed of with normal trash. The remaining water will be filtered to a pure state and stored in tanks to be dispersed through the Project’s landscape irrigation system.

With implementation of the mitigation measures identified in Section 5.8, Hydrology and Water Quality, the Project, as proposed, will not violate any water quality standards or waste discharge requirements, substantially alter the existing drainage pattern of the site including the course of a stream or river, or increase the rate or amount of surface runoff resulting in flooding on or off-site. The Project will not contribute runoff that would exceed the capacity of storm water drainage systems or otherwise substantially degrade water quality. The Project site is not in a 100-year flood hazard area and will not place housing or other structures within a flood hazard area or impede or redirect flood flows. The Project is not in the immediate vicinity of a levee or a dam and, therefore, will not expose people or structures to injury or death due to the failure of a dam or a levee. Due to the location of the Project site, there is no risk of inundation by seiche, tsunami, or mudflow. With mitigation as proposed, impacts to hydrology and water quality will be reduced to a less than significant level.

9. Land Use and Planning

The Project requires issuance of a Conditional Use Permit to allow a hotel in the Industrial Park (IP-A) zoning district and the issuance of a Conditional Use Permit for a winery in the Industrial Park zoning district pursuant to Zoning Code Section 17.14.020. A Planned Development Overlay will be required to allow a building height increase for the winery and office buildings and to allow for shared parking. Mitigation will be implemented to recognize the shared parking.

The City’s General Plan establishes a floor area ratio of 0.4 for the corporate park land use designation. The Project results in a 0.42 FAR. However, the General Plan and the Zoning Code allow for the combination and averaging of FAR for projects that encompass several buildings on several lots. The Meritage Resort, Meritage Commons, and the Trinitas Mixed-Use Project function as extensions of each other under one ownership within the Napa Valley Commons, and averaging the three components results in a 0.38 FAR. Mitigation will be implemented to ensure square footage restriction. No significant impacts will occur related to Land Use and Planning.

10. Noise

The analysis of noise impacts was divided into short-term (temporary) and long term. Temporary impacts are associated with noise generated by construction activities and long-term impacts are associated with operational noise.

Analysis shows that short-term construction activities could generate noise levels above the City’s thresholds and result in a temporary increase in ambient noise levels. However, implementation of mitigation measures will ensure that the Project is consistent with the City’s Municipal Code regulating construction activities. Adherence to the City’s noise impact
standards as required by project mitigation measures will reduce short-term noise impacts to less than significant.

The hotel component could experience long-term (operational) exterior noise above the City’s “normally acceptable” limit of 65 CNEL. A Condition of Approval requiring construction of a noise barrier along the hotel’s outdoor use area would reduce noise levels below the City’s “normally acceptable” limit. The Project site is located outside the Napa County Airport Master Plan 55 dBA CNEL noise contour and will not be exposed to excessive noise levels due to aircraft operations. The proposed Project will not result in short-term or long-term noise impacts that cannot be reduced to less than significant levels through implementation of the Mitigation Measures, conditions of approval and best management practices.

11. Population and Housing

The proposed Project has the potential to generate jobs for 238 to 329 worker-households according to the Housing Report detailed in Section 5.11, Population and Housing herein. However, the service population estimated by the Applicant for the Project is 190 workers. The Project will offer a diverse mix of professions and pay levels, requiring availability of a housing mix for all income levels. The Project includes the implementation of a mitigation measure requiring payment of an affordable housing linkage fee to the City in accordance with the City’s Affordable Housing Ordinance. The affordable housing linkage fee may be used for, but not limited to, new construction of affordable units, acquisition of real property for the present or future development of affordable housing, conversion of existing market rate units to affordable units, preservation of existing affordable units, rehabilitation of affordable units at risk of loss, subsidies for developers that will promote and encourage the development of affordable housing units or rental units affordable to extremely low, very low and low income households. Upon implementation of mitigation, Project impacts related to population and housing will be less than significant.

12. Public Services

The proposed Project has been designed to include features and technologies to assist the police and fire departments to protect guests and employees of not only the Project, but the adjacent developments. Adherence to building and fire codes will result in new construction that provides safer structures. Additional personnel will be added to staff and equip the new fire station. The proposed Project will not significantly increase the school populations or add significant population to use existing libraries or other public facilities and will not contribute cumulatively in those areas. Upon implementation of mitigation measures, including fees to be paid to the City for Fire Protection services and adherence to City building standards, Project impacts related to public services will be less than significant.

13. Transportation and Traffic

A Traffic Impact Analysis was conducted for the proposed Project to study traffic impacts at 16 area intersections. Under existing conditions, 2 of the 16 study area intersections operate at unacceptable levels of service. The same intersections operate at unacceptable levels of service under Existing Plus Project conditions due to the addition of 50 or more peak hour trips at each location, which would result in a significant impact. Cumulative (2035) intersection level of service analysis shows that 13 intersections in the study area would...
operate at unacceptable levels of service. The Project impact on the surrounding circulation system under existing and cumulative with Project conditions will be less than significant with implementation of Project mitigation measures requiring the “fair share” contribution for improvements at each of the impacted intersections.

14. Tribal Cultural Resources

An Archeological Survey was conducted for the proposed Project. The results of the Archaeological Survey indicate there are no known archaeological or built environment historic resources within the Project area. The Project area is considered to have low sensitivity for prehistoric and historic archaeological deposits, because a records search and pedestrian survey failed to identify any significant historical resources or unique archaeological resources within the study area or Area of Potential Effects (APE). No additional mitigation is recommended, as the Project site does not meet the threshold criteria established by CEQA for Tribal Cultural Resources. However, Project mitigation measures included in Section 5.4, Cultural Resources will protect any resources found during Project construction in compliance with CEQA and the City’s General Plan policies for the protection of such resources.

15. Utilities and Service Systems

Implementation of the proposed Project will increase the demand for utility and service systems. However, standard mitigation measures have been included in Section 5.15, Utilities and Service Systems to reduce direct impacts and ensure coordination with service providers in order to reduce impacts to a less than significant level. Implementation of the Project will not result in significant impacts related to water service, sanitary sewer service, storm water sewer service, solid waste disposal, electric or gas service. The Project will be conditioned by the Napa Sanitation District to extend the recycled water pipeline to the northern property line and is required to use recycled water for landscape irrigation. Points of sewer and water connection will be sufficient to accept increased flows due to the Project.
### 2.5 Matrix of Mitigation Measures

The following matrix of mitigation measures contains standard mitigation measures and special mitigation measures. The special mitigation measures are those that are specifically attributed to the Trinitas Project, while the standard mitigation measures are more broadly applied to development projects being considered for project approval, as required by Napa Policy Resolution 27. Differentiation of the two types of mitigation measures is called-out in the first column of the matrix. Where a project impact occurs, it is so noted.

<table>
<thead>
<tr>
<th>Project Impacts</th>
<th>Mitigation Measures</th>
<th>Level of Significance after Incorporation of Conditions of Approval and Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
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</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM AE-1 Low-level lighting shall be utilized in any parking area(s) as opposed to elevated high-level intensity light standards.</td>
<td>Implementation of MM AE-1 will reduce Aesthetic impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM AE-2 All new utilities shall be placed underground.</td>
<td>Implementation of MM AE-2 will reduce Aesthetic impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM AE-3 The developer shall comply with the following: a. The plans submitted for the Project improvements or building permit, whichever comes first, shall include a final landscape and irrigation plan designed and signed by a licensed landscape architect or landscape contractor. The final landscape plans shall specify that 1) all plant materials be certified by the Napa County Agricultural Commissioner inspection program for freedom from the glassy winged sharpshooter or other pests identified by the Agricultural Commissioner and 2) the Agricultural Commissioner's Office shall be notified of all impending deliveries of live plants with points of origin outside of Napa County so that inspection can be arranged. No improvement plans shall be approved nor building permit issued until the Planning Department approves the landscape and irrigation plan. Prior to occupancy, the licensed professional who signed the final landscape and irrigation plan shall certify in writing to the Planning Director that he/she has inspected and approved the installation of landscaping and irrigation and has found them to be consistent with the approved plans including, but not limited to, the certifications and inspections by the Agricultural Commissioner as well as that the systems are in working order. A substitution of an alternate licensed professional may be allowed by the Planning Director upon a showing of good cause.</td>
<td>Implementation of MM AE-3 will reduce Aesthetic impacts to a less than significant level.</td>
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<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM AE-4 The Developer shall secure separate architectural review approval for any signage for the Project.</td>
<td>Implementation of MM AE-4 will reduce Aesthetic impacts to a less than significant level.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>MM AQ-1 During Project construction, the applicant shall ensure that best management practices for dust control as set forth in the BAAQMD CEQA Air Quality Guidelines are implemented. These include: 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 miles per hour (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.</td>
<td>Implementation of MM AQ-1 requiring compliance with the BAAQMD-recommended construction best management practices will reduce Air Quality impacts to a less than significant level.</td>
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<tr>
<td>Tree Protection Guidelines and Long Term Maintenance Plan (Tree Plan) prepared for the proposed Project made recommendations for preservation of existing trees on-site.</td>
<td>MM Bio-1 Prior to issuance of grading permits, the Project Applicant shall provide a tree risk assessment for the three valley oaks proposed to be preserved in place to determine their health and stability. Recommendations in the tree risk assessment shall be enforced to protect trees determined healthy enough for preservation.</td>
<td>Implementation of MM Bio-1 requiring compliance with the Tree Plan will reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>Tree Protection Guidelines and Long Term Maintenance Plan (Tree Plan) prepared for the proposed Project made recommendations for preservation of existing trees on-site.</td>
<td>MM Bio-2 Prior to issuance of grading permits the Applicant shall submit to the City grading/site preparation plans that reflect that the roots of the oak trees to be protected are severed around the entire perimeter of the tree protection zones to ensure subsequent construction can proceed outside the tree protection zone without further impacting the trees.</td>
<td>Implementation of MM Bio-2 requiring compliance with the Tree Plan will reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>Tree Protection Guidelines and Long Term Maintenance Plan (Tree Plan) prepared for the proposed Project made recommendations for preservation of existing trees on-site.</td>
<td>MM Bio-3 Prior to issuance of building permits, the Applicant shall ensure that the construction documents depict that Silva Cells are to be installed in three locations beneath the new hardscape areas to provide a dedicated zone for oak tree root growth, consistent with the locations identified on the Silva Cell Location Diagram on page 5.3-45 herein.</td>
<td>Implementation of MM Bio-3 requiring compliance with the Tree Plan will reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>Tree Protection Guidelines and Long Term Maintenance Plan (Tree Plan) prepared for the proposed Project made recommendations for preservation of existing trees on-site.</td>
<td>MM Bio-4 Prior to issuance of a grading permit, the Applicant shall ensure that the grading plans and relevant construction documents incorporate the Tree Protection and Maintenance Guidelines set forth in the Arborist’s report, included on pages 15 through 30 of Appendix F.</td>
<td>Implementation of MM Bio-4 requiring compliance with the Tree Plan will reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>The Biological Technical Report prepared for the proposed Project concluded that proposed grading activities should minimize potential impacts to nesting birds.</td>
<td>MM Bio-5 Prior to issuance of a grading permit, the Applicant shall ensure that vegetation clearing outside of the nesting season (February 1 through August 31) for all vegetation alliances or land-cover types on the site is conducted. If vegetation clearing is not feasible outside of the nesting season, the Project Applicant shall submit a nesting bird survey, prepared by a qualified biologist, within three days prior to any disturbance of the site, including diskig, demolition activities and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests consisting of as much as 500 feet for raptors and 300 feet for non-raptors, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.</td>
<td>Implementation of MM Bio-5 requiring grading activities to occur outside of nesting season would reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>The Biological Technical Report prepared for the proposed Project concluded that completed dry-season and wet-season protocol surveys are necessary to determine on-site presence of vernal pool fairy shrimp.</td>
<td>MM Bio-6 Prior to issuance of a grading permit, the Applicant shall ensure that dry-season and wet-season protocol surveys are completed to determine whether the potential seasonal wetland features observed on the site support listed fairy shrimp, including the vernal pool fairy shrimp.</td>
<td>Implementation of MM Bio-6 requiring compliance with the Biological Technical Report recommendations would reduce Biological impacts to a less than significant level.</td>
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### Project Impacts

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<tr>
<td><strong>The Biological Technical Report prepared for the proposed Project concluded further investigation was needed to determine the on-site presence of vernal pool fairy shrimp and recommended mitigation in the event vernal pool fairy shrimp are present.</strong></td>
<td>Implementation of MM Bio-7 requiring compliance with the Biological Technical Report recommendations would reduce Biological impacts to a less than significant level.</td>
</tr>
<tr>
<td>MM Bio-7 Prior to the issuance of grading permit, the Applicant shall provide to the City or its biologist for review, the fairy shrimp protocol surveys to determine presence or absence of fairy shrimp. If listed fairy shrimp are detected within any of the potential seasonal wetland features, impacts to occupied habitat shall be mitigated at a 2:1 ratio. Fee payment shall be made through an approved mitigation bank that covers the vernal pool fairy shrimp. The mitigation bank shall be located within the service area that covers the Project site. Alternate mitigation may be approved by USFWS, to the satisfaction of the City of Napa.</td>
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### Cultural Resources

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<tr>
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<tr>
<td><strong>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</strong></td>
<td>Implementation of MM CR-1 will reduce impacts to a less than significant level in the event archeological resources are found on the Project site.</td>
</tr>
<tr>
<td>MM CR-1 During site preparation and grading activities, the Project applicant shall ensure that, if any archaeological materials or objects are unearthed during Project construction, all work in the vicinity shall be immediately halted until a qualified archaeologist is retained by the City to evaluate the finds. The Project applicant shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.</td>
<td></td>
</tr>
<tr>
<td><strong>Research indicates that there are no known archeological or historic resources within the Project area.</strong></td>
<td>Implementation of MM CR-2 will reduce impacts to a less than significant level in the event human remains are found on the Project site.</td>
</tr>
<tr>
<td>MM CR-2 During the construction phase, the Project applicant shall ensure that if any human remains are uncovered, work shall be halted within the immediate vicinity of the discovery and state law shall be followed, which includes immediately contacting the County Coroner’s office and a representative of the Yocha Dehe Wintun Nation.</td>
<td></td>
</tr>
<tr>
<td><strong>Research indicates that there are no known archeological or historic resources within the Project area.</strong></td>
<td>Implementation of MM CR-3 will reduce impacts to a less than significant level in the event archeological resources are found on the Project site.</td>
</tr>
<tr>
<td>MM CR-3 During the construction phase, the Project applicant ensure that if any unidentified cultural materials are encountered on or below the surface, archaeological consultation should be sought immediately.</td>
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<td>Project Impacts</td>
<td>Mitigation Measures</td>
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<tr>
<td><strong>Geology and Soils</strong></td>
<td><strong>MM Geo-1</strong>  All Project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM Geo-2</strong>  All construction activities shall meet the Uniform Building Code regulations for seismic safety (e.g., reinforcing perimeter and/or load bearing walls, bracing parapets).</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM Geo-3</strong>  Developer shall provide an erosion and sediment control plan and a schedule for implementation of approved measures to the Public Works Director for approval prior to the issuance of any grading permits. No grading and excavation shall be performed except in accordance with the approved plan and schedule.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM Geo-4</strong>  Hydrotechnical Report prepared for the Project made recommendations related to seismic design criteria for structures, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, drainage and maintenance.</td>
</tr>
<tr>
<td>Prior to the issuance of building permits and grading permits, the City of Napa shall ensure grading and building plans demonstrate compliance with the recommendations included in the Geotechnical Study Report by RGH consultants dated July 13, 2015 related to seismic design criteria for structures, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, drainage and maintenance.</td>
<td><strong>MM Geo-5</strong>  Prior to the issuance of building permits and grading permits, the City shall ensure grading and building plans demonstrate compliance with the recommendations included in the Geotechnical Study Report by RGH consultants dated July 13, 2015 related to seismic design criteria for structures, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, drainage and maintenance.</td>
</tr>
<tr>
<td>The proposed Project is required to provide construction materials hauling information.</td>
<td><strong>MM Geo-6</strong>  Prior to issuance of grading permits, the Applicant shall have prepared a haul route plan showing the construction materials haul routes, the number of trips per day, and the location where grading export materials will be taken.</td>
</tr>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td><strong>MM GHG-1</strong>  Prior to the issuance of building permits, the City shall ensure that building plans reflect the following measures are to be implemented in the areas of Transportation, Energy-Efficiency, Water and Waste Consumption Measures to Reduce Project GHG Emissions. 1. Ensure that all winery-related industrial wastewater is treated on-site and instate a program to reduce indoor and outdoor water use by at least 20%; 2. Instate a program to ensure that 2013 Title 24 energy standards (used by the CalEEMod model) for energy use and lighting are exceeded by at least 20%. Adherence to CalGreen 2016 Title 24 energy standards and other measures would be necessary including, but not limited to:</td>
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### Project Impacts

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<tbody>
<tr>
<td>a. Sensors shall be installed in all rooms that detect if a guest is in the room and activate the HVAC.</td>
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<tr>
<td>b. A separate system requires the guest room key to be inserted for the lights to work in the hotel rooms.</td>
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<tr>
<td>c. LED lights installed throughout</td>
</tr>
<tr>
<td>d. All new appliances would be energy efficiency rated for the hotel;</td>
</tr>
<tr>
<td>3. Instate a recycling and compost program that would divert at least 20% of waste created on-site.</td>
</tr>
</tbody>
</table>

### Hazards and Hazardous Materials

The Phase I Environmental Site Assessment prepared for the property did not identify any potentially hazards or hazardous materials. The Project site is not located within a high fire hazard severity zone but nevertheless will incorporate advanced fire protection measures. The proposed Project is consistent with the density requirements specified by the Airport Land Use Commission.

None

Impacts will be less than significant

### Hydrology and Water Quality

The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
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</thead>
<tbody>
<tr>
<td>MM H/WQ-1 To ensure adequate drainage control, the Developer of any project that introduces new impervious surfaces (roof, driveways, patios) that will change the rate of absorption of drainage or surface run-off shall submit a drainage and grading plan designed in accordance with Policy Resolution No. 17 and the City of Napa Public Works Department Standard Specifications to the Public Works Department for its approval.</td>
</tr>
</tbody>
</table>

Implementation of MM H/WQ-1 will reduce impacts to a less than significant level.

The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
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</thead>
<tbody>
<tr>
<td>MM H/WQ-2 For any construction activity that results in the disturbance of 5 acres or greater total land area, or that is part of a larger common plan of development that disturbs 5 acres or greater total land area, Developer shall file a Notice of Intent with the California Regional Water Quality Control Board (SWRCB) prior to any grading or construction activity. In the event construction activity for the Project occurs after the SWRCB has changed its General Permit for construction activity to cover disturbance(s) of 1 acre or more, this measure shall apply to any construction activity for this Project which results in the disturbance of 1 acre or greater total/and area, or is part of a larger common plan of development that disturbs 1 acre or greater total land area.</td>
</tr>
</tbody>
</table>

Implementation of MM H/WQ-2 will reduce impacts to a less than significant level.
<table>
<thead>
<tr>
<th>Project Impacts</th>
<th>Mitigation Measures</th>
<th>Level of Significance after Incorporation of Conditions of Approval and Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-3 The Developer shall ensure that no construction materials (e.g., cleaning fresh concrete from equipment) are conveyed into the storm drain system. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.</td>
<td>Implementation of MM H/WQ-3 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-4 All materials that could cause water pollution (e.g., motor oil, fuels, paints) shall be stored and used in a manner that will not cause any pollution. All discarded material and any accidental spills shall be removed and disposed of at an approved disposal site.</td>
<td>Implementation of MM H/WQ-4 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-5 All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.</td>
<td>Implementation of MM H/WQ-5 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-6 Developer shall meet the requirements of discharging to a public storm drainage system as required to ensure compliance by the City with all state and federal laws and regulations related to storm water as stipulated in the Clean Water Act. Developer shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit in effect prior to completion of Project construction for storm water discharges from the municipal storm water system operated by the City of Napa. Developer shall comply with the Storm Water Pollution Mitigation Plan (SWPMP) submitted by Developer as part of its application as (modified and) approved by the Director of Public Works.</td>
<td>Implementation of MM H/WQ-6 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-7 Developer shall mark all new storm drain inlets with permanent markings, which state “No Dumping-Flows to River.” This work shall be shown on improvement plans.</td>
<td>Implementation of MM H/WQ-7 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM H/WQ-8 Developer shall record a plan for long-term private maintenance acceptable to the Director of Public Works and the City Attorney for any structural storm water pollution removal devices or treatment control BMP incorporated as part of the Project. The plan shall comply with City and SWRCB requirements including, but not limited to, a detailed description of responsible parties, inspections, maintenance procedures for the detention system, including monitoring and documentation of annual report to the Public Works Department and procedures for enforcement. Appropriate easements or other arrangements satisfactory to the Public Works Director and City Attorney necessary or convenient to ensure the feasibility of the scheme and fulfillment of maintenance responsibilities shall be secured and recorded prior to approval of the final/parcel map or issuance of a building permit, whichever comes first.</td>
<td>Implementation of MM H/WQ-8 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>Project Impacts</td>
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<td>Level of Significance after Incorporation of Conditions of Approval and Mitigation Measures</td>
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<tr>
<td>The proposed Project is subject to compliance with NPDES requiring a California General Permit for Storm Water Discharges Associated with Construction Activity.</td>
<td>MM H/WQ-9 Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance under California's General Permit for Storm Water Discharges Associated with Construction Activity. The Project Applicant shall prepare and submit to the City a Storm Water Pollution Prevention Plan that describes erosion and sediment control BMPs and BMPs that will be used during the construction of the Project.</td>
<td>Implementation of MM H/WQ-9 requiring the preparation of a Storm Water Pollution Prevention Plan will reduce erosion and sediment impacts to a less than significant level.</td>
</tr>
<tr>
<td>The Hydrology and Water Quality report prepared for the Project made recommendations for water quality Low Impact Design Features.</td>
<td>MM H/WQ-10 Prior to issuance of building permits, the City of Napa shall ensure the building plans demonstrate that properly designed and sized LID features have been incorporated into the Project.</td>
<td>Implementation of MM H/WQ-10 requiring the incorporation of LID features into the proposed Project will reduce water quality impacts to a less than significant level.</td>
</tr>
<tr>
<td>Land Use and Planning</td>
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<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM LU-1 Developer shall comply with all requirements of federal, state and local laws and regulations applicable to Project construction and issuance of building permits.</td>
<td>Implementation of MM LU-1 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM LU-2 Developer shall comply with the monitoring/reporting checklists for development pursuant to the City of Napa Resolution 96-153 regarding CEQA implementation procedures for both standard and Project specific mitigation measures.</td>
<td>Implementation of MM LU-2 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM LU-3 Developer shall notify all employees and agents of the mitigation measures and conditions applicable to the Project and shall ensure compliance with such measures and conditions. Developer shall also notify all assigns and transferees of the same.</td>
<td>Implementation of MM LU-3 will reduce impacts to a less than significant level.</td>
</tr>
<tr>
<td>The Project proposes to combine square footage with The Meritage Resort and Meritage Commons as donor sites to allow for an increased FAR at the Project site while remaining within the General Plan allowable maximum FAR.</td>
<td>MM LU-4 Prior to issuance of building permits, the Project Applicant shall provide evidence to the City of a deed restriction identifying the combined square footage for The Meritage Resort, Meritage Commons, and the Trinitas Mixed Use Project and the resultant averaging of FAR as permitted to maintain consistency with the General Plan FAR allowance. The deed restriction shall restrict the “donor” parcels (The Meritage Resort and Meritage Commons) to a maximum of 689,316 square feet consistent with the combined average in order to prevent overbuilding of square footage on those parcels.</td>
<td>Implementation of MM LU-4 will reduce impacts related to an increased FAR at the Project site to a less than significant level.</td>
</tr>
<tr>
<td>The Project proposes Planned Development Zoning to allow for shared parking between the hotel, winery and office parcels. When calculated based on the individual components, a deficit of three (3) parking spaces will result. Mitigation is required to ensure a reciprocal parking agreement.</td>
<td>MM LU-5 Prior to issuance of building permits, the Project Applicant shall memorialize a shared parking agreement per a Planned Development Overlay to allow a total of 441 shared parking spaces for use between the hotel and winery. The shared parking agreement shall provide three parking spaces for evening use of the hotel. The shared parking agreement shall be in full force and effect throughout the life of the project and will be binding upon any future owners of the property.</td>
<td>Implementation of MM LU-5 will reduce impacts related to shared parking, as allowed by Planned Development zoning to a less than significant level.</td>
</tr>
<tr>
<td>Project Impacts</td>
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<tr>
<td><strong>Noise</strong></td>
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<tr>
<td>The proposed Project includes construction activities that could result in a temporary increase of area ambient noise levels.</td>
<td>MM N-1 During the construction phase, the Project Applicant shall ensure that all construction activities shall comply with all requirements in Section 8.08.025 of the Napa Municipal Code, including limiting hours of construction to 7:00 a.m. to 7:00 p.m. Monday through Friday on weekdays and 8:00 a.m. to 4:00 p.m. on weekends or legal holidays unless a permit shall first have been secured from the City Manager.</td>
<td>Implementation of MM N-1 will reduce impacts related to construction noise at the Project site to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project has a winery component requiring the operation of mechanical equipment that could potentially result in an increase of long-term ambient noise.</td>
<td>MM N-2 Prior to issuance of building permits, Project Applicant shall ensure that mechanical equipment associated with the winery component of the Project shall be selected and designed to reduce impacts on surrounding uses to meet the City’s General Plan noise level thresholds for industrial land uses. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the noise performance standard. Noise reduction measures could include but are not limited to, selection of equipment that emits low noise levels and installation of noise barriers such as enclosures to block the line of sight between the noise source and the nearest receptors.</td>
<td>Implementation of MM N-2 will reduce impacts related to the selection and operation of winery mechanical equipment to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project includes construction activities that could result in a temporary increase of area ambient noise levels.</td>
<td>MM N-3 Prior to commencement of construction activities, Project Applicant shall notify adjacent building occupants of scheduled construction activities and schedule such activities during hours with the least potential to affect nearby occupants to the extent feasible.</td>
<td>Implementation of MM N-3 will reduce impacts related to construction noise at the Project site to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project includes an event lawn for outdoor special events that could potentially result in an increase of long-term ambient noise.</td>
<td>MM N-4 During special events, the Project Applicant shall ensure all public address or sound amplification systems are operated consistent with the provisions of Sections 17.52.310 and Section 8.08.010 of the Municipal Code including the conditions of the Project use permit.</td>
<td>Implementation of MM N-4 will reduce impacts related to the use of the even lawn for special events to a less than significant level.</td>
</tr>
<tr>
<td><strong>Population and Housing</strong></td>
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<tr>
<td>The City of Napa has an established affordable housing fee assessed to new development within the City to mitigate housing impacts created by projects.</td>
<td>MM P/H-1 Prior to the issuance of a building permit, Applicant shall pay the City the affordable housing impact fee as calculated by the Chief Building Official and based on the methodology identified by the City Council for non-residential development.</td>
<td>Implementation of MM PH-1 will reduce impacts related to affordable housing availability within the City created by the proposed Project to a less than significant level.</td>
</tr>
</tbody>
</table>
### Chapter 2. Executive Summary

#### 2.5 – Matrix of Mitigation Measures

**Draft Environmental Impact Report**

**January 2018 Trinitas Mixed Use Project**

<table>
<thead>
<tr>
<th>Project Impacts</th>
<th>Mitigation Measures</th>
<th>Level of Significance after Incorporation of Conditions of Approval and Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population and Housing</strong></td>
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</tr>
<tr>
<td>The proposed Project will result in an increase demand on fire and paramedic services.</td>
<td>MM PS-1  Developer shall pay the required fire and paramedic fees for new development in accordance with Napa Municipal Code Chapter 15.78. The fee for each unit of development within a development project shall be paid in full prior to the issuance of the building permit required for that unit of development. Such fees shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in the ordinance and Resolution 94-106 are incorporated herein. The City further finds that calculation of the fee pursuant to the formula set forth therein demonstrates that there is a reasonable relationship between the fees imposed and the cost of improvements attributable to this Project.</td>
<td>Implementation of MM PS-1 will reduce impacts related to fire and paramedic services through the payment of fees for each unit of development to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would construct new buildings on the Project site. Development within the City of Napa, as with the State of California, are subject to the provisions of the Uniform Building Code. The proposed Project is also subject to the Fire Department and PWD Standard Specifications and the Fire Department “Standard Requirements for Commercial/Residential Projects.”</td>
<td>MM PS-2  Developer shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and PWD Standard Specifications and the Fire Department “Standard Requirements for Commercial/Residential Projects,” including, without limitation, the requirements for access, new construction, smoke detectors, fire extinguishers, and fire hydrants. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications.</td>
<td>Implementation of MM PS-2 will reduce impacts related to fire protection and access to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would construct new buildings on the Project site. Developments within the City of Napa are subject to NFPA and City Standard Specifications.</td>
<td>MM PS-3  All newly constructed buildings must have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which installation permit must be obtained from Fire Prevention. In multi-building complexes, or in buildings with three or more stories, special monitoring conditions will be required. Existing habitable buildings, which are retained, shall be retrofitted.</td>
<td>Implementation of MM PS-3 will reduce impacts related to fire protection to a less than significant level.</td>
</tr>
<tr>
<td>The Project proposes Comerica occupancy subject to approval from Napa Fire Prevention and Building Departments.</td>
<td>MM PS-4  The Developer of any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards, or are classified by the Uniform Building Code as an H (hazardous) occupancy.</td>
<td>Implementation of MM PS-4 will reduce impacts related to commercial occupancy to a less than significant level.</td>
</tr>
<tr>
<td><strong>Transportation and Traffic</strong></td>
<td></td>
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</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM T-1  All required public frontage and street improvements shall be designed and built in accordance with City of Napa ordinances and the PWD Standard Specifications. Unless waived by the Public Works Director, street improvements shall include curbs, gutter, sidewalk, planting, streetlights, and street trees. Any additional right-of-way necessary to accommodate these improvements shall be dedicated to the City.</td>
<td>Implementation of MM T-1 will reduce impacts related to traffic to a less than significant level.</td>
</tr>
<tr>
<td>Project Impacts</td>
<td>Mitigation Measures</td>
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</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM T-2 During non-working hours, open trenches shall be provided with appropriate signage, flashers and barricades approved by the Street Superintendent to warn oncoming motorists, bicyclists and pedestrians of potential safety hazards.</td>
<td>Implementation of MM T-2 will reduce impacts related to traffic to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM T-3 All road surfaces shall be restored to pre-Project conditions after completion of any Project-related pipeline installation activities.</td>
<td>Implementation of MM T-3 will reduce impacts related to traffic to a less than significant level.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td>MM T-4 To mitigate the cumulative impact of the traffic generated by the subject Project on the City’s arterial and collective street system, the Developer shall pay a Street Improvement Fee in accordance with Napa Municipal Code Chapter 15.84 and implementing resolutions to pay for the traffic improvements identified therein. Such fee shall be payable at the rate in effect at the time of payment. The findings set forth in the ordinance and implementing resolutions are incorporated herein. The City further finds that the calculation of the fees in accordance with the trip generation capacity of development demonstrates there is a reasonable relationship between the amount of the fees imposed and the cost of the street improvements attributable to this Project.</td>
<td>Implementation of MM T-4 will reduce impacts related to traffic to a less than significant level.</td>
</tr>
<tr>
<td>The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of SR 221/Kaiser Road, that would be potentially adversely impacted by the proposed Project.</td>
<td>MM T-5 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 1.84% fair share contribution to the following improvement: provide additional northbound and southbound through lanes and optimization of signal timing at the intersection of SR 221/Kaiser Road.</td>
<td>Implementation of MM T-5 will reduce impacts related to traffic impacts at the intersection of SR 221/Kaiser Road to a less than significant level.</td>
</tr>
<tr>
<td>The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of SR 221/Napa Valley Corporate Way, that would be potentially adversely impacted by the proposed Project.</td>
<td>MM T-6 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 3.43% fair share contribution to the following improvement: provide additional northbound and southbound through lanes and optimization of signal timing at the intersection of SR 221/Napa Valley Corporate Way.</td>
<td>Implementation of MM T-6 will reduce impacts related to traffic impacts at the intersection of SR 221/Napa Valley Corporate Way to a less than significant level.</td>
</tr>
<tr>
<td>The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of SR 12-SR 29/SR 221, that would be potentially adversely impacted by the proposed Project.</td>
<td>MM T-7 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.12% fair share contribution to the following improvement: replace the existing signal by constructing a fully grade-separated interchange or roundabout at the intersection of SR 12-SR 29/SR 221.</td>
<td>Implementation of MM T-7 will reduce impacts related to traffic impacts at the intersection of SR 12-SR 29/SR 221 to a less than significant level.</td>
</tr>
</tbody>
</table>
### Project Impacts

The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way, that would be potentially adversely impacted by the proposed Project.

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
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</thead>
<tbody>
<tr>
<td>MM T-8 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay an 11.20% fair share contribution to the following improvement: restripe westbound approach to one left-turn lane, one shared through/left-turn lane, and one right-turn lane at the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way.</td>
<td>Implementation of MM T-8 will reduce impacts related to traffic impacts at the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way to a less than significant level.</td>
</tr>
</tbody>
</table>

The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of Napa Valley Corporate Way/Bordeaux Way, that would be potentially adversely impacted by the proposed Project.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>MM T-9 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay 100% of the cost of the following cumulative impact improvement: installation of a traffic signal or a roundabout at the intersection of Napa Valley Corporate Way/Bordeaux Way.</td>
<td>Implementation of MM T-9 will reduce impacts related to traffic impacts at the intersection of Napa Valley Corporate Way/Bordeaux Way to a less than significant level.</td>
</tr>
</tbody>
</table>

The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of SR 221/Streblow Drive, that would be potentially adversely impacted by the proposed Project.

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</tr>
</thead>
<tbody>
<tr>
<td>MM T-10 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.09% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound direction and optimization of signal timing at the intersection of SR 221/Streblow Drive.</td>
<td>Implementation of MM T-10 will reduce impacts related to traffic impacts at the intersection of SR 221/Streblow Drive to a less than significant level.</td>
</tr>
</tbody>
</table>

The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of SR 221/Magnolia Drive, that would be potentially adversely impacted by the proposed Project.

<table>
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</thead>
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<tr>
<td>MM T-11 Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 1.73% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound direction and optimization of signal timing at the intersection of SR 221/Magnolia Drive.</td>
<td>Implementation of MM T-11 will reduce impacts related to traffic impacts at the intersection of SR 221/Magnolia Drive to a less than significant level.</td>
</tr>
</tbody>
</table>

The Traffic Impact Analysis prepared for the proposed Project identified seven intersections, including the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121), that would be potentially adversely impacted by the proposed Project.

<table>
<thead>
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<tr>
<td>MM T-12 Prior to issuance of Certificates of Occupancy, at the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) under Existing plus Project conditions, the Project Applicant shall pay a 1.39% fair share contribution to the following improvement: optimization of signal timing. Under Cumulative Plus Project conditions, the Project Applicant shall pay a 1.68% fair share contribution for an additional through lane in the northbound and southbound direction and signal timing optimization.</td>
<td>Implementation of MM T-12 will reduce impacts related to traffic impacts at the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) to a less than significant level.</td>
</tr>
</tbody>
</table>

### Utilities and Service Systems

The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.

<table>
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<tr>
<th>Mitigation Measures</th>
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<tbody>
<tr>
<td>MM U-1 Prior to trenching within existing roadway areas, the Developer’s engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems.</td>
<td>Implementation of MM U-1 will reduce impacts related to Utilities and Service Systems to a less than significant level.</td>
</tr>
<tr>
<td>Project Impacts</td>
<td>Mitigation Measures</td>
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</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-2</strong> Water and energy conservation measures shall be incorporated into Project design and construction in accordance with applicable codes and ordinances.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-3</strong> The Project shall be connected to the Napa Sanitation District for sanitary sewer service. If the subject property is currently served by individual sewage disposal systems, the septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction and after connection to the District, the existing septic tank(s) shall be properly destroyed.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-4</strong> The Project shall be connected to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well-destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water District's specifications.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-5</strong> The Project shall be designed and built in accordance with the PWD Standard Specification regarding the adequate conveyance of storm waters.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-6</strong> All faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-7</strong> All showerheads shall be of a design to limit the maximum flow to 2.5 gallons per minute.</td>
</tr>
<tr>
<td>The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27.</td>
<td><strong>MM U-8</strong> The Developer shall completely offset the water requirements of this Project by complying with the retrofit requirements of Napa Municipal Code Chapter 13.09.</td>
</tr>
<tr>
<td>Project Impacts</td>
<td>Mitigation Measures</td>
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</tbody>
</table>
| The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27. | MM U-9  
During the construction/demolition/renovation period of the Project, Developer shall use the franchised garbage hauler for the service area in which the Project is located to remove all wastes generated during Project development, unless Developer transports Project waste. If the Developer transports the Project’s waste, Developer must use the appropriate landfill for the service area in which the Project is located. | Implementation of MM U-9 will reduce impacts related to Utilities and Service Systems to a less than significant level. |
| The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27. | MM U-10  
Developer shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the Developer transports such wood waste to a location where wood waste is recycled. | Implementation of MM U-10 will reduce impacts related to Utilities and Service Systems to a less than significant level. |
| The proposed Project would be subject to the following standard mitigation measure as required by Policy Resolution No. 27. | MM U-11  
A recycling/solid waste enclosure shall be provided in accordance with Chapter 17.102, et seq. of the Napa Municipal Code for all commercial, industrial, and multi-family projects with common solid waste facilities. | Implementation of MM U-11 will reduce impacts related to Utilities and Service Systems to a less than significant level. |
## 2.6 Conditions of Approval/Best Management Practices

<table>
<thead>
<tr>
<th>Project Impacts</th>
<th>Conditions of Approval / Best Management Practices</th>
<th>Level of Significance after Incorporation of Conditions of Approval and Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Resources</td>
<td>The Project proposes to retain three oak trees located on site. An Arborists Report, detailed herein, contained several recommendations related to protection of the trees to be retained on-site.</td>
<td>Less than significant impact</td>
</tr>
</tbody>
</table>

**BMP-1** The Tree Protection Guidelines provide Best Management Practices (BMPs) to be implemented prior to, during and subsequent to construction of the proposed Project to ensure the safety and continuing health and stability of the protected trees. Mitigation Measure MM Bio-4 requires adherence to the general Tree Protection and Preservation Plan recommendations as summarized below. The BMPs are found in their entirety in the Tree Protection Guidelines (pages 15-30) included herein as Appendix F.

1. Preconstruction Requirements - include meetings with City staff and construction personnel, review of site plans, establishment of tree protection zones on plans, fencing locations, warning signs
2. Identification of activities permitted within the tree protection zones
3. Restricted and/or controlled activities during demolition and construction activities
4. Trenching excavation and equipment use
5. Tree pruning recommendations
6. Tree root management
7. Tree maintenance during construction
8. Damage to trees
9. Long-term maintenance

**BMP-2** During construction, no grade changes within the perimeter of the tree protection zones and driplines for trees 001, 002, 003 and 040 will occur from grading activities. Grade changes outside the dripline shall not exceed 6 inches and all grading shall be done in conjunction with the Project arborist to minimize and/or mitigate root damage.

**BMP-3** A protection fence shall be in place at all times during construction activities to prevent encroachment into the tree protection zones.
### Hydrology and Water Quality

The proposed Project will be required to connect with the existing storm drain system. In accordance with Section 4.36.140 of the Napa Municipal Code, the Applicant/Owner shall be responsible for payment of a storm water system service fee for inspection and maintenance services.

<table>
<thead>
<tr>
<th>Level of Significance after Incorporation of Conditions of Approval and Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>No impact</td>
</tr>
</tbody>
</table>

### Noise

The proposed Project will result in construction noise. In addition, to ensure that exterior noise levels at the hotel during the operational phase are reduced to a minimum, conditions of approval have been recommended.

<table>
<thead>
<tr>
<th>Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP-4</strong> Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</td>
</tr>
<tr>
<td><strong>BMP-5</strong> Unnecessary idling of internal combustion engines should be prohibited.</td>
</tr>
<tr>
<td><strong>BMP-6</strong> Utilize “quiet” air compressors and other “quiet” equipment where technology exists.</td>
</tr>
<tr>
<td><strong>BMP-7</strong> Notify all adjacent businesses, residences and other noise-sensitive land uses of the construction schedule and provide a written schedule of “noisy” construction activities.</td>
</tr>
<tr>
<td><strong>BMP-8</strong> Temporary plywood noise barriers or noise control blanket barriers should be erected if scheduling conflicts occur related to timing of construction activities to minimize impacts from noisy construction.</td>
</tr>
<tr>
<td><strong>BMP-9</strong> Identify a contact name/number for a coordinator who would be responsible for responding to any complaints about construction noise. The coordinator will investigate the complaint and require that reasonable measures be implemented to correct the problem. The name/number should be posted at the construction site.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions of Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COA-1</strong> A minimum 6-foot noise barrier shall be constructed to shield the hotel’s outdoor use area. A 6-foot noise barrier would provide at least 5 dBA of noise reduction and would maintain exterior noise levels below the City of Napa’s “normally acceptable” exterior noise level limit of 65 dBA CNEL.</td>
</tr>
<tr>
<td><strong>COA-2</strong> A qualified acoustical engineer shall prepare a detailed analysis of interior noise levels resulting from all exterior sources during the design phase of the Project. The study will review the final site plan, building elevations and floor plans prior to construction and recommend building treatments to reduce interior noise levels to 45 dBA CNEL or lower. Treatments could include, but are not limited to, sound-rated windows and doors, acoustical caulking, protected ventilation openings, etc. The specific determination of what noise insulation treatments are necessary shall be conducted on a unit-by-unit basis during final design of the Project. Results of the study will be included in a final report to be submitted with the final plans and specifications.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Significance after Incorporation of Conditions of Approval and Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than significant impact</td>
</tr>
<tr>
<td>Project Impacts</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>COA-3</td>
</tr>
<tr>
<td>COA-4</td>
</tr>
</tbody>
</table>
2.7 Impacts Found Not To Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR identify those impacts found not to be significant in the Initial Study/NOP and EIR process. Those impacts must be identified accompanied by a brief explanation of why the impacts were found to be insignificant. The following impacts were found to be insignificant after completion of the NOP process and are not analyzed in the EIR.

Table 2-1 Impacts Found Not To Be Significant

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Basis for Dismissal from EIR Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Forestry Resources</td>
<td>The proposed Project will not result in impacts to agriculture/forestry resources, because none exist on the site. The Project is within the boundaries of an existing corporate park. The Project site is undeveloped, with only sparse vegetation consisting of grasses, shrubs, and trees, and has previously been graded. Occasional mowing occurs for vegetation and fire control. The site does not contain characteristics of farmland and has never operated as farmland. Therefore, further analysis was not included in the DEIR, because there is no possibility that any environmental impacts to agriculture/forestry will result from Project implementation.</td>
</tr>
<tr>
<td>Mineral Resources</td>
<td>The Project site has not been identified in the City’s General Plan as an area where mineral resources of local significance will occur. No evidence of mineral resources was observed during site visits related to the preparation of technical analyses for the Project EIR. Therefore, it was determined that no mineral resources of value were present on the site, and no further analysis was necessary.</td>
</tr>
<tr>
<td>Recreation</td>
<td>The City of Napa includes numerous opportunities for recreation, including golf courses, regional parks, local parks, and trails. The nature of the proposed uses will not likely attract a significant number of visitors who are seeking such amenities to the extent that there will be an impact to existing facilities. The hotel visitors will have on-site pools, spas, and picnic areas. The City provides trails that can be readily accessed from the site. A golf course is located just north of the Napa Valley Commons corporate park. Therefore, no adverse impacts to recreation will result from Project implementation that will require additional analysis.</td>
</tr>
</tbody>
</table>
3. Project History and Background

The proposed Project is located on undeveloped land situated on 11.55 acres of property within the Napa Valley Commons corporate park (Napa Valley Commons). Napa Valley Commons encompasses 237 acres located in south Napa at the gateway intersection to the Napa Valley and the City of Napa. The site is bound by Kaiser Road to the north, SR 221 to the east, SR 12 to the south, and the Napa Pipe project (formerly Kaiser steel plant) and Napa River to the west. Napa Valley Commons is nearly built out with only three small properties at the southwest end of the site currently remaining undeveloped. A 9.3-acre parcel of land located at the southern boundary of Napa Valley Commons is planned as a hotel known as Meritage Commons. In addition to the City’s General Plan and Zoning Code, development in Napa Valley Commons is guided by the Napa Valley Commons Design Guidelines (Design Guidelines) and was historically governed by the Airport North/Bedford Industrial Park Specific Plan until its sunset in 2014.

The Airport North/Bedford Industrial Park Specific Plan was adopted by the County of Napa in 1981 for approximately 1,580 acres of land extending from the Napa County Airport north to Kaiser Road. The purpose of the Specific Plan and its associated Master Environmental Impact Report was to prepare for the development and annexation of this land into the City of Napa. Today, the land that was once governed by the Airport North/Bedford Specific Plan has been incorporated into the City and is now governed by the City’s General Plan and Zoning Code.

The Meritage Resort (formerly the Buena Vista) was approved for construction in 2004. Pacific Hospitality Group (PHG) subsequently acquired the resort property, including property directly across Bordeaux and the property that is the subject of this DEIR, the Trinitas Mixed-Use Project site. The Meritage Resort, the Meritage Commons, and the Trinitas Mixed-Use Project are under the same ownership, and each component is part of the larger vision to provide a collection of brands and experiences that create a true destination. As part of the City’s approval of the Meritage Commons project in 2015, the City approved floor area ratio (FAR) averaging consistent with City Zoning Code Section 17.52.20(c)(1) between the existing Meritage Resort and Meritage Commons, which are non-contiguous parcels and separated by Bordeaux Way. Meritage Commons, which is currently under construction, is anticipated to open in 2018.

In 2014, the Airport North/Bedford Industrial Park Specific Plan, which was implemented in 1981 prior to the annexation of Napa Valley Commons into the City of Napa, was extinguished. In the same year, the Zoning Code was amended to allow wineries within the IP-A and IP-B zoning districts, where they were previously only allowed in the IP-C zoning district. In 2016, the Napa Valley Commons Design Guidelines were updated to reflect the evolution of the area from a strictly industrial area to a mixed use corporate park including uses ranging from the resort and hospitality sector to wine and food industry. Napa Valley Commons is divided into three tracts by the Design Guidelines with the proposed Project located within Tract B, the periphery tract, designated for mixed uses with high quality landscape and architectural features. Tract A is designated as the Resort Park tract and
Tract C is designated as the Internal Park where larger sites for research, development, assembly, and warehousing are located. The stated purpose of the Design Guidelines is to be a tool for the Napa Valley Commons Design Review Committee. The Design Guidelines establish overall design parameters that are flexible and adaptable, allowing and encouraging original design expression.

As discussed above, the Project is located to the east of the Napa Pipe project. Napa Pipe is a 154-acre mixed use development that has been approved for approximately 945 houses and apartments, a K-8 school, industrial, retail, and warehousing including a Costco warehouse. Napa Pipe is located within the County of Napa and was approved by the County Board of Supervisors in 2013, and the Napa Pipe Design Guidelines were approved in 2015. It is anticipated that the Napa Pipe project will be implemented in phases.

Planning Commission Preliminary Review

Preliminary review by the Planning Commission is applied by City staff to significant projects that would benefit from early consultation. While preliminary review is encouraged by the Planning Commission and City Staff, it is not a requirement. The purpose of the preliminary review is an informal process intended to serve as guidance to the project applicant. On June 1, 2017 the Planning Commission conducted a preliminary design review.

After receiving a presentation on the Project, the Planning Commission offered comments focused on design elements and site layout. The following table provides a summary of the key comments received by the Planning Commission and the changes to the Project advanced by the Applicant in response to the Planning Commission comments.

<table>
<thead>
<tr>
<th>Table 3-1 Planning Commission Comment and Applicant Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concern related to materials for Hotel Component</strong></td>
</tr>
<tr>
<td>The Residence Inn was updated to include metal detail around the windows, incorporate wood into the façade similar to the winery, and the overall color field of the hotel was lightened.</td>
</tr>
<tr>
<td>The AC Hotel was also updated to have copper metal detail surrounding the windows, a wood veneer façade added to the hotel signage on the corner of the building, and incorporate wood in the facade similar to the winery.</td>
</tr>
<tr>
<td><strong>Hotel distinction</strong></td>
</tr>
<tr>
<td>The Residence Inn and AC Hotel brands located within the hotel building are distinguished through separate façade design and by distinctly separate roof lines. The AC Hotel roof was updated to include a combination of flat and shed roofs to support the lifestyle brand that is contemporary and playful. The standing seam material consistent throughout the AC Hotel and Residence Inn provide consistency in commonality between the two brands.</td>
</tr>
<tr>
<td><strong>Concerns about site layout and orientation</strong></td>
</tr>
<tr>
<td>It is not possible to reorient the hotel, as zoning regulations on the other parcels within the Project site are within the IP-B zoning district and do not permit the 60-foot height limit required for the hotel and allowable by the IP-A zoning district. The winery is appropriately positioned near the highway with truck access shielded in the interior of the Project site, while the office building is located near existing commercial offices on Napa Valley Corporate Drive and can be conveniently accessed by occupants.</td>
</tr>
<tr>
<td><strong>Request for view simulations depicting the Gateway to Napa vantage</strong></td>
</tr>
<tr>
<td>View simulations were prepared and are included in the Aesthetics section.</td>
</tr>
</tbody>
</table>

January 2018
4. Project Description

4.1 Project Location

The Project site is located at the southern boundary of the City of Napa, near the junction of State Route 29 (SR 29) and State Route 221 (SR 221) as shown on Exhibit 2-1, Regional Map and Exhibit 4-2, Vicinity Map. The Project site is located approximately 4 miles south of downtown Napa in a corporate park known as the Napa Valley Commons. The Project site is made up of three vacant parcels and bound by Napa Valley Corporate Way to the south, Napa Valley Corporate Drive to the west, and Highway 221 to the east. The Kaiser Data Center is located northerly of the site across a vacant parcel. The immediate surrounding area is largely built-out with low-rise office and industrial development with an existing hotel and a planned hotel located on Bordeaux Way, about a block from the Project site. Vineyards are located easterly of the Project site across SR 221.

A planned redevelopment project known as Napa Pipe is located westerly of the site within the County of Napa (County) and the City’s sphere of influence. The Napa County Airport and the Airport Industrial Park are located approximately 4 miles to the south, and the Project site is within the Napa County Airport Land Use Compatibility Plan (ALUCP).

4.2 Existing Conditions

The proposed Project is located on a 11.55-acre undeveloped site that has been rough graded and where the site is predominantly characterized by a sparse covering of oat grass, and is frequently mowed for fire control, as shown on Exhibit 4-4, Site Photos. The site has relatively flat topography with elevations ranging from 12 to 32 feet and including berms and sloping areas at the north and southeastern boundaries of the property. The Project site has a total of 50 trees on-site with 47 of the trees growing along the south and southeast corner of the property. Three Coast Live Oak trees are located along the western boarder of the property adjacent to the neighboring commercial property. Table 4-1 describes the surrounding land uses.

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Kaiser Data Center, office and commercial buildings</td>
</tr>
<tr>
<td>South</td>
<td>Office buildings, The Meritage Resort, Meritage Commons</td>
</tr>
<tr>
<td>East</td>
<td>SR 221, a vineyard, a church, and open space</td>
</tr>
<tr>
<td>West</td>
<td>Commercial and office uses, Napa Pipe</td>
</tr>
</tbody>
</table>
Exhibit 4-1    Regional Map
Exhibit 4-3  Site Photo Key
Chapter 4. Project Description
Draft Environmental Impact Report

4.2 – Existing Conditions

January 2018 Trinitas Mixed-Use Project

View 1 – Southeastern corner of Project site from adjacent property

View 2 – Southern property boundary looking east toward SR 221

Exhibit 4-4 Site Photos
Chapter 4: Project Description  
Draft Environmental Impact Report

4.2 – Existing Conditions

January 2018 Trinitas Mixed-Use Project

Exhibit 4-5  Site Photos
View 5 – Northwestern corner of the property looking southeasterly

View 6 – Northern property looking south

Exhibit 4-6  Site Photos
View 7 – Adjacent property to the north of the Project site

View 8 – Berm at northern property boundary

Exhibit 4-7  Site Photos
View 9 – Eastern property line looking north

View 10 – Western property line looking south along Napa Valley Corporate Drive

Exhibit 4-8  Site Photos
Chapter 4. Project Description
Draft Environmental Impact Report

4.2 – Existing Conditions

January 2018 Trinitas Mixed-Use Project

View 11 – Project site from across SR 221 looking west

View 12 – Eastern property line looking west toward Napa Valley Corporate Drive

Exhibit 4-9   Site Photos
View 13 – Western boundary at existing development

View 14 – On-site, looking east toward SR 221

Exhibit 4-10 Site Photos
4.3 Project Description

The Trinitas Mixed-Use Project proposes a hotel, a winery, and an office building within the Napa Valley Commons corporate park. The Trinitas development is the third component of the Project owners’ vision for Napa Valley Commons and completes the combination of brands and experiences that create a resort destination that includes TMR and MC. Market studies demonstrate that the hotel market is desirous of more, higher-end select service hotels such as the AC Hotel and the Residence Inn, given that such brands are not currently present in the Napa market. Feasibility studies demonstrate that these types of hotels are economically feasible and fill a need within the market.

The vision is to create a resort lifestyle district where various parcels under common ownership all complement one another and guests have the opportunity to share a multitude of experiences including overnight stays, events, wine and food, and cultural-related activities. While the existing Meritage Resort focuses on higher-end transient and group guests within an independent four-diamond setting with many resort amenities, the proposed AC Hotel and Residence Inn focus on select service transient guests within the context of branded hotel properties, particularly the extended stay product for those guests who require a more affordable price point with a longer length of stay.

The three hotels, The Meritage Resort and Meritage Commons, which will operate as one hotel, and the proposed AC Hotel and Residence Inn, offer distinct amenities but share a variety of facilities and services. As noted, all the hotels within the district are under common ownership and management, so efficiencies are a core component of the overall business plan. The hotels will share a managing director, who will oversee all day-to-day operational activities of the resort district. There will be shared operations among the hotels, including facilities management and engineering, marketing and sales, and accounting. The following table details the rooms, event space, and amenities provided for the existing TMR and MC expansion as well as the proposed AC Hotel and Residence Inn.

<table>
<thead>
<tr>
<th>Property</th>
<th>Number of Guest Rooms</th>
<th>Event Space (square feet)</th>
<th>Hotel Amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Meritage Resort</td>
<td>322</td>
<td>50,000</td>
<td>Full-service restaurant, lobby bar, blend coffee and sundries shop, chapel, pool, Crush Lounge with bowling lanes, fitness center, 9 acres of walkable vineyards, vineyard deck, and wine cave featuring spa, tasting room, and event space</td>
</tr>
<tr>
<td>Meritage Commons Expansion (opening June 2018)</td>
<td>145</td>
<td>25,380</td>
<td>Outdoor event lawn, Vintners Room with rooftop terrace, pool, food and beverage village including wine tasting rooms, boutique grocery market, demonstration kitchen, and fitness center</td>
</tr>
<tr>
<td>Napa AC Hotel + Residence Inn (to be built)</td>
<td>253</td>
<td>2,000</td>
<td>AC Hotel lounge, AC Hotel kitchen, library, outdoor living space with BBQs and fire pits, complimentary hot breakfast (RI guests only), grab-and-go markets (both on AC Hotel and Residence Inn side), fitness center, and pool</td>
</tr>
<tr>
<td>Total</td>
<td>720</td>
<td>77,380</td>
<td></td>
</tr>
</tbody>
</table>
The Meritage Resort has been developed and expanded, and Meritage Commons is currently under construction. In 2015, the City approved the construction of the Meritage Commons and the addition of an approximately 10,000-square-foot exhibition hall to the existing Meritage Resort. Meritage Commons includes 134 guest rooms and a variety of guest-serving amenities such as a wellness center, a spa, an outdoor event area, an exhibition kitchen, and a small guest-serving market. Shared facilities were included such as guest check-in for both hotels at the Meritage Resort, use of the existing restaurants and a shuttle service to downtown Napa. Environmental impacts for TMR and MC were previously analyzed. This EIR does not provide additional environmental analysis for TMR and MC.

The proposed Trinitas Mixed-Use Project will add guest rooms, amenities, and shared facilities, in addition to providing a winery and an office building. Guests of the AC Hotel and the Residence Inn will enjoy the food and wine experiences within the Village of the Meritage Commons or the spa treatments within the spa cave at The Meritage Resort. A shuttle and common signage and marketing will tie all the hotels together.

Following is a detailed description of the proposed Trinitas Mixed-Use Project.

The Trinitas Project site is made up of three vacant parcels and bound by Napa Valley Corporate Way and Napa Valley Corporate Drive. Highway 221 is located easterly of the Project site. The proposed Project's three distinct components are shown on Exhibit 4-11, Site Plan.

Table 4-3 below summarizes the proposed square footage for the Project.

<table>
<thead>
<tr>
<th>Table 4-3</th>
<th>Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hotel Component (253 guest rooms)</strong></td>
<td><strong>Area</strong> (square feet)</td>
</tr>
<tr>
<td>Guest rooms</td>
<td>99,076</td>
</tr>
<tr>
<td>Amenities, beverage and food</td>
<td>6,319</td>
</tr>
<tr>
<td>Meeting space</td>
<td>780</td>
</tr>
<tr>
<td>Lobby, lounges, and check-in</td>
<td>2,957</td>
</tr>
<tr>
<td>Back of house, circulation, and structure</td>
<td>46,425</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>155,557</td>
</tr>
<tr>
<td><strong>Winery Component</strong></td>
<td></td>
</tr>
<tr>
<td>Lobby, conference, sales, and tasting</td>
<td>3,160</td>
</tr>
<tr>
<td>Production and storage</td>
<td>15,986</td>
</tr>
<tr>
<td>Back of house and structure</td>
<td>7,068</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>26,214</td>
</tr>
<tr>
<td><strong>Office Component</strong></td>
<td></td>
</tr>
<tr>
<td>Leasable space</td>
<td>24,673</td>
</tr>
<tr>
<td>Non-leasable (restrooms and storage)</td>
<td>1,250</td>
</tr>
<tr>
<td>Non-leasable (circulation and structure)</td>
<td>3,955</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>29,878</td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td>211,649</td>
</tr>
</tbody>
</table>
Exhibit 4-11 Site Plan
The proposed Project components will have varying building heights, with the hotel being the tallest at approximately 57 feet including rooftop architectural features. The second tallest building would be the winery with a roof height of 28 feet and architectural features extending up to 38 feet. The office building would be the shortest structure with a roof height of 24 feet and architectural features extending up to 32 feet. The proposed building heights are provided on Table 4-4 below. An analysis of building heights is provided in Section 5.1, Aesthetics and Section 5.9, Land Use and Planning.

Table 4-4  Proposed Building Heights

<table>
<thead>
<tr>
<th></th>
<th>Hotel</th>
<th>Winery</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP-A (allowed)</td>
<td>40/60 feet</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>IP-B (allowed)</td>
<td>--</td>
<td>30 feet</td>
<td>30 feet</td>
</tr>
<tr>
<td>Project (proposed)</td>
<td>57 feet</td>
<td>28 feet/38 feet</td>
<td>24 feet/32 feet</td>
</tr>
</tbody>
</table>

1  IP-A up to four stories/60 feet with Planning Commission design review (Z.C.17.14.030)
2  Building height/architectural feature height

The Project site is bound by Highway 221, Napa Valley Corporate Way, Napa Valley Corporate Drive, and an adjacent lot with an office building and partially undeveloped land. The Project site is split into two zoning districts (IP-A and IP-B) with two distinct sets of setback requirements. Lot 1 (containing the hotel building) is within the IP-A district, which requires a minimum setback of 50 feet from Highway 221 and 35 feet from Napa Valley Corporate Way. Lot 2 (containing the winery building and a portion of the parking lot along Highway 221) is within the IP-B zoning district, which requires a minimum setback of 35 feet from Highway 221. Lot 3 (containing the office building) is within the IP-B zoning district, which requires a minimum setback of 35 feet from Napa Valley Corporate Drive. The following table details Project compliance with the zoning code setback requirements.

Table 4-5  Proposed Setbacks

<table>
<thead>
<tr>
<th></th>
<th>Lot 1 (IP-A)</th>
<th>Lot 2 (IP-B)</th>
<th>Lot 3 (IP-B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 221</td>
<td>50 ft./35 ft.</td>
<td>45 ft.</td>
<td>---</td>
</tr>
<tr>
<td>Napa Valley Corporate Way</td>
<td>35 ft./35 ft.</td>
<td>50 ft.*</td>
<td>---</td>
</tr>
<tr>
<td>Napa Valley Corporate Drive</td>
<td>35 ft./35 ft.</td>
<td>---</td>
<td>35 ft.</td>
</tr>
</tbody>
</table>

*Requirement of existing landscape easement

The General Plan establishes the allowable Floor Area Ratio (FAR) for the Corporate Park designation as 0.4. The proposed development at the Project site would have a FAR of 0.42, which is greater than is allowed by the General Plan. However, given Pacific Hospitality Group’s (PHG) ownership of The Meritage Resort, Meritage Commons, and this new Project component, the properties can be viewed in a comprehensive manner with regard to their integrated operations and to assess allowable FAR.

Zoning Code §17.52.120 C provides for the combination and averaging of FAR for projects that encompass several buildings on several lots. Using this approach, the Trinitas project component FAR would be computed in conjunction with Meritage, which are all located in close proximity and are all under the ownership/operation of PHG. The Meritage Resort, which is located on a 20.63-acre lot, expanded its operations in 2016 by incorporating a 9.3-acre lot located across the street for the construction of Meritage Commons. Zoning Code
§17.52.120 C provides for the combination and averaging of FAR for projects that encompass several buildings on several lots. Using this approach, the Trinitas project component FAR would be computed in conjunction with The Meritage Resort and Meritage Commons developments.

The table below is a summary of square footage and FAR approved under the most recent discretionary review process PA 15-0071.

<table>
<thead>
<tr>
<th>Table 4-6</th>
<th>Comprehensive Project FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>Development Area</td>
</tr>
<tr>
<td>The Meritage Resort</td>
<td>20.63</td>
</tr>
<tr>
<td>Meritage Commons</td>
<td>9.3</td>
</tr>
<tr>
<td>Trinitas Mixed-Use Project</td>
<td>11.55</td>
</tr>
<tr>
<td>Meritage/Trinitas Combined</td>
<td>41.48</td>
</tr>
</tbody>
</table>

The Project proposes a total of 211,694 square feet for the hotel, the winery, and the office building, which exceeds the maximum allowable floor area established by the General Plan FAR by approximately 10,403 square feet. Through prior planning applications, the City approved 477,667 of the 521,500 square feet for The Meritage Resort and Meritage Commons, providing a surplus of 43,833 square feet. Mitigation included herein requires recordation of a covenant, or other satisfactory device, to restrict the allowable square footage to ensure that the total remaining intensity for Meritage is not exceeded. A General Plan Amendment or other legislative act to increase the Project FAR is not required if Zoning Code §17.52.120 is utilized to average the FAR across all three developments.

4.3.1 Mixed-Use Visual Character

The Project components are designed with a cohesive architectural theme. Proposed materials include wood, reclaimed wood, stucco, and colored concrete block combined with more contemporary materials such as concrete, steel, and glass. The proposed materials would be incorporated into the Project to provide modern features for each individual building by using materials that are commonly found in homes, towns, and wineries in the area.

The Design philosophy that defines the Project, is a creation of buildings that weave themselves into the fabric of the regional architecture while creating an identity of their own. The Project takes its influences from the Napa agrarian architecture and the wines it represents. The clean lines with shed roofs and simple forms create a design that is an ode to the winery barns of old, while embodying a casual sophistication. The material palette with accents of corrugated metal and wood, strengthen this idea of the simple utilitarian elegance. The use of deep color for the metal cladding against the light color of the plaster is an homage to the variety of wines produced in the area. Altogether, the design of the Project is a reflection of the wine industry that is synonymous to the Napa identity.

The dual-branded AC Hotel and Residence Inn, while functioning as one building, each has a distinctive brand identity that allows it to address the unifying vision for this Project in its own unique way. The Residence Inn brand is known for being more restrained and residential. The architecture addresses this by keeping the forms simple and utilitarian with
the barnwood accents providing the agrarian feel. By contrast the AC Hotel brand is known for a more modern aesthetic, and so the corrugated metal shed forms are more expressive and the colors bolder, influenced heavily from the more contemporary architecture that can be seen around Napa.

The Winery building is a more utilitarian structure where the function drives form. The wine industry is the heart and soul of Napa so it is fitting that the most dominant architectural features of this barn style building are driven by the processing, production and storage of the wine that is produced here. A continuation of the materials palette and architectural forms ties it together with the other two buildings giving it the same restrained elegance.

The Office building is nestled away furthest from the highway and closest to the one and two-story buildings that make up the bulk of the Napa Valley Commons area. The corrugated metal and shed roof forms continue the architectural language established by its two neighbors to give it the Napa feel, but it is the most restrained of the three with a limited material palette that helps it blend into the surrounding area.

Several illustrative plans have been included in this document to provide the reader with a visual interpretation of the proposed Project; however, they do not contain the level of Project detail as provided by plans or drawings, and are intended to provide the reader a visual reference. Illustrative plans for the hotel, the winery, and the office building are depicted in Exhibit 4-12 through Exhibit 4-18, Project Rendering. A further description of the visual character for each component is provided below.

4.3.2 AC Hotel and Residence Inn

The hotel is proposed as a 4-story, 253-guest-room, dual-branded Marriott hotel featuring an AC Hotel and a Residence Inn. The dual-branded hotel will be constructed as a single building with several shared features, but will operate to provide distinct experiences. The building architecture will incorporate subtle differences for each brand, with separate arrival and lobby areas. The hotels will have a combined total of approximately 99,000 square feet of guest rooms, 3,800 square feet of food and beverage, 2,500 square feet of guest amenities, and 780 square feet of shared meeting space. The two hotel brands will share back of house and circulation areas, as well as a fitness center, an event lawn, and pool amenities.

The hotel will also include areas to accommodate housekeeping, employee facilities, mechanical/electrical, and circulation, such as corridors, back of house circulation, stairwells, elevator cores, and public circulation. The hotel is planned with three distinct areas within the building including the AC Hotel check in, amenities and guest rooms, Residence Inn check in, amenities and guest rooms, and shared common area amenities. As a select service operation, the hotels will not include a restaurant or room service, but will provide limited breakfast service. Each of these components is described in more detail below. Detail of the proposed hotel is depicted on Exhibit 4-19 through Exhibit 4-23, Hotel Floor Plans.
Exhibit 4-12  Project Rendering – Aerial View of Project Components
Exhibit 4-13  Project Rendering – View of Hotel and Amenities
Exhibit 4-14  Project Rendering – Entrance to AC Hotel
Exhibit 4-15  Project Rendering – Residence Inn Entrance
Exhibit 4-16  Project Rendering – Trinitas Winery Arrival
Exhibit 4-19 Hotel Floor Plan – Level 1
Exhibit 4-20  Hotel Floor Plan – Level 2
Exhibit 4-21  Hotel Floor Plan – Level 3
Exhibit 4-23  Hotel Floor Plan – Roof
1. **AC Hotel**

The AC Hotel will have 153 guest rooms located on the northern portion of the hotel building. The amenities provided for the AC Hotel include an approximately 900-square-foot kitchen area, an 1,800-square-foot lounge, an 800-square-foot library and media center, and an open air bar.

As mentioned above, the AC Hotel will not have a restaurant or room service. A European-style breakfast of premade baked eggs dishes will be served to guests in the mornings, and small plate appetizers will be served in the evenings. AC Hotel guests will be offered shuttle service to downtown Napa and to its sister hotel, The Meritage Resort, which offers a full-service restaurant and is located approximately two-tenths of a mile away on Bordeaux Way.

Guests enter the AC Hotel through the AC Hotel entry on the north side of the building facing the winery. The bar, market, library, and media area separate the lobby and check-in area from the guest rooms. The entry will be distinguishable to guests through the use of a canopy, pavers, landscaping, and signage. Upon entry, guests will check in at the AC Hotel lobby and check-in area. Parking for the AC Hotel will be provided in the northeastern portion of the parking lot.

The AC Hotel will have five queen and king guest room configurations. Guests will have options ranging from a standard double queen room to a large king room. The standard guest rooms are designed with a sleeping area and a separate bathroom. The king guest rooms are designed with a sleeping area and a pull-out couch sitting area along with a separate bathroom. The AC Hotel guest rooms will not be equipped with kitchens. Both the king and queen configurations will offer ADA accessible rooms for guests.

2. **Residence Inn**

The Residence Inn will have 100 guest rooms located on the southern portion of the hotel building. The amenities provided for Residence Inn include an approximately 700-square-foot breakfast area and 1,000-square-foot hearth room. Guests will enter the Residence Inn at the southeast corner of the building facing Napa Valley Corporate Way. The Residence Inn entry way opens into the check-in area and hearth room. The entrance will be distinguishable to guests through the use of a canopy, pavers, landscaping, and signage. The guest rooms are located in two separate areas in the east wing and the main building of the hotel. Amenities are located in a central area adjacent to the check-in area. Parking for the Residence Inn will be provided in the southeastern parking area with overflow parking provided in the southern parking area.

The Residence Inn will have nine queen and king room configurations. Guests will have options ranging from studios to two bedrooms. The studio guest rooms are designed as one single room with a sleeping area, a kitchen and living room area, and a bathroom. The one-bedroom guest rooms are designed with either two queens or one king bed in the bedroom, a separate kitchen and living room area with dining seating and a couch, and a bathroom. The two-bedroom guest rooms are designed with a king bed in the first room and a queen bed in the second room, a separate kitchen and living room with dining seating and a couch, and a bathroom. All guest rooms will come equipped with a kitchen and all room configurations will offer ADA accessible rooms for guests.
3. **Hotel Building Features**

   The hotel building is generally oriented toward the parking lot facing SR 221. The hotel building mainly runs north from the Kaiser Data Center end of the property and south towards Napa Valley Corporate Way, with two guest room wings that extend easterly containing a majority of the guest rooms. The southern guest room wing contains Residence Inn guest rooms, and the northern guest room wing contains AC Hotel guest rooms. Looking north from Napa Valley Corporate Way, the hotel building shape is intended to provide substantial massing relief by obscuring the back half of the building and appearing only as an L-shape. The shape of the hotel building serves to create a centrally located sheltered area for the pool and outdoor common area.

   Building heights for the hotel range from 47 feet with ridgelines up to approximately 57 feet. Building heights and mass are generally consistent with the maximum height on the southern perimeter being approximately 1 foot lower than the northern perimeter. The hotel is a 4-story building with amenities and a limited number of guest rooms located on the first floor with the remainder of guest rooms located on floors two through four. The hotel building incorporates flat and pitched rooflines throughout with several pop-up roofline elements.

4. **Shared Hotel Amenities**

   As discussed above, the proposed dual-branded hotel will share several amenities, including a 1,600-square-foot fitness center located centrally on the first floor of the building between the meeting room and the AC Hotel kitchen. The fitness center will be accessed from inside the building through an internal corridor that connects the AC Hotel to the Residence Inn. The main shared hotel area is the common outdoor space located between the two wings of the hotel. This common outdoor space includes a small lawn, a fire pit with seating, a covered barbeque area, a table seating area, a pool, a spa, a pool deck lounge area, and cabanas, as shown on Exhibit 4-24, Hotel Shared Outdoor Area Illustrative Plan.

   The shared outdoor area will have access from four hotel entry points, two on the AC Hotel side and two on the Residence Inn side. The shared outdoor area entry points for the AC Hotel are located at the main part of the building, adjacent to the lounge and bar area and at the east end of the AC Hotel guest room corridor. The shared outdoor area entry points for the Residence Inn are located at the main part of the building, adjacent to the hearth room and at the east end of the Residence Inn guest room corridor.

   The shared outdoor entry points open to a central lawn area with a fire pit and seating area located to the north of the event lawn near the AC Hotel. A water feature will be located to the south of the lawn near the Residence Inn. A covered barbeque area will be located on the south near the Residence Inn. A trellis is proposed to cover the barbeque and seating area. The spa and associated deck lounge seating will be located to the east of the barbeque area towards the parking lot, and a small storage building will be located at the end of the shared outdoor area between the spa and the parking lot. The pool and associated deck lounge seating will be located centrally near the AC Hotel side of the shared outdoor area. Pedestrian paths will connect each of the separate outdoor shared components, enabling hotel guests to move freely about the area.
Exhibit 4-24  Hotel Shared Outdoor Area Illustrative Plan
4.3.4 Winery

The proposed winery is a single-story 26,214-square-foot building that will include approximately 3,000 square feet of front of house uses such as production and storage facilities, a conference room, a tasting area, and a sales office. The winery also includes approximately 7,000 square feet of ancillary or back of house uses such as administrative offices, a wine lab, a storage area, restrooms, and associated mechanical areas. Wine production and storage will occupy approximately 15,000 square feet of the building, and an approximately 5,500-square-foot exterior lawn for small events and tastings is proposed to be located on the south side of the building between the winery and the hotel. The entrance to the winery would be east facing with an arrival area that will be distinguishable to guests through the use of a canopy, pavers, landscaping, and signage. Upon entry into the winery, guests will be greeted in the lobby/salon area that opens directly into the bar and kitchen. The conference/library room will be immediately to the left and two small tasting rooms to the right. A larger barrel tasting room will be located on the left between the conference/library room and the kitchen. The public area in the winery will be limited at just over 3,000 square feet with the remaining area consisting of the crush pad, the cellar, barrel storage, and other back of house uses such as offices, restrooms, storage, circulation, and employee facilities. Detail of the proposed winery is depicted on Exhibit 4-25, Winery Floor Plan – Level 1.

The event lawn is bordered by trees located to the south of the winery building, between the hotel and the winery. The event lawn is anticipated to function as an outdoor area for entertaining groups of up to approximately 150 people. No permanent roofing or canopy is proposed for the event lawn, which will be maintained as an open space grassy area when not in use. It is anticipated that the event lawn will have events throughout the year. Although a majority of events will occur during the warmer summer months. For the purpose of this analysis, it is assumed that regular use of the event lawn would be consistent with the provisions of the City’s Municipal Code, and events that would otherwise require special permitting will require compliance with use permit conditions. An in-depth review of event noise generation is contained in Section 5-10, Noise.

Winery Building Features

The winery building is proposed to be 28 feet high with architectural features extending to 38 feet high. Design features at the winery include a combination of slanted and flat roofs, exterior articulated columns, and art niches. Building façade materials include corrugated aluminum metal painted in a colonial red paint on the exterior columns bordering a portion of the building’s east façade and a standing seam roof also painted with colonial red paint along the southern portion of the building. Additional incorporated materials include reclaimed wood, stucco, and polished CMU block used throughout the building’s façade.
Exhibit 4-26  Winery Roof Plan
Wine Manufacturing and Production

The winery is anticipated to be either a single-tenant or a custom crush operation producing approximately 50,000 barrels of wine per year. Grapes used for crush will be delivered directly into the crush pad via the delivery area at the western side of the winery building. The wine produced in the crush pad will be transferred to the cellar or barrel storage for the fermentation process, while industrial wastewater will be transferred to a wastewater treatment area located opposite the loading area adjacent to the trash enclosures. At the end of the fermentation period, wine stored in the cellar and barrels will be bottled and packaged for distribution. As required by the City’s Zoning Code, all wine manufacturing operations will occur within the building, and the associated mechanical yard will be screened by a 6-foot wall to meet city zoning regulations.

Wastewater Treatment

As indicated above, wastewater treatment for wine waste will be provided on-site. The industrial wastewater from the winery will be held in a tank beneath the winery and transferred through an underground piping system to an on-site wastewater treatment area located immediately to the southwest of the winery across an internal drive aisle. The wastewater treatment area will be approximately 2,800 square feet in size and includes three cylindrical water storage tanks and the wastewater treatment system itself. The wastewater treatment area will be shielded from view through the use of fencing and landscaping. The wastewater treatment area will be accessed through a gate to ensure that the area remains secure.

The industrial wastewater treatment process includes a filtration process where solid and liquid elements of the wastewater will be separated. The solids will be dewatered and disposed of with normal trash, and remaining water will be filtered to a pure state through a reverse osmosis system. The resultant pure water will be stored in tanks in the wastewater treatment area and dispersed through the Project’s landscape irrigation system, which will be directly connected to the pure water storage tanks. The proposed winery will not connect into the sewer system or use a hauling system. All industrial wastewater water will be treated on-site.

4.3.5 Office Building

The proposed office building is a 2-story, 29,878-square-foot building with highly modular office space. A majority of the office space will serve as management offices for the on-site winery, the on-site dual-branded AC Hotel/Residence Inn, The Meritage Resort, and Meritage Commons, which are all under common ownership and management. The remaining leasable space would be approximately 8,000 square feet. Amenities at the office building include a 1,700-square-foot meeting room, a 1,500-square-foot lobby, an outdoor courtyard area, and bicycle parking.
The office building would be located immediately off Napa Valley Corporate Drive. Office tenants and employees will enter using the driveway and park in the parking lot located adjacent to Napa Valley Corporate Drive. Overflow parking spaces are provided along the perimeter of the northern boundary of the subject property. The office building entrance is west-facing towards Napa Valley Corporate Drive and will be distinguishable to guests through the use of a canopy, pavers, landscaping, and signage. Detail of the proposed office building is depicted on Exhibit 4-27, Office Floor Plan – Level 1 and Exhibit 4-28, Office Floor Plan and Roof Plan.

The office building would have a roof level height of approximately 24 feet with architectural features extending to 32 feet in height. Building façade materials include corrugated aluminum metal painted in a colonial red paint on the exterior columns of the building’s east façade and a standing seam roof also painted with colonial red paint along the southern portion of the building. Additional materials include painted stucco, aluminum C-channel, and large double pane windows used throughout the building’s exterior. Building accent features include sky lights, a glass-aluminum curtain wall, horizontal louvers and wood door awnings.

### 4.3.6 Site Access and Circulation

Vehicular access to the Project site will be provided from the existing driveway on Napa Valley Corporate Way, and a new right in/right out driveway is proposed on Napa Valley Corporate Drive. Visitors accessing the hotel and winery are anticipated to utilize the Napa Valley Corporate Way entry point, while the office traffic is anticipated to utilize the Napa Valley Corporate Drive access point. The traffic study identified impacts in the cumulative condition to the main access off Napa Valley Corporate Way, which requires the installation of a traffic signal or roundabout as further detailed in Section 5.13, Transportation/Traffic.

Once on-site, vehicles accessing the property from Napa Valley Corporate Way will be prompted by internal signage to proceed easterly towards the AC Hotel and the Residence Inn arrival areas, and the winery. Delivery trucks entering from Napa Valley Corporate Way will be directed through the property using an internal drive aisle to the winery and hotel delivery areas. The office building will be primarily accessed from Napa Valley Corporate Drive where internal signage will direct vehicles. As shown on the Site Plan, the entry off Napa Valley Corporate Way will be enhanced with street paving to assist in directing vehicle traffic along the primary access way to the hotel parking areas and entrances. The primary access throughout the Project will be provided around the perimeter of the site, and speed bumps will be installed throughout the northern drive aisle to minimize the occurrence of speeding along the northern boundary of the Project site. The proposed internal drive aisle is intended to be a secondary accessway used only for deliveries and trash pickup.

Surface parking throughout the Project site will allow patrons and guests to park close to their destination. Parking spaces will be provided via surface parking around the exterior perimeter of the Project site. The proposed Project will provide 441 on-site parking spaces. Based on the parking ratios set forth in Zoning Code §17.54.040, the applicant is required to provide a total of 444 parking spaces. The proposed Project will be three spaces short of the required parking based on the zoning code standards for all three uses, and will request a reduction in the required parking by three spaces based on the shared uses.
Exhibit 4-27  Office Floor Plan – Level 1
Exhibit 4-28  Office Floor Plan and Roof Plan
Table 4-7 details required parking totals.

Table 4-7  Vehicle Parking Summary

<table>
<thead>
<tr>
<th>Component</th>
<th>Required Spaces</th>
<th>Proposed Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel (1 space per room)</td>
<td>253</td>
<td>250</td>
</tr>
<tr>
<td>Staff (1 space per every 2 employees)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>264</td>
</tr>
<tr>
<td>Winery (1 space per 500 square feet)</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Admin/sales (1 space per 350 square feet)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Office (1 space per 200 square feet)</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>441</td>
</tr>
<tr>
<td>Shortfall</td>
<td>--</td>
<td>3</td>
</tr>
</tbody>
</table>

The Project will provide 441 on-site parking spaces including 15 ADA-compliant parking spaces and 53 clean air vehicle parking spaces, which are counted towards the required total for the Project and are represented in the table above. As detailed above, the Project provides three parking spaces fewer than is required by City Code. However, as a mixed-use project with different peak parking periods, it is anticipated that office parking would be available on evenings and weekends, which are the peak demand periods for the hotel.

The Project also proposes the installation of on-site bike racks and bike storage. The short-term bike racks are for day use only and a covered and lockable bike storage area is intended for longer storage needs. The hotel bike racks and bike storage will be located at the back of the building adjacent to the internal driveway. The winery will provide bike racks at the northern side of the building adjacent to the drive aisle and parking running along the northern boundary of the property. No bike storage will be provided at the winery. The office building will provide bike racks at the front entrance of the building facing Napa Valley Corporate Drive. Bike storage for the office building will be provided at the back of the building adjacent to the internal drive aisle. Table 4-8 details short-term (bike racks) and long-term (bike storage) bike parking for the proposed Project:

Table 4-8  Bike Parking

<table>
<thead>
<tr>
<th>Component</th>
<th>Required Spaces</th>
<th>Proposed Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel (short term)</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Hotel (long term)</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Winery (short term)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Winery (long term)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Office (short term)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Office (long term)</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>
Pedestrian access and circulation will be maintained on-site through the construction of pathways and directional signage. The Project proposes sidewalk improvements along Napa Valley Corporate Drive and Napa Valley Corporate Way that will provide direct pedestrian access onto the Project site.

The proposed internal drive would require the removal of a trash enclosure belonging to the neighboring office building located to the west of the Project site. The proposed Project includes the relocation of the trash enclosure approximately 100 feet to the north. The relocated trash enclosure will be approximately the same size or slightly larger than the existing trash enclosure and will be accessible from the neighboring site through the proposed internal drive aisle on the subject site. Disposal of trash, including trash truck pick up, will function in the new location the same way as it currently operates. The applicant will maintain the neighbor’s trash enclosure on the Project site in a location approximately 100 feet from its existing location.

4.3.7 Signage

The Project proposes on-site signage. The Project signs would be informational and directional and advisory, and subject to the City’s discretionary approval process. There will be a variety of signs at the Project entries and within the interior of the Project site to assist in wayfinding for hotel guests, winery patrons, office employees and visitors, and for service and deliveries, as shown on Exhibit 4-29, Sign Program Site Location and Sign Types. Sign materials will primarily consist of aluminum painted backing with aluminum primary tenant addresses pinned off the sign and vinyl lettering. Sign design examples are provided in Exhibit 4-30 through Exhibit 4-47, Sign Plan Signage Examples. The following table provides the number and types of signs proposed by the Sign Program.

<table>
<thead>
<tr>
<th>Sign Type</th>
<th>Quantity</th>
<th>Area (sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 4: Directional Sign</td>
<td>8</td>
<td>15 per face</td>
</tr>
<tr>
<td>Type 5: Accessible Parking</td>
<td>15</td>
<td>per Code</td>
</tr>
<tr>
<td>Type 6: Legal Notice</td>
<td>2</td>
<td>per Code</td>
</tr>
<tr>
<td>Type 7: On-site Stop Sign</td>
<td>1</td>
<td>per Code</td>
</tr>
<tr>
<td>Type 9A: Single Tenant Monument</td>
<td>1</td>
<td>30 per face</td>
</tr>
<tr>
<td>Type 9B: Multi-Tenant Monument</td>
<td>2</td>
<td>30 per face</td>
</tr>
<tr>
<td>Type 10: Storefront Signage</td>
<td>4</td>
<td>5 per panel</td>
</tr>
<tr>
<td>Type 11: Building Mounted Signage</td>
<td>7</td>
<td>25 per panel</td>
</tr>
<tr>
<td>Type 13: Clean Air/EV Parking</td>
<td>89</td>
<td>per Code</td>
</tr>
</tbody>
</table>

In addition to interior signs, several signs will be positioned on-site to be viewed from the street and the sidewalks. These signs include a multi-tenant entry sign at the entry way off Napa Valley Corporate Drive and Napa Valley Corporate Way with several directional signs. One multi-tenant monument entry sign will be placed at each entrance to identify multiple tenants within the Project area, and will be double faced up to 30 square feet in size. The single-tenant monument sign will be installed at the entry of the office building and will be a single-faced sign up to 30 square feet in size.
Sign Program Site Location and Sign Types
TRINITAS MIXED USE SIGN PROGRAM

3.1 Sign Type 4: Directional Signing

Exhibit 4-30  Sign Plan Signage Examples – Sign Type 4: Directional Signing (Sheet 4.0)
Exhibit 4-31  Sign Plan Signage Examples – Sign Type 4: Directional Signage (Sheet 4.1)
TRINITAS MIXED USE SIGN PROGRAM

3.2  Sign Type 5: Accessible Parking

Code required signs at each HC parking space for car or van

Exhibit 4-32  Sign Plan Signage Examples – Sign Type 5: Accessible Parking (Sheet 5.0)
Code required signs at each HC parking space for car or van

**Exhibit 4-33  Sign Plan Signage Examples – Sign Type 5: Accessible Parking (Sheet 5.1)**
TRINITAS MIXED USE SIGN PROGRAM

3.3 Sign Type 6: Legal Notice

Code required sign for notices regarding HC parking space use, fire lanes, and private property

15 SQ FT per sign face, sign is singlefaced
Code required sign for notices regarding HC parking space use, fire lanes, and private property

15 SQ FT per sign face, sign is singlefaced

Exhibit 4-35  Sign Plan Signage Examples – Sign Type 6A: Legal Notice (Sheet 6.1)
TRINITAS MIXED USE SIGN PROGRAM

3.4 Sign Type 7: On-Site Stop Sign

Code required sign for interior STOP locations

Exhibit 4-36  Sign Plan Signage Examples – Sign Type 7: On-Site Stop Sign (Sheet 7.0)
Exhibit 4-37  Sign Plan Signage Examples – Sign Type 7A: On-Site Stop Sign (Sheet 7.1)
Chapter 4. Project Description
Draft Environmental Impact Report

Exhibit 4-38  Sign Plan Signage Examples – Sign Type 9A: Single-Tenant Monument (Sheet 9.0)
Exhibit 4-39  Sign Plan Signage Examples – Sign Type 9A: Single-Tenant Monument (Sheet 9.1)
TRINITAS MIXED USE SIGN PROGRAM

3.6 Sign Type 9B: Multi-Tenant Monument

Exhibit 4-40 Sign Plan Signage Examples – Sign Type 9B: Multi-Tenant Monument (Sheet 9.2)
Exhibit 4-41  Sign Plan Signage Examples – Sign Type 9B: Multi-Tenant Monument (Sheet 9.3)
TRINITAS MIXED USE SIGN PROGRAM

3.7 Sign Type 10: Storefront Signage

Exhibit 4-42 Sign Plan Signage Examples – Sign Type 10: Storefront Signage (Sheet 10.0)
Exhibit 4-43  Sign Plan Signage Examples – Sign Type 10: Storefront Signage (Sheet 10.0) continued
TRINITAS MIXED USE SIGN PROGRAM

3.8 Sign Type 11: Building Mounted Signage

Exhibit 4-44  Sign Plan Signage Examples – Sign Type 11: Building-Mounted Signage (Sheet 11.0)
Exhibit 4-45 Sign Plan Signage Examples – Sign Type 11: Building-Mounted Signage (Sheet 11.0) continued
Exhibit 4-46 Sign Plan Signage Examples – Sign Type 11: Building-Mounted Signage (Sheet 11.0) continued
TRINITAS MIXED USE SIGN PROGRAM

3.9 Sign Type 13: Clean Air/Electric Vehicle Parking

Added / New Sign Type

Used at surface parking spaces as required

Exhibit 4-47 Sign Plan Signage Examples – Sign Type 13: Clean Air/Electric Vehicle Parking
Several primary directional signs are proposed around the perimeter of the proposed Project site throughout the parking areas. These signs would be installed at eight locations within the property to assist in wayfinding. The proposed signs would assist in vehicle flow and safety, identification of accessible parking, and providing legal notices. However, signs are also proposed as tenant identification and as an ease for wayfinding. Additional information regarding signage and wayfinding can be found in Section 5.13, Transportation/Traffic.

4.3.8 **Existing and Planned Napa Valley Commons Hotels – Combined Operations**

The Project is intended to complement and operate in association with The Meritage Resort (TMR), which is an existing hotel located south of the Project site, and Meritage Commons (MC), which is an expansion of TMR and currently under construction. All three hotels are under common ownership. The hotels will have shared components including back of house services, laundry, and guest-serving components such as a shuttle between the new hotel component and TMR/MC and to the downtown. The hotels will also share a managing director who will oversee all day-to-day operational activities of the resort district. There will be shared operations among the hotels, including facilities management and engineering, marketing and sales and accounting.

4.3.9 **Infrastructure and Utilities**

The Project site, although not currently, because it is a vacant lot, would be served by existing utility and other service providers. Utilities in the area are provided by Pacific Gas and Electric, and phone services are provided by an array of companies including AT&T and Comcast. The City of Napa Water District is the responsible agency for providing water to the proposed Project and the City of Napa Recycling and Solid Waste division is responsible for trash pickup. As a function of the Project, an existing trash enclosure belonging to the neighboring property and located on the subject property will be relocated for the purpose of creating a clear path for the internal drive aisle between the subject property and the neighboring property. The trash enclosure belonging to the neighbor will be moved approximately 100 feet northerly along the proposed internal drive aisle.

Napa Sanitation District is responsible for providing sewer service and recycled water service to the Project. The Project will provide the infrastructure for the sewer and recycled water connections. In addition, the Project includes retrofits for upsizing of connection pipes within the public domain and a storm water detention tank on the Project site for the purpose of detaining the discharge differential between the 25-year and 10-year storm event on-site. In addition to the proposed detention tank, the Project will implement Drainage Management Area (DMA) and Integrated Management Practices (IMP) strategies. Additional information and analysis regarding storm water can be found in Section 5.8, Hydrology and Water Quality.

4.3.10 **Tree Preservation and Planting**

The Project arborist identified 50 trees on the Project site that were each analyzed in terms of size, location, current condition and anticipated survival rate based on existing condition. The survey of on-site trees resulted in a determination that four of the on-site trees (three valley oaks and one coast live oak) are protected species per the City of Napa regulations. These
trees will be preserved on-site per the City of Napa regulations, and measures will be implemented to ensure their continued health.

The remaining 46 trees on site are not protected and do not require preservation by the City; however, 43 of those trees are worth preserving based on their condition. It is the intent of the proposed Project to maintain the 43 healthy trees on-site, which are largely located at the southeast corner of the Project site. It is anticipated that these trees will be minimally impacted by construction and will most likely tolerate the minimal amount of root pruning that will be required during construction. Additional information and analysis regarding the trees located on-site can be found in Section 5.3, Biological Resources.

The Project includes preservation of nearly all existing on-site trees, but also will provide a total of 430 new trees and shrubs throughout the Project site, as shown on Exhibit 4-48, Tree Plan. The perimeter of the of the Project site along the parking area and drive aisles will be lined with approximately 82 California live oak and California sycamore trees.

In the parking lot areas of the Project, where cars will be more densely present, African Sumac will be planted to provide shield from view and shade from the sun. Approximately 22 Mediterranean Cyprus trees are also proposed to be used in the main parking lot to assist in breaking up the area, and 120 Mediterranean cypress trees will be planted along the buildings’ exterior walls to provide color, visual texture and as a compliment to the aesthetics of the buildings themselves. Although it is acknowledged that the 45-foot setback area between SR 221 and the winery could present the potential for additional landscaping, the setback area is encumbered by two easements that take up the entire setback. Support for landscaping within the setback cannot be granted to the applicant due to required access and maintenance of the easement. Any planting within the easement areas would need to be consistent with City of Napa utility maintenance guidelines.

A majority of the proposed trees would be planted in the parking lots and along the outside of the buildings. There are six rows of parking between the winery and SR 221. The Applicant proposes planting more than 100 trees in the parking lot and drive aisles located between the winery and SR 221 for the purpose of minimizing and attenuating the visual appearance of a large parking area along SR 221 in addition to providing parking lot shade.

The Applicant proposes to plant approximately 30 trees in the parking lot and drive aisle between the hotel and SR 221. The tree planting in this area is less than between the winery and SR 221, where there are only two rows of parking. The winery parking lot contains six rows of parking. In addition, the tree planting in this area is limited, as compared to the winery, in an attempt to preserve guest views from the hotel across SR 221 to the vineyards. As discussed above, the proposed Project will maintain the existing grove of 43 trees located at the southeast corner of the Project site at Napa Valley Corporate Way and SR 221.

The building frontages and walkways will be lined with a variety of other trees including 54 olive trees, 21 northern red oak trees, 44 callery pear trees, 19 laurel trees, and 22 strawberry trees. In addition to the proposed trees, the Project also includes an extensive landscape plan with variety of shrubs, hedges, grasses and succulents. A full list of these can be found on Exhibit 4-49, Planting Legend. Additional information and analysis regarding the trees planting can be found in Section 5.1, Aesthetics.
Exhibit 4-48  Tree Plan
**Chapter 4. Project Description**

**Draft Environmental Impact Report**

**Section 4.3 – Project Description**

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### Exhibit 4-49  Planting Legend

<table>
<thead>
<tr>
<th>Trees Imagery</th>
<th>List of Shrubs/Ground Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>N ° 1 - ABIES LINDLEYI</td>
<td>Ginkgo biloba</td>
</tr>
<tr>
<td>N ° 2 - CUPRESUS SEMPERVIRENS</td>
<td>Pinus radiata</td>
</tr>
<tr>
<td>N ° 3 - LAURELUS NOBILIS</td>
<td>Quercus rubra</td>
</tr>
<tr>
<td>N ° 4 - OLIVE EUROPEA</td>
<td>Quercus agrifolia</td>
</tr>
<tr>
<td>N ° 5 - PHOENIX CANARIENSIS</td>
<td>Quercus agrifolia</td>
</tr>
<tr>
<td>N ° 6 - PLATANUS RACEMOSA</td>
<td>Quercus agrifolia</td>
</tr>
<tr>
<td>N ° 7 - SYCAMORE STELLAIRE</td>
<td>Quercus agrifolia</td>
</tr>
<tr>
<td>N ° 8 - RHUS LANCEA</td>
<td>Quercus agrifolia</td>
</tr>
</tbody>
</table>

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*January 2018 Trinitas Mixed-Use Project*
4.4 Environmental Features

The Project site is characterized as an 11.55-acre undeveloped and rough graded lot with trees bordering the southern frontage and the southeast corner. The Project site is an open, vacant lot with multiple trees found on the eastern and southern perimeter of the site. There are three mature valley oaks on the western side of the property, a small coast live oak located on the eastern side of the property, and 31 small redwood trees located throughout the Project site. Natural drainage consists of sheet flow over the ground surface that concentrates in manmade surface drainage elements such as roadside ditches and natural drainage elements such as swales, ravines, and creeks.

The environment and the Project sustainability are important factors of the Project design. A fundamental strategy for the property is to deliver a “green” and sustainable community. There are differing concepts of green building design elements due to the broad range of sustainable issues. Definitions vary from wide-ranging concepts that incorporate all aspects of sustainability to narrow definitions that focus on one specific sustainable design feature such as water harvesting or energy efficiency. While there is no formal definition of green site design, the term implies a site structure that is friendlier to its occupants and the environment and is more resource efficient. In general, green building design entails the implementation of these related community goals: energy efficiency, healthy indoor air quality, waste reduction, water efficiency, and reduced environmental impacts. The green building design field continues to evolve as new technologies and products come into the marketplace and innovative designs improve their effectiveness. Although it cannot be predicted what technology will be available in the future, the Project proposes to exceed current standards for low impact design.

The Project design feature options included herein are intended to exceed current standards of protection for all valuable resources, including but not limited to:

1. **Outdoor Air Quality** – The proposed mixed-use development will offer connection to on-street sidewalks to offer pedestrian and bicycle links from one use to another, resulting in reduced automobile trips.

2. **Water Usage and Storm Water Quality** – The low impact development plan will include the use of drought-resistant plant materials, reclaimed water for all landscape irrigation purposes, water-saving systems, and the use of storm water filtering systems throughout the Project site. All development will comply with water-saving features such as utilizing low-flow showerheads, faucets, and water closets. Landscaping water usage will be reduced by using drought-tolerant California-friendly plant material and irrigation systems that measure the local weather condition and respond to current conditions. The use of large areas of turf is minimal, and is not utilized in landscape areas. Roof collection systems will divert rain water to irrigate drought tolerant landscape area. The Project will be in compliance with the City of Napa Water Efficient Landscape Ordinance (WELO) as well as state criteria for water usage.
3. **Energy** – Reduction of energy usage by the proposed Project can be accomplished by using passive solar techniques and low energy lighting. Passive solar techniques such as incorporating roof overhangs, awnings, trellises, and shade trees to selectively control heat gain, installation of windows to catch breezes and provide cross ventilation should be considered.

Appliances used by the hotel shall be Energy Star qualified appliances. The Project will also comply with the California Energy Code and Green Building Code.

4. **Outdoor Lighting** – Outdoor lighting will:
   - Be designed to prevent glare, light trespass, and sky glow as much as possible
   - Be architecturally integrated with the character of the structures consistent with the Napa Valley Commons Design Guidelines
   - Be directed away from adjacent properties and public rights-of-way
   - Be energy-efficient and shielded so that all glare is confined within the boundaries of the site
   - Use timers, where acceptable, to turn outdoor lights off during hours when they are not needed
   - Be appropriate in height, intensity, and scale to the uses being served
   - Use no more intensity than absolutely necessary
   - Use (LED) light emitting diode fixtures where appropriate
   - Conform with California Energy Code and Green Building Code

5. **Waste Management** – Disposal of solid waste should include provision for recycling.

6. **Construction** – The use of renewable and recyclable materials will be encouraged for the construction of all structures.

7. **Debris Control** – Projects shall divert construction and demolition waste to designated landfills in accordance with City standards.

8. **Building Materials** – Porous or pervious pavement should be used for walks and driveway surfaces and parking areas where possible.

9. **Construction Indoor Air Quality Management Plan** – The developer shall provide a construction air quality management plan on the construction drawings that, at a minimum, includes protecting ducts during construction and changing the filters and vacuuming ducts prior to occupancy.

The developer shall use interior paints and wood finishes with low volatile organic compound (VOC) levels.
4.5 Construction Schedule

Development of the Project site is anticipated to take approximately 19 months to complete, with construction to last approximately 18 months. The work performed will include general site work and construction of the hotel, winery, and office. Site work is anticipated to last 90 days, including grading of approximately 30,150 cubic yards of export, site preparation, and utility infrastructure. Work on the hotel is anticipated to be ongoing for the entire 18 months of anticipated construction time, with winery and office work anticipated to each take 15 months.

The first 30 days of Project site development includes activities such as grading and preparing roadways and parking areas, curbs and gutters, site survey, winterizing the site and erosion control, installing temporary fencing and gates, and developing site ingress and egress. Some of these activities will take longer to complete; however, the first 30 days of site development would be limited to activities such as those mentioned above. The hotel component of the Project would take the longest to complete with construction commencing approximately 1 month after the start of site preparation activities and finishing 18 months later. Hotel construction would include activities such as installation of utilities and electrical, framing for the hotel’s four floors, deck and roof, roofing, elevator installation, interior trim, finish, and painting, and floor coverings.

The winery and office buildings are anticipated to commence construction approximately one month after the hotel and conclude construction approximately 15 months later. Winery and office building construction would include activities such as installation of utilities and electrical, concrete and foundation, framing, roofing, elevator installation, interior trim, finish, and painting, and floor coverings. The table below provides a rough approximation of the timeline for construction:

<table>
<thead>
<tr>
<th>Component</th>
<th>Duration</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Preparation</td>
<td>3 Months</td>
<td>Day 1</td>
</tr>
<tr>
<td>Hotel</td>
<td>18 Months</td>
<td>One Month after Commencement of Site Preparation</td>
</tr>
<tr>
<td>Winery</td>
<td>15 Months</td>
<td>One Month after Commencement of Hotel Construction</td>
</tr>
<tr>
<td>Office Building</td>
<td>15 Months</td>
<td>One Month after Commencement of Hotel Construction</td>
</tr>
</tbody>
</table>

4.6 Discretionary Approvals

This Environmental Impact Report is intended to provide complete and adequate CEQA coverage for all actions and approvals associated with ultimate development of the proposed Project. The following approvals are anticipated for Project implementation.
4.6.1 Major Design Review
Approval of a Major Design Review permit for the purpose of evaluating the proposed Project’s design and quality with respect to the City’s General Plan policies. The Napa City Council has Design Review permit authority over the proposed Project pursuant to City Zoning Code §17.62.050.

4.6.2 Planned Development Overlay
Approval of a Planned Development Overlay pursuant to §17.42 of the City’s Zoning Code. The Planned Development Overlay will include the entire Project site and allow for shared parking for 441 parking spaces when 444 would be required if the Project were to be considered as individual components. An increase in height for the winery and office buildings to 38 feet and 32 feet, respectively, will also be allowed through the Planned Development Overlay.

4.6.3 Conditional Use Permit
The Napa City Council will review the proposed Project for the issuance of a Conditional Use Permit for a hotel in the Industrial Park (IP-A) zoning district and the issuance of a Conditional Use Permit for a winery in the Industrial Park zoning district pursuant to Zoning Code §17.14.020.

4.6.4 ALUC Consistency Determination
The County of Napa Airport Land Use Commission (ALUC) will review the proposed Project for a consistency determination for a hotel within the Airport Land Use Compatibility Plan Zone C. Pursuant to City Zoning Code §17.34.070, the proposed Project will be referred by the Planning Commission to ALUC for a consistency determination. ALUC review will occur prior to final action by Napa City Council.

4.7 Project Objectives
CEQA Guidelines §15124 requires an EIR to include a statement of objectives sought by the proposed Project. This disclosure assists in developing the range of Project alternatives to be analyzed in the EIR, as well as providing a rationale for the adoption of a Statement of Overriding Considerations, if one must be adopted, because of one or more significant unavoidable Project-related impacts. Identified below are objectives related to the proposed Project.

- Implement the City's General Plan
- Provide a high quality mixed-use project consistent with the intent of the City of Napa Zoning Code
- Provide safe access at the Project site including adequate wayfinding information for vehicular access to and within the Project site
- Provide safe pedestrian and bicycle access within the Project site
- Design a project consistent with the Napa Valley Commons Design Guidelines
4.8  Intended Uses of the EIR

1. Agencies that are expected to use the EIR in their decision making:
   - City of Napa as Lead Agency
   - Napa County Airport Land Use Commission
   - United States Fish and Wildlife Service
   - Regional Water Quality Control Board

2. Permits or other approvals that may be required to implement the Project:
   - United States Fish and Wildlife Service
   - Regional Water Quality Control Board
   - Caltrans

3. Subsequent use of the EIR:

   This DEIR provides analysis for the proposed Project and may be relied upon for any subsequent permits related to the Project, including resource agency permits related to biological resources impacts and traffic impacts.

   In accordance with CEQA Guidelines §15168(c), subsequent projects identified within the scope of the EIR may rely on this document without the preparation of a new environmental document or the preparation of new findings so long as the project was contemplated in the EIR. Subsequent projects include, but are not limited to, Master Plans, Site Development Permits, Tentative Tract Maps, and Final Maps. The City must examine each subsequent action requested to determine whether it was described in the EIR. No new environmental documentation would be required where the subsequent action/project is within the scope of the EIR so long as no new effects would occur and no additional mitigation measures would be required.

   This EIR may be relied upon for all approval and permit actions related to development of the proposed Project.
5. Environmental Setting, Impacts, and Mitigation Measures

5.1 Aesthetics

This section describes the existing aesthetics setting and the potential effects from the proposed Project implementation on the site and its surrounding area. Aesthetics refers to visual considerations, including scenic resources, scenic vistas, changes in visual character, and lighting or glare. Aesthetics analysis is a process to assess logically visible changes and any anticipated viewer response to that change. The analysis herein is based on visual simulations and Project renderings prepared by WATG and included throughout this section.

5.1.1 Existing Conditions

The Project site is a vacant plot of land located within Napa Valley Commons corporate park in south Napa at the junction of the 12/29/221 Highways. Land uses to the north, south, and west are predominantly one-story and two-story commercial and industrial uses, including the City of Napa Department of Motor Vehicles, the Kaiser Data Center, and various wineries. State Route (SR) 221 borders the Project site to the east, with vineyards and a church located to the east of SR 221. Two existing Pacific Hospitality Group-owned/operated hotels, Meritage Commons and The Meritage Resort, are located south of the Project along Bordeaux Way at Napa Valley Corporate Drive. The Napa Pipe mixed-use project is located west of the Project site between Syar Way and the Napa River.

The photographs provided in Exhibit 5.1-1 through Exhibit 5.1-7 show the Project site's existing condition. As shown, the site is covered with grasses, shrubs, and trees, which occur generally on the perimeter of the site. The site is regularly maintained for weed control purposes. The landscaped area on the southeast corner of the site includes areas of turf and coast redwoods, which are part of the landscape theme for the surrounding industrial park. The 50 identified trees on the Project site were analyzed in terms of size, location, current condition and anticipated survival rate based on existing condition. The survey determined that of the 46 non-protected trees on site, 43 trees are worth preserving based on their condition. In addition, four trees were identified as protected under the City's municipal code regulations. Therefore, the existing landscape tree buffer along Highway 221 will remain substantially as depicted under the existing setting.

Within the Napa Valley Commons corporate park, the existing Meritage Resort site has been expanded to include the Meritage Commons, another resort facility directly across Bordeaux Way, which will include 134 hotel rooms and guest amenities when completed. Therefore, the proposed Project will be consistent with existing uses within the corporate park generally.

The Napa Pipe project, west of the Project site, will add impacts to the visual character of the area with development of residential, commercial, industrial, retail and hotel uses.
View of southeastern corner of Project site from Hwy 221/Napa Valley Corporate Way looking northwest

View at southern property boundary looking east along Napa Valley Corporate Way toward Hwy 221

Exhibit 5.1-1 Site Photos
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

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Exhibit 5.1-2  Site Photos

On-site view looking south toward Hwy 221/Napa Valley Corporate Way intersection

View looking south towards Napa Valley Corporate Way
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures
Draft Environmental Impact Report

5.1 – Aesthetics

View at northwestern corner of the property looking southeasterly

View at northern property looking south

Exhibit 5.1-3  Site Photos
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures  5.1 – Aesthetics

View of adjacent property to the north of the Project site

View of berm at northern portion of Project site

Exhibit 5.1-4  Site Photos
View at eastern property line looking north along Hwy 221

View at western property line looking south along Napa Valley Corporate Drive

Exhibit 5.1-5  Site Photos
5.1 – Aesthetics

Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

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View of Project site from Hwy 221 looking west/northwest

View of eastern property boundary looking northwest toward Napa Valley Corporate Drive

Exhibit 5.1-6  Site Photos
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

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Exhibit 5.1-7  Site Photos

Southwestern boundary at existing development looking north

On-site view looking east toward Hwy 221
5.1.2 Regulatory Setting

The City of Napa General Plan policies, the City of Napa Zoning Code standards, and the Napa Valley Commons Design Guidelines regulate the Project.

1. City of Napa General Plan

The City of Napa General Plan establishes policies for future development and redevelopment within the City. The Community Character and Identity section of the General Plan policies ensure that the City’s small-town identifying character and qualities are maintained. The following Land Use policies set forth by the General Plan relate to the aesthetic quality of the proposed Project.

LU-1.6 The City shall designate SR 29, SR 121, and SR 221 as scenic corridors. The City shall endeavor to improve the scenic character of these roads through undergrounding of utilities, increased landscaping, street tree planting, and other improvements.

LU-1.7 The City shall enhance the Napa River as a natural corridor and recreational spine connecting neighborhoods, employment areas, and other destinations.

2. City of Napa Zoning Standards

The City of Napa Zoning Code provides standards prepared based on the General Plan policies to which proposed projects must adhere. The proposed Project is seeking a Design Review permit for the following:

**17.62.010 Specific purposes:** Design review implements General Plan policies concerning the environment and design by guiding the location and appearance of development. Key design goals of the city are to integrate the urban environment with the city's natural features; to encourage attractive, well located commercial development and to assure high quality, well designed housing that respects neighborhood character. General Plan design goals are furthered by the adoption of design guidelines. Design review also allows implementation of applicable design guidelines.

The proposed Project does not include residential development; however, the office, winery and hotel elements of the proposed Project are required to be designed to the standards of the zoning code. The proposed Project is located within the Industrial District (IP-A and IP-B). The two districts maintain the same development intent with slightly different implementation of standards. Section 5.9, Land Use and Planning of this report analyzes Project land use consistency with the zoning code. This section will analyze Project aesthetics consistent with property development standards provided by the zoning code.

3. Napa Valley Commons Design Guidelines

The Napa Valley Commons Design Guidelines (Design Guidelines), included as Appendix C, Napa Valley Commons Design Guidelines approved February 22, 2016 were originally prepared in the 1980s when Napa Valley Commons (formerly Napa Valley Corporate Park) was first built and were updated in 2016 in response to the growth Napa Valley Commons
has experienced over the past 30 years. The Design Guidelines are developed in accordance with the City of Napa General Plan and zoning code, and establish site planning, architecture, landscape, and lighting guidelines specific to the Napa Valley Commons area, including the Project site. In addition to individual site guidelines, the Design Guidelines establish objectives for the public realm within Napa Valley Commons and procedures for development including the design review process.

**Design Review Process**

Separate from the City’s Planning Commission Design Review permit, the proposed Project is subject to the Napa Valley Commons design review process. The process for design review requires that the applicant submit master and schematic plans to the Napa Valley Commons Design Review Committee for review and approval of all Project elements including aesthetics.

### 5.1.3 Thresholds of Significance

The City thresholds of significance for the evaluation of Project impacts in the area of aesthetics are based upon suggested criteria from the CEQA Environmental Checklist in Appendix G of the CEQA Guidelines. The Project would result in a significant impact if it would:

- a) Have a substantial adverse effect on a scenic vista.
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- c) Substantially degrade the existing visual character or quality of the site and its surroundings.
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

### 5.1.4 Project Impacts Prior to Mitigation

The proposed Project will change the aesthetics character of the Project site by building a hotel, a winery, and an office building on a vacant parcel of land in Napa Valley Commons. The Project site will be graded; buildings, drive aisles, and parking areas will be constructed; and landscaping, drainage, and water treatment will be designed and installed. Site preparation and construction will take into consideration the four native oak trees that are to be preserved on-site. The proposed Site Plan, included as Exhibit 5.1-8 below, depicts the built-out condition of the proposed Project hotel, winery, and office building.
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

Exhibit 5.1-8  Proposed Site Plan
The aesthetics components of the proposed Project include vehicle and pedestrian access, truck delivery access, common space areas, and building materials and features. Proposed site access, including vehicle, pedestrian, and commercial access, will be maintained by two entry points from the surrounding streets. Is it anticipated that the proposed driveway along Napa Valley Corporate Drive will function as an accessway for the office building. The existing driveway along Napa Valley Corporate Way will serve hotel guests, the winery and commercial vehicles. A drive aisle connecting the two driveways with a direct path around the perimeter of the Project site will provide a sidewalk for pedestrian access and parking. The perimeter drive aisle would be viewed from the existing Kaiser Data Center, Napa Valley Corporate Way and SR 221 and will be lined with California sycamore and California live oak trees at an interval of approximately every eight parking spaces.

Related to commercial vehicles, the site plan depicts locations at which commercial vehicles will park while carrying out their purpose for being on-site. Delivery areas and waste removal areas have been designed to be shielded from public view by buildings and landscaping, including a variety of shrubs and trees such as California sycamore, northern oaks, California live oak, cypress, and laurels. For a complete list and locations of proposed trees, see Exhibit 5.1-9, Tree Plan.

Open space areas on the proposed Project site, as shown on the site plan, include pedestrian circulation and common areas that are connected by landscaping and hardscape. Also included are a 50’ landscaped berm along Highway 221 and double landscaped right-of-way in the setback from Napa Valley Corporate Drive near the office building. Exhibit 5.1-10 depicts cross-sections from the travel lanes of SR 221. Section A shows the view towards the hotel, and Section B shows the view towards the winery. Visual simulations are presented in the following Section 5.1.4.3, Long-Term Impacts.

The proposed Project features design elements such as wood trellis, pergolas for entryways, water features, low walls with decomposed granite, pavers, and outdoor fire pits. The open area at the pool and lounge deck is reserved for use by Residence Inn and AC Hotel guests, and is located centrally between two east wings of the building. The pool area is surrounded by walkways, a glass enclosure, and a grassy open space area situated between the pool deck and the main hotel building. The event lawn is a large grassy area surrounded by shrubs, laurel trees, and northern red oaks located between the winery and hotel buildings. The event lawn will function as a part of the winery operations and will be reserved for organized events. The office building includes an outdoor courtyard lined by olive trees with a seating area for working or eating. Hotel, winery, and office building features and materials are discussed in detail below.

Site Planning for the proposed Project was developed with consideration of the City’s General Plan and Zoning Code, and the Napa Valley Commons Design Guidelines. The Project proposes extensive landscaping throughout the site and within setback areas, including large canopy trees as discussed above. Storm water treatment will be located in landscaping and parking lots areas. Buildings are situated such that their relationship with the entrance streets are reinforced and parking is screened from street view by the buildings, landscaping and berms. Building heights will vary with the hotel as the tallest at a height of approximately 57 feet, the winery at a height of 38 feet, and the office building at a height of 32 feet. Further explanation of each individual component, including building height and architectural features, is included below.
Exhibit 5.1-9  Tree Plan
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

Draft Environmental Impact Report

January 2018 Trinitas Mixed-Use Project

Exhibit 5.1-10  Cross-Sections from Travel Lanes of SR 221
1. City of Napa General Plan, Zoning, and Napa Valley Commons Design Guidelines

The proposed Project has been designed in accordance with the standards set forth by the City’s General Plans, the City’s zoning code, and guidelines set forth by the Napa Valley Commons Design Guidelines, including the following:

**Napa General Plan**

The proposed Project is located adjacent to the SR 221 corridor, which is considered a scenic corridor by the City’s General Plan Policy LU-1.6. The Project will improve the aesthetics qualities of the area through the undergrounding of utilities, extensive landscaping, planting of over 400 trees, and the incorporation of high quality materials and building design. The proposed Project is consistent with the City of Napa General Plan.

General Plan policy LU-1.6 calls for the future designation of several state highways, including SR 29, SR 121 and SR 221 as scenic corridors. The proposed Project is adjacent to Highway 221, which has not yet been designated. However, the policy also encourages improving the scenic character of the highways through undergrounding utilities, increased landscaping, tree planting and other improvements. The development of the vacant site, which includes extensive landscaping along the perimeters of the Project as well as internal landscaping, will enhance the view of the corporate park from the perspective of Highway 221. Landscaping will include 400+ trees with approximately 90-100 trees between Highway 221 and the hotel and winery structures. In addition, the Project design includes extensive setbacks from Highway 221, which will further enhance views of landscaping features from the Highway towards the Project and could allow the undergrounding of powerlines in the setbacks. The Project is consistent with this policy even absent the official designation for SR 221.

General Plan policy LU-1.7 encourages the enhancement of the Napa River as a natural corridor and recreational spine connecting destinations. The Napa River is close enough to the Project site that guests and visitors could be enticed to utilize the recreational opportunities afforded through this policy. However, the policy does not specifically pertain to the Project site as the River is not contiguous to Project boundaries and no direct connections are anticipated between the Project and the Napa River.

**Napa Zoning Code**

The proposed Project integrates urban development through the preservation of existing trees on-site and the berm landform adjacent to Highway 221. The Project proposes planting additional trees, bushes, and drought-tolerant plants native to this area. The architectural theme and building materials were selected based on Napa architecture. The proposed Project is consistent with the City of Napa Zoning Code land use designations and will achieve regulatory consistency through the approval of a Planned Development Overlay.
Napa Valley Commons Design Guidelines

The proposed Project will be submitted to the City Planning Commission for design review approval. In addition to completing the City’s design review process, the applicant will prepare and submit to the Napa Valley Commons Design Review Committee a plan package for review and approval. The submitted plans will follow the detailed requirements of the Napa Valley Commons Design Review Process. This review is separate from the CEQA analysis provided herein. The new driveway cut along Napa Valley Corporate Drive and proposed sidewalks will be designed consistent with the Napa Valley Commons streetscape guidelines.

The Napa Valley Commons Design Guidelines are a tool for the Napa Valley Commons Design Review Committee and serve to further define the design intent requirements as set forth by the Covenants, Conditions, and Restrictions (CC&Rs). The guidelines outlined are not a replacement for the zoning code, but rather function to aid design goals and objectives for developers and land owners within Napa Valley Commons. The proposed Project will comply with the Napa Valley Commons Design Guidelines by adhering to the plan review process as outlined by the Design Review Process in the Napa Valley Commons Design Guidelines, and implementing any appropriate Project specific design guidelines.

2. Short-Term Impacts

Construction activities for the Project will include site clearing, grading, infrastructure installation, and construction of parking areas, drive aisles, driveways, and building structures. Project completion is expected to take approximately 18 months from the start of construction to complete build-out. Exposed grading surfaces, construction debris, construction equipment, and stockpiled materials may adversely impact views of the site on a temporary basis.

The Project Applicant is required to coordinate with the City of Napa Public Works during the various construction phases of the Project. Project grading includes minimal changes to site topography, as the existing topography is disturbed and relatively flat.

Construction areas, including construction equipment, construction storage bins, and fencing, will be visible from surrounding land uses, roadways and SR 221. However, due to the short-term nature of construction, and required adherence to Best Management Practices and coordination with the City, potential construction-related impacts to aesthetics are not anticipated to be significant.

3. Long-Term Impacts

Long-term impacts to aesthetics are those associated with the Project upon completion of all Project construction phases. Construction will permanently alter the site. Potential permanent impacts are further described below.
Project Components

The following discussion provides details and analysis of the Project’s three components from an aesthetics viewpoint. As analyzed herein, the Project is consistent with the theme of the Napa Valley Commons corporate park and complies with height, setback, site coverage and architectural styles in the City’s regulations, policies and design guidelines. Therefore, the proposed Project is not anticipated to have a significant impact on or degrade the existing visual character or quality of the site and its surroundings. The proposed uses are consistent with commercial and hotel uses that have already been established in the surrounding area. The visual concept for the proposed Project incorporates updated and contemporary features by using materials that are commonly found in homes and wineries in the area. As shown on the Project renderings Exhibit 5.1-11 through Exhibit 5.1-14, the Project will blend aesthetically with the surrounding area and the building colors and materials provide a cohesive appearance, compatible with the existing development within the corporate park.

While, the proposed Project is designed to communicate aesthetically as a whole, each component exemplifies slightly unique characteristics as described below. Proposed materials include wood, reclaimed wood, stucco, colored concrete block, and more contemporary materials such as concrete, steel, and glass, as shown on Exhibit 5.1-15 Materials Board.

1. Hotel Component

Project components have been designed to communicate a unified theme with each building component retaining an individual uniqueness. The most prominent building on-site will be the 4-story hotel with 253 guest rooms and total of 155,557 square feet of gross area. The proposed hotel building roofline would be 46 feet with mechanical housing and architectural features extending up to approximately 57 feet, as shown on Exhibit 5.1-16 and Exhibit 5.1-17, Illustrative Hotel Elevations.

The hotel is proposed to be a dual-branded – AC Hotel and Residence Inn – Marriott hotel. Due to its height and proximity to roadways, the hotel building will have primary viewpoints from Napa Valley Corporate Way and SR 221, as well as some secondary views from Bordeaux Way, Napa Valley Corporate Drive, and Anderson Road. Although the hotel is designed with consistent materials for both brands operating out of the building, slight variations would be incorporated in the way the materials would be used and presented for each brand. For example, both brands incorporate reclaimed wood, corrugated metal, and stucco facades; however, the façade on the Residence Inn half of the hotel primarily uses reclaimed wood and stucco with very little corrugated metal, and the AC Hotel primarily uses stucco and corrugated metal with less reclaimed wood. As discussed above, the hotels’ shared pool area, situated between the two main guest room wings of the hotels, incorporates trees, bushes, and groundcover consistent with landscaping around the entire property.
Exhibit 5.1-11  Project Rendering – Aerial View of Project Components
Exhibit 5.1-12  Project Rendering – View of Hotel and Amenities
Exhibit 5.1-13  Project Rendering – Entrance to AC Hotel
Exhibit 5.1-14  Project Rendering – Residence Inn Entrance
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5.1 – Aesthetics

Exhibit 5.1-16  Illustrative Hotel Elevations (South and East)
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

Exhibit 5.1-17  Illustrative Hotel Elevation (North)
Visual Character

The four-story hotel structure is designed with articulated exterior walls, textured materials, and varying rooflines, including the use of flat and slanted roofing to minimize massing. The colors and materials used for the building exterior are intended to complement each other. The building is proposed to be a combination of burgundy corrugated aluminum metal and off-white stucco, accented around the base with finished concrete back and off-set by copper penny color painted window frames. Landscaping and extended roof features have been incorporated to accentuate the hotel entrances. The hotel pool area, located between the two main wings of the hotel buildings, creates an open space area with landscaping, a grassy area, and pool deck for hotel guests to sit outdoors, lounge or swim.

2 Winery Component

The winery is proposed to occupy a gross area of 26,214 square feet on the Project site and has been designed with a consistent project theme. The proposed winery building roofline would be approximately 26 feet with mechanical housing and architectural features extending up to approximately 38 feet, as shown on Exhibit 5.1-18, Illustrative Winery Elevations (East and South).

Primary views of the winery would be from SR 221 with secondary views from Anderson Road. The winery would be almost completely obscured from views along Napa Valley Corporate Drive and Napa Valley Corporate Way by the proposed hotel and office building and the existing buildings located on the adjacent property. Building materials, architectural features, and the façade of the winery strongly reference the hotel and office building components by using reclaimed wood, corrugated metal, and stucco. The winery is designed with an articulated pitched roof with architectural rooftop elements to reduce massing. The outdoor area surrounding the winery incorporates trees, bushes, and groundcover consistent with landscaping around the entire property.

Visual Character

The one-story winery building is proposed to have a façade consisting of a combination of reclaimed wood, corrugated aluminum metal, cement block, and stucco. The winery is also designed with an articulated façade of varying colors and materials to provide visual relief and draw guests to the entry. The colors and materials used for the exterior of the winery will complement those used for the hotel and office, but would have a stylish effect comparable to Napa area wineries. The building is proposed to be a combination of colonial red corrugated aluminum metal and off-white stucco, with finished concrete block accenting the base of the building. The winery building is designed with articulated rooflines of varying pitches and materials, including sanding seam snap on roof panels to minimize visual massing of the building. A small event lawn will be connected west of the winery, providing an area for small gatherings between the hotel and the winery.
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.1 – Aesthetics

Overall East Elevation – Winery Building

Overall South Elevation – Winery Building

Exhibit 5.1-18  Illustrative Winery Elevations (East and South)
3. **Office Building Component**

The Office building would be a two-story building occupying a gross area of 29,878 square feet and has been designed consistent with the themes of the hotel and winery. The proposed office building roofline would be approximately 24 feet high with mechanical housing and architectural features extending up to approximately 32 feet high, as shown on Exhibit 5.1-19, Illustrative Office Elevations (North and West).

Primary views of the office building would be from Napa Valley Corporate Drive. Views of the office building from Napa Valley Corporate Way would be obscured by the existing buildings on the adjacent property, and views of the office building from SR 221 would be obscured by the winery.

**Visual Character**

The office building is proposed as the third structural element and will tie into the hotel and winery by using similar and complimentary colors and materials. The building materials are proposed to be a combination of burgundy corrugated aluminum metal and off-white stucco, with door awnings, wood framed windows, and horizontal louvers and C-channel graphite colored window accents.

**Visual Simulations**

The Project has been designed with canopy trees to assist in screening the parking lot from neighboring views and SR 221.

The rustic modern architectural theme of the proposed Project is consistent with the architectural theme within Napa Valley Commons. The Project’s aesthetics visual impacts will be less than significant since the proposed buildings will be consistent with the existing views in Napa Valley Commons. Exhibit 5.1-22 and Exhibit 5.1-23 portray view simulations of the Project as viewed from Highway 221 at the primary access point to the corporate park.
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5.1 – Aesthetics

Overall North Elevation – Office Building

Overall West Elevation – Office Building

Exhibit 5.1-19  Illustrative Office Elevations (North and West)
Exhibit 5.1-20, View Simulation – Street View from Highway 221/Napa Valley Corporate Way depicts the view of the Project through the dense landscaping that will remain. Project components visible through the landscaping include roofs and portions of the hotel buildings. The most visible portion of roof will be from the southern extent of the Residence Inn structure, which is aligned along an east to west orientation. The nearest portion of the building is located approximately 250 feet from the intersection. The nearest point of the hotel core of the building is located more than 300 feet from the intersection. In addition, the top of the roof of the AC Hotel would be minimally visible from this vantage point. The nearest portion of AC Hotel roof is more than 400 feet from the intersection and only a small area of the roof would be visible. The distance that the structures are set back from the corner of Highway 221/Napa Valley Corporate Way combined with the mature and dense landscaping located at the southeast corner of the site diminishes the visual appearance of the hotel structures.

Exhibit 5.1-21, View Simulation – Street View from Highway 221 Looking West depicts the view from Highway 221 just north of the Napa Valley Corporate Way intersection. From this location, the majority of the Residence Inn is screened from view by the existing dense landscaping at the southeast corner of the Project site. From this vantage point, the AC Hotel is the most prominent feature visible from Highway 221. As shown, existing dense landscaping and mature trees provide a view buffer for a large portion of the Residence Inn hotel. The most prominent portion of the AC Hotel that will be visible is the portion that is oriented east/west of the site. The nearest part of the building is located more than 150 feet from Highway 221. The core of the hotel structure, which runs in a north to south orientation, is located approximately 275 feet from Highway 221. The façade of the AC Hotel that will be most visible from this location incorporates several different building materials including a light-colored façade, dark colored façade and multiple windows. Behind the façade the roof slopes to provide further articulation.

Exhibit 5.1-22, View Simulation – Street View from Highway 221 Looking Southwest to the Proposed Winery to the proposed winery depicts the view of the Project from across the grassy setback area. The closest visual feature is the telephone poles that are set slightly back from Highway 221. The parking lot will be visible beyond the grassy setback that gently slopes from SR 221 to the Project site with an approximate 10-foot grade differential. The winery is largely obscured by trees, and the hotel can be seen in the distance through trees. The office building is not visible at this vantage. The nearest parked car that would be entirely visible is located approximately 75 feet away, and the hotel is located approximately 220 feet away.

Exhibit 5.1-23, View Simulation – Street View from Highway 221 Looking Southwest to the Proposed Hotel depicts the view of the Project from across the setback area to the hotel. Similar to Exhibit 5.1-22, the closest visual feature is the existing utility poles that are set slightly back from Highway 221. Across the setback, there is an approximate 10-foot grade differential between SR 221 and the proposed parking lot. The first row of parking will be partially obscured from view because of the grade differential. The next row of parking and the majority of the parking lot that would be entirely visible is located approximately 75 feet away. The nearest corner of the hotel is located approximately 150 feet away from Highway 221. The AC Hotel is prominently visible in the background, while the winery is largely obscured by trees and the office building located behind the winery is not visible.
Exhibit 5.1-20  View Simulation – Street View from Highway 221/Napa Valley Corporate Way
Exhibit 5.1-21  View Simulation – Street View from Highway 221 Looking West
Exhibit 5.1-22  View Simulation – Street View from Highway 221 Looking Southwest to the Proposed Winery
Exhibit 5.1-23  View Simulation – Street View from Highway 221 Looking Southwest to the Proposed Hotel
Other areas of the sloped roof will also be visible above the existing trees. The façade of the Residence Inn hotel, which will be reclaimed wood, will be minimally visible from this location. The grey tones of the reclaimed wood blend in and are less visible compared to the corrugated metal and stucco which are also proposed on the buildings.

**Light and Glare**

The Project site does not currently generate any nighttime light source; therefore, development of the proposed Project will create a new light source that will increase light and glare in the immediate vicinity and incrementally increase the amount of light shed into the night sky. Virtually all light sources will contribute to illumination of the surrounding area to some degree. The degree of illumination varies, depending on the candlepower of the light source, the height of the light, the presence of barriers or obstructions, and the type and design of the light source. A Photometric Assessment was prepared to investigate on-site and surrounding off-site impacts produced by the installation of lights and signage on the subject site. The Photometric Assessment is included herein as Exhibit 5.1-24, Photometric Assessment. As shown in the Exhibit, lighting has been designed to eliminate spill from the Project parking lot lighting onto the adjacent properties, including Highway 221.

New light sources resulting from the proposed Project will include safety and security lighting and ornamental lighting for landscaping and architectural features. The street lights provided along the drive aisles and the parking areas for safety purposes will be mounted on 24-foot poles. New glare sources from light reflecting off building windows will be minimized by the use of non-reflective glass. Spillover into the surrounding area will be prevented by use of light fixtures that are shielded downward.

The proposed lighting would be an extension of the existing lighting from the surrounding development and would be consistent with similar commercial and hotel development. The additional lighting will be designed in compliance with City Zoning Code §17.54.170.C.5 and will not create any light spillage onto nearby businesses with the implementation of Mitigation Measures MM AE-1 through MM AE-4. These mitigation measures will prevent light spill onto surrounding properties and resource preservation areas and ensure that on-site lighting is directed towards the appropriate use.

The proposed Project is within the Napa County Airport Land Use Compatibility Plan area. The proposed Project must meet certain standards to be considered a compatible use within the ALUCP. The proposed Project’s compatibility is analyzed in Section 5.7, Hazards and Hazardous Materials in this DEIR. Project impacts related to light and glare will be less than significant with mitigation included herein.
Exhibit 5.1-24 Photometric Assessment
Grape Crusher View Point

The City of Napa General Plan does not identify scenic vistas in the immediate area surrounding the proposed Project or within City limits. However, the Napa County General Plan identifies the Grape Crusher statue as a scenic vista. The proposed Project is located approximately a half mile north of the Grape Crusher and at a significantly lower grade. Intervening development such as The Meritage Resort, Meritage Commons, offices, and utility lines are currently visible from the Grape Crusher. The proposed Project will not impact views of the Grape Crusher statue, but will be visible from the Grape Crusher look-out area. As noted, lighting will be shielded downward to prevent illumination of dark skies and to minimize lighting visibility from off-site locations such as the Grape Crusher. While views from the Grape Crusher during daylight hours could be somewhat impacted by the additional Project development, the Project is in an area that is largely built-out as a corporate park, and views of this area will remain substantially the same as currently exist. The proposed Project would have a less than significant impact on a scenic vista.

5.1.5 Mitigation Measures

1. Standard Mitigation Measures

The proposed Project would be subject to the following standard mitigation measures as required by City of Napa Policy Resolution No. 27.

| MM AE-1 | Low-level lighting shall be utilized in any parking area(s) as opposed to elevated high-level intensity light standards. |
| MM AE-2 | All new utilities shall be placed underground. |
| MM AE-3 | The developer shall comply with the following: |
| | a. The plans submitted for the Project improvements or building permit, whichever comes first, shall include a final landscape and irrigation plan designed and signed by a licensed landscape architect or landscape contractor. The final landscape plans shall specify that 1) all plant materials be certified by the Napa County Agricultural Commissioner inspection program for freedom from the glassy winged sharpshooter or other pests identified by the Agricultural Commissioner and 2) the Agricultural Commissioner’s Office shall be notified of all impending deliveries of live plants with points of origin outside of Napa County so that inspection can be arranged. No improvement plans shall be approved nor building permit issued until the Planning Department approves the landscape and irrigation plan. Prior to occupancy, the licensed professional who signed the final landscape and irrigation plan shall certify in writing to the Planning Director that he/she has inspected and approved the installation of landscaping and irrigation and has found them to be consistent with the approved plans including, but not limited to, the certifications and inspections by the Agricultural Commissioner as well as that the |
systems are in working order. A substitution of an alternate licensed professional may be allowed by the Planning Director upon a showing of good cause.

b. Prior to occupancy, Developer shall execute and record the City’s Landscape Maintenance Agreement. (Forms are available from the Planning Department.)

MM AE-4 The Developer shall secure separate architectural review approval for any signage for the Project.

2. Special Mitigation Measures

None required. The analysis indicates that, with implementation of project design features and the City’s Standard Mitigation Measures, the proposed Project would not have a significant effect on aesthetics.

5.1.6 Level of Significance after Mitigation

The proposed Project would have a less than significant impact on scenic resources, visual character, and light and glare.

The Aesthetics Assessment analysis responds to CEQA Guidelines, Appendix G Checklist as follows:

CEQA Guideline thresholds require analysis of a project related to whether the project will have a substantial adverse effect on a scenic vista.

The Grape Crusher statue is the prominent landmark and is considered a scenic viewpoint. The Project will not have an impact on views of the Grape Crusher; however, the additional development will be visible from the Grape Crusher outlook. As noted, intervening development, in addition to the fact that the Project will be developed in an existing corporate park setting, will minimize the visual effects of the Project from the Grape Crusher location.

a) The Project will not substantially damage scenic resources, including trees, rock outcroppings and historic buildings within a state scenic highway.

The Project is located in a substantially developed and built out area. The City’s General Plan does not list Highway 221 as a currently designated scenic highway and there are no scenic resources on the Project site such as rock outcroppings or historic buildings. Oak trees that are identified in the City’s tree preservation guidelines will be preserved on-site. No impacts will result from Project implementation related to scenic resources on the Project site.

b) The Project will not degrade the existing visual character or quality of the site and its surroundings.

Exhibit 5.1-11 (page 5.1-18) through Exhibit 5.1-14 (page 5.1-21) show renderings of the Project built-out condition. Aesthetically, the Project will be compatible with the surrounding development within the Napa Valley Commons corporate park. Buildings will be within
approved height limits and have been designed to present a cohesive visual treatment for the proposed hotel, winery and office building.

The Project includes extensive landscaping throughout the Project site, which will preserve many of the existing trees on the site while enhancing aesthetics with the addition of 400+ trees. More than 100 trees will be located between Highway 221 and the hotel and winery structures with a majority of the trees in the parking lot fronting the winery. Fewer trees are proposed in front of the hotel in order to preserve scenic views of the vineyards across SR 221. However, the existing grove of trees located near the Residence Inn hotel at the corner of Napa Valley Corporate Way and SR 221 will be preserved as shown in Exhibit 5.1-21 and Exhibit 5.1-22 above. The rustic modern architectural theme and building materials are consistent with and based on typical architecture within Napa Valley Commons.

c) As analyzed herein, the Project will create a new source of light and glare because the site is currently vacant with no lighting. However, the lighting will appear as an extension of current lighting in the area which is substantially built out. As noted, extensive landscaping will be provided between Highway 221 and the Project structures, buffering any potential light intrusion to properties across the highway.

The photometric assessment (Exhibit 5.1-24, page 5.1-35 above) shows that with shielded lighting as proposed, no light spill to adjacent properties or roadways will occur. Glare will be kept to a minimum through the use of non-reflective materials on buildings, and will be further minimized by the extensive landscaping along the perimeter of the Project site. There will be no impact related to the additional lighting that will result from the Project.

The Project will be consistent with Napa Valley Commons Design Guidelines. Although the proposed mitigation is intended to reduce the impacts due to light and glare and visual character, it will have a positive impact with respect to the Napa Valley Commons Design Guidelines. The Guidelines were specifically prepared for the Napa Valley Commons business park and were updated as recently as 2016 to address the growth experienced in the past 30 years. The Guidelines are consistent with the City’s General Plan and zoning code, and compliance with the Guidelines will ensure that no visual or aesthetics impacts will result from the Project.

5.1.7 Cumulative Impacts

CEQA Guidelines §15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts are the direct and indirect effects of a proposed Project that, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project. The Project, as proposed, would not result in a cumulative impact when combined with other projects in the area. The Project’s contribution to aesthetics impacts is negligible in the built-out environment surrounding the Project site.
5.1.8 Unavoidable Adverse Impacts

1. Short-Term
   No unavoidable adverse short-term impacts are anticipated to occur.

2. Long-Term
   No unavoidable adverse long-term impacts are anticipated to occur.
5.2 Air Quality

This section analyzes the potential air quality impacts associated with the proposed Project in terms of short-term (construction) impacts and long-term (operational) impacts. Information in this section is based on the Air Quality and Greenhouse Gas Assessment (Air Quality Assessment) prepared by Illingworth & Rodkin, Inc. dated September 1, 2017. The analysis of greenhouse gas emissions is included separately as Section 5.6 of this DEIR. The complete Air Quality and Greenhouse Gas Assessment, including appendices, is included herein as Appendix D.

5.2.1 Existing Conditions

The Project site is located in Napa County within the San Francisco Bay Area Air Basin (SFBAAB). The Project site is at the southern boundary of the City of Napa and in a largely built-out area. The Project site is a vacant, previously graded parcel within the Napa Valley Commons, a commercial/industrial corporate park. Napa Valley is bordered by mountains with an average ridgeline height of approximately 2,000 feet, with some peaks approaching 3,000 to 4,000 feet. The mountains provide a barrier to the prevailing northwesterly winds.

1. Climate

The climate in and around the Project area during the summer months ranges from average maximum temperatures in the low 80s at the southern end of the valley to the low 90s at the northern end. Winter temperatures range from the high 50s/low 60s to the high to mid-30s with slightly cooler temperatures in the northern end of the valley.

The prevailing winds flow up valley from the south approximately half the time, drawing air in from the San Francisco Bay during warm summer afternoons. Daytime winds occasionally flow down valley from the north. During winter evenings, down valley drainage often occurs. Wind speeds are generally low, with almost 50% of the winds at less than 4 miles per hour (mph). Only 5% of the winds are between 16 and 18 mph during strong summertime up-valley wind events and winter storms.

2. Baseline Air Quality

The Project is in an area currently designated non-attainment for the state 1-hour and 8-hour ozone standards, non-attainment for the state 24-hour and annual PM_{10} standards, and non-attainment for the state annual PM_{2.5} standard. It is also designated as non-attainment for the national 8-hour ozone standard and non-attainment for the national 24-hour PM_{2.5} standard.

The air pollution potential in the Napa Valley could be high if there were sufficient sources of air contaminants nearby. Summer and fall prevailing winds transport ozone precursors northward from the Carquinez Strait Region to the Napa Valley, effectively trapping and concentrating the pollutants when stable conditions are present. The local upslope and downslope flows created by the surrounding mountains may also recirculate pollutants already present, contributing to buildup of air pollution.
3. **Air Pollutants of Concern**

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NOx), which react under certain conditions to form high ozone levels. The highest ozone levels in the SFBAAB occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM$_{10}$) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM$_{2.5}$). Elevated particulate concentrations are the result of regionwide (cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer) and result in reduced lung function growth in children.

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (cancer causing). TACs include, but are not limited to, criteria air pollutants and are found in ambient air, especially in urban areas. They are caused by industry, agriculture, fuel combustion, and commercial operations such as dry cleaners. TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). TACs are regulated at the regional, state, and federal level because chronic exposure can result in adverse health effects.

Based on the SFBAAB average, diesel exhaust represents approximately three-quarters of the cancer risk from TACs and is the predominant TAC in urban environments. According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles, making the evaluation of health effects a complex scientific issue. Some of the chemicals in diesel exhaust identified as TACs by the CARB such as benzene and formaldehyde are listed as carcinogens either under the state’s Proposition 65 or under the Federal Hazardous Air Pollutants programs.

5.2.2 **Regulatory Setting**

The Project is located in the Bay Area Air Quality Management District (BAAQMD). The BAAQMD comprises nine San Francisco Bay Area counties including Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Napa, southwestern Solano, and southern Sonoma counties. BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards (AAQS) and California Ambient Air Quality Standards (CAAQS). The BAAQMD also has permit authority over most types of stationary equipment utilized for the proposed Project. The BAAQMD is responsible for permitting and inspection of stationary sources, enforcement of regulations, including setting fees, levying fines and enforcement actions and ensuring that public nuisances are minimized.

1. **Federal Regulations**

The United States Environmental Protection Agency (EPA) sets nationwide emissions standards for mobile sources, which include on-road (highway) motor vehicles such as
trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards. California also has the ability to set motor vehicle emissions standards and standards for fuel used in California, as long as they are the same or more stringent than the federal standards.

In the past decade, the EPA has established a number of emissions standards for on-road and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of nitrogen oxides (NOX) and particulate matter (PM$_{10}$ and PM$_{2.5}$), and because the EPA has identified diesel particulate matter as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce PM and NOX emissions from diesel engines up to 95% in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.\(^\text{1}\)

In concert with the diesel engine emissions standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The new standards reduced the amount of sulfur allowed by 97% for highway diesel fuel (from 500 parts per million by weight [ppmw] to 15 ppmw), and by 99% for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel (ULSD), is currently required for use by all vehicles in the U.S.

All of the above federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or requiring earlier implementation dates.

The federal Clean Air Act Amendments (CAAA) of 1990 required that the EPA review all national AAQS in light of known health effects. The EPA was charged with modifying existing standards or initiating new standards, where appropriate. The EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small-diameter particulate matter (PM$_{2.5}$).

2. **State Regulations**

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.\(^\text{2}\) In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90%, a significant component of the plan involves application of emissions control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the federal on-road and non-road diesel

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engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and PM$_{2.5}$ emissions. This regulation will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road, or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

CARB has also adopted and implemented regulations to reduce DPM and NO$_x$ emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NO$_x$ exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment to achieve specified fleet-averaged emissions rates. Implementation of this regulation, in conjunction with stringent federal off-road equipment engine emissions limits for new vehicles, will significantly reduce emissions of DPM and NO$_x$.

3. **Bay Area Air Quality Management District (BAAQMD)**

As noted herein, the BAAQMD has jurisdiction over the Bay Area and is the lead agency in developing plans to address attainment and maintenance of the National AAQS and California AAQS. AAQS are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare of those people most susceptible to further respiratory distress and known as “sensitive receptors.” Sensitive receptors include asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. CARB has identified the following air pollutants as having ambient air quality standards.

- Particulate matter (PM$_{10}$ and PM$_{2.5}$)
- Ozone (O$_3$)
- Nitrogen dioxide (NO$_2$)
- Sulfates
- Carbon monoxide (CO)
- Sulfur dioxide (SO$_2$)
- Lead
- Hydrogen sulfide (H$_2$S)
- Vinyl chloride
- Visibility reducing particles
The BAAQMD CEQA Air Quality Guidelines (BAAQMD Guidelines) were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The Guidelines are discussed further herein in Section 5.2.3, Thresholds of Significance (beginning on page 5.2.3 below).

4. **City of Napa General Plan**

The City of Napa General Plan includes a discussion of Air Quality in Chapter 7, Natural Resources. That section notes that the BAAQMD imposes regulations to address stationary and mobile sources of air emissions, while the City incorporates policies throughout its General Plan to coordinate land use to support regional efforts at improving air quality. The following policies relate to air quality generally and are applicable to the proposed Project.

- **NR-5.1** – The City shall encourage the use of mass transit, bicycle facilities and pedestrian walkways in order to decrease use of private vehicles and thereby reduce emissions from mobile sources.

- **NR-5.2** – The City shall encourage land use patterns and management practices that conserve air and energy resources, such as mixed use development and provisions for local-serving commercial uses adjacent to neighborhoods.

- **NR-5.4** – The City shall, during discretionary review, require that development proposals comply with federal and state air quality standards, or make findings that the project has overriding benefits to the community that outweigh nonattainment of the standards.

- **NR-5.5** – The City shall, during early consultation with project proponents, encourage project design that minimizes direct and indirect air emissions. Projects should consider the following air quality concerns:
  
  a) Land use and design measures to encourage alternatives to the automobile and to conserve energy,
  b) Land use and design measures to minimize exposure of sensitive receptors to odors, toxics, and criteria pollutants, and
  c) Applicable Bay Area Air Quality Management District rules, regulations, and permit requirements.

Appendix E to the General Plan, Policies and Programs Related to Air Quality, contains a compilation of policies and implementation programs that address air quality. The policies found in the Natural Resources section of the General Plan have been included. Following are additional policies pertinent to the proposed Project that are found in other sections of the General Plan.

- **LU-8.1** – The City shall promote efficient use of larger vacant parcels and vacant areas of the city by encouraging mixed use development.

- **T-6.8** – The City shall provide for bicycle storage and access in future development.
5.2.3 **Thresholds of Significance**

The State of California encourages local agencies to adopt their own thresholds, but it is not required. In addition to BAAQMD thresholds detailed herein, the City of Napa utilizes the thresholds of significance found in Appendix G of the CEQA Guidelines for air quality, which state:

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:

a) Conflict with or obstruct implementation of the applicable air quality plan?
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
d) Expose sensitive receptors to substantial pollutant concentrations?
e) Create objectionable odors affecting a substantial number of people?

1. **Bay Area Air Quality Management District**

The BAAQMD CEQA Guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table 5.2-1 below.

<table>
<thead>
<tr>
<th>Criteria Air Pollutants</th>
<th>Construction Thresholds</th>
<th>Operational Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Daily Emissions</td>
<td>Average Daily Emissions</td>
</tr>
<tr>
<td></td>
<td>(pounds per day)</td>
<td>(pounds per day)</td>
</tr>
<tr>
<td>ROG</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>NO(_x)</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>82 (Exhaust)</td>
<td>82</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>54 (Exhaust)</td>
<td>54</td>
</tr>
<tr>
<td>CO</td>
<td>Not Applicable</td>
<td>9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)</td>
</tr>
<tr>
<td>Fugitive Dust</td>
<td>Construction Dust Ordinance or other Best Management Practices</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Note: ROG = reactive organic gases, NO\(_x\) = nitrogen oxides, PM\(_{10}\) = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM\(_{2.5}\) = fine particulate matter or particulates with an aerodynamic diameter of 2.5 µm or less; and GHG = greenhouse gas.
The BAAQMD's adoption of significance thresholds contained in the 2011 CEQA Air Quality Guidelines was called into question by an order issued March 5, 2012 in *California Building Industry Association (CBIA) v BAAQMD* (Alameda Superior Court Case No. RG10548693). The order requires the BAAQMD to set aside its approval of the thresholds until it has conducted environmental review under CEQA. The ruling made in the case concerned the environmental impacts of adopting the thresholds and how the thresholds would indirectly affect land use development patterns. In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds (Cal. Court of Appeal, First Appellate District, Case Nos. A135335 and A136212). CBIA sought review by the California Supreme Court on three issues, including an appellate court's decision to uphold the BAAQMD's adoption of the thresholds, and the Court granted review on just one: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users of a proposed project? In December 2015, the Supreme Court determined that an analysis of the impacts of the environment on a project – known as "CEQA-in-reverse" – is only required under two limited circumstances: 1) when a statute provides an express legislative directive to consider such impacts; and 2) when a proposed project risks exacerbating environmental hazards or conditions that already exist (Cal. Supreme Court Case No. S213478). The Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's ruling. Because the Supreme Court's holding concerns the effects of the environment on a project (as contrasted to the effects of a proposed project on the environment), and not the science behind the thresholds, the significance thresholds contained in the 2017 CEQA Air Quality Guidelines are applied to this project.

2. **Sensitive Receptors**

Sensitive receptors are groups of people more affected by air pollution than others. These population groups include asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can generally tolerate occasional exposure to air pollutant levels considerably above the minimum standards before adverse effects result. For cancer risk assessments, children are the most sensitive receptors, because they are more susceptible to cancer-causing TACs. Locations that may contain high concentrations of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. As noted in the Air Quality Assessment, a review of the Project area did not reveal the presence of any sensitive receptors in the vicinity of the Project site.

### 5.2.4 Project Impacts Prior to Mitigation

Air quality impacts can be categorized as either primary or secondary. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact.

Secondary pollutants, by comparison, require time to transform from a more benign form to a more unhealthful contaminant. The impact occurs regionally far from the source. Analysis of significance of such emissions is based on a specified amount of emissions (e.g., pounds, tons)
even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Local air quality impacts/emissions are usually divided into short-term and long-term impacts. Short-term impacts are normally the result of demolition, construction, or grading operations. Long-term impacts are associated with the built-out condition of the proposed Project and are the result of day-to-day operation and maintenance, use of consumer products, natural gas use, and vehicle trips associated with residents, visitors, and employees.

1. **Construction Emissions – Short-Term Impacts**

Construction emissions are difficult to quantify, because the exact type and amount of equipment that will be used or the acreage that may be disturbed on any given day is generally not known with any reasonable certainty. The emphasis in environmental documents relative to construction activity emissions impacts has, therefore, been to minimize the emissions as fully as possible through comprehensive mitigation, even if the exact amount of emissions cannot be precisely quantified.

Dust is typically the primary concern during construction, but because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Due to the inherent uncertainty in the predictive factors for estimating fugitive dust generation, regulatory agencies typically use one universal “default” factor based on the area disturbed, assuming that all other input parameters into emission rate prediction fall into midrange average values. State and local regulations generally require the use of “best available control measures” for fugitive dust from construction activities, which can reduce fugitive dust emissions to 1 to 2 pounds per day per acre disturbed.

Emissions during the phases of construction were calculated using the California Emissions Estimator Model 2016.3.1 (CalEEMod) computer program developed by CARB, which provides emission estimates for on-site and off-site construction activities. The model also calculates emissions for operation of various projects.

On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. CalEEMod considers the following phases in its calculation of construction emissions: demolition, site preparation, grading, building construction, paving, and painting. The acreage, duration of each construction phase, and other key elements of the Project were input into the CalEEMod program to generate the estimated emissions. The proposed Project land uses for the 11.55-acre site were input and are described as follows:

- A dual-branded hotel that would be constructed as a single building. To account for the different trip rates associated with the extended stay and the AC Hotel, 153 rooms (AC Hotel) were modeled as “Motel,” and 100 rooms (Residence Inn) were modeled as “Hotel.”
- The proposed 29,878-square-foot office building was modeled as “General Office Building.”
- The 26,214 square feet of winery was modeled as “Manufacturing.”
- 441 parking spaces were modeled as “Parking Lot.”
The CalEEMod default construction schedule assumes that the Project would be built out over a period of approximately 19 months or an estimated 418 construction workdays (assuming an average of 22 construction days per month). The model assumed that construction for the Project would begin in September 2017. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 5.2-2 shows average daily construction emissions of ROG, NO\textsubscript{x}, PM\textsubscript{10} and PM\textsubscript{2.5} during construction of the Project. As shown in the table, predicted construction period emissions would not exceed the BAAQMD significance thresholds.

### Table 5.2-2  Construction Period Emissions

<table>
<thead>
<tr>
<th>Scenario</th>
<th>ROG</th>
<th>NO\textsubscript{x}</th>
<th>Exhaust – PM\textsubscript{10}</th>
<th>Exhaust – PM\textsubscript{2.5}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total construction emissions (tons)</td>
<td>1.84 tons</td>
<td>6.86 tons</td>
<td>0.33 tons</td>
<td>0.31 tons</td>
</tr>
<tr>
<td>Average daily emissions (pounds)*</td>
<td>8.9 lbs.</td>
<td>32.8 lbs.</td>
<td>1.6 lbs.</td>
<td>1.5 lbs.</td>
</tr>
<tr>
<td>BAAQMD Thresholds (pounds per day)</td>
<td>54 lbs.</td>
<td>54 lbs.</td>
<td>82 lbs.</td>
<td>54 lbs.</td>
</tr>
<tr>
<td>Exceed Threshold?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*Assumes 418 workdays.

During site preparation and grading, construction activities would temporarily generate fugitive dust in the form of PM\textsubscript{10} and PM\textsubscript{2.5}. Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after the mud dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if feasible mitigation measures are implemented to reduce the generation of fugitive dust. Mitigation Measures are included in Section 5.2.5 (page 5.2-11).

In 1998, the California Air Resources Board (CARB) identified particulate matter from diesel-fueled engines (diesel particulate matter or DPM) as a Toxic Air Contaminant (TAC). It is assumed that most of the heavy construction equipment utilized during the construction phase of the Project would be diesel fueled and emit DPM.

Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment). Peak diesel exhaust emissions will occur during the grading phase of the Project, which is expected to take approximately 60 days. Total construction is anticipated to be completed in approximately 19 months. Due to the relatively short duration of construction compared with a 70-year lifespan, diesel emissions resulting from the construction of the Project, including construction truck traffic, are not anticipated to be significant.

### 2. Operational Emissions – Long-Term Impacts

Operational air emissions would be generated primarily from automobiles driven by hotel/winery/office building employees and hotel patrons. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are
typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed Project, assuming full build-out. The above-described project land uses were input to CalEEMod to assess operational emissions.

Traffic Impacts

The primary source of emissions generated by the Project will be from motor vehicles. Emissions associated with vehicle travel depend on the year of analysis, because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest full year projected for Project build-out and operation would be 2020. Emissions associated with build-out later than 2020 would be lower.

Carbon monoxide (CO) is a localized gas that dissipates very quickly under normal meteorological conditions. As such, CO concentrations decrease substantially as distance from the source (intersection) increases. Since exhaust fumes from vehicles are the primary source of CO, there is a relationship between traffic/circulation congestion and CO impacts. Intersections are areas of the highest CO concentrations and have the potential to create pockets of elevated levels of CO which are called “hot spots.”

CalEEMod allows for the user to enter specific vehicle trip generation rates, which were input to the model using the daily trip generation rate provided in the project trip generation table in the traffic analysis for net Project trips. The default trip lengths and trip types specified by CalEEMod were used.

The Project area is in attainment for CO based on state and national standards. Carbon monoxide was the pollutant of primary concern near intersections, and exceedances of the standards would result in a significant local air quality impact. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of CO. The Project would add approximately 184 peak hour trips. Air pollutant monitoring data indicate that CO levels have been at healthy levels in the Bay Area since the early 1990s. The highest measured level over any 8-hour averaging period in the Bay Area during the last 3 years is less than 3.0 ppm, compared to the ambient air quality standard of 9.0 ppm.

Energy/Other Impacts

CalEEMod defaults for energy use were used, which are assumed to include 2013 Title 24 Building Standards. Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the Project. Table 5.2-3 below identifies the anticipated emissions as compared with the BAAQMD thresholds.
Table 5.2-3  Operational Emissions

<table>
<thead>
<tr>
<th>Scenario</th>
<th>ROG</th>
<th>NOx</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>0.96 t.</td>
<td>2.52 t.</td>
<td>0.99 t.</td>
<td>0.29 t.</td>
</tr>
<tr>
<td>Winery and Other</td>
<td>0.36 t.</td>
<td>0.45 t.</td>
<td>0.32 t.</td>
<td>0.09 t.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1.32 t.</td>
<td>2.97 t.</td>
<td>1.31 t.</td>
<td>0.38 t.</td>
</tr>
<tr>
<td><strong>BAAQMD Thresholds (tons/year)</strong></td>
<td>10 t.</td>
<td>10 t.</td>
<td>15 t.</td>
<td>10 t.</td>
</tr>
</tbody>
</table>

As shown in the table, the Project operational emissions related to ozone and particulate matter are below the BAAQMD thresholds for all criterion pollutants. Therefore, the Project will not result in a significant regional air impact, and mitigation is not required to reduce operational emissions.

Cumulative Emissions

BAAQMD screening guidance indicates that the Project would have a less than significant impact with respect to CO levels if Project traffic projections indicate that traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour. As shown on Table 5.2-3 above, the Project is significantly below the BAAQMD thresholds for ROG, NOx, PM10, and PM2.5. Mitigation has been included to ensure that emissions due to construction activities remain below thresholds.

3. Sensitive Receptors

Project impacts related to increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the Project vicinity. Review of the Project area did not reveal any sensitive receptors in the vicinity (within 1,000 feet) of the Project site.

5.2.5 Mitigation Measures

1. Standard Mitigation Measures

None required. The City of Napa Policy Resolution 27 does not include mitigation measures in the area of Air Quality.

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3 For a land-use project type, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections to more than 44,000 vehicles per hour.
2. Special Mitigation Measures

Short-Term Impacts

It is anticipated that fugitive dust will result from soil disturbance and truck transport of soils during grading and site preparation activities. In compliance with the BAAQMD CEQA Air Quality Guidelines, the following mitigation measures are included to implement the BAAQMD-recommended construction best management practices to reduce emissions to a less than significant level.

**MM AQ-1** During Project construction, the applicant shall ensure that best management practices for dust control as set forth in the BAAQMD CEQA Air Quality Guidelines are implemented. These include:

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 miles per hour (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.
Long-Term Impacts

The Air Quality Assessment did not identify any long-term operational emissions that exceed the BAAQMD Thresholds for ROG, NOx, PM_{10}, PM_{2.5} or carbon monoxide (CO) for the Project components, either individually or cumulatively. Therefore, no mitigation measures are necessary for operational emissions.

5.2.6 Level of Significance after Mitigation

An air quality assessment must discuss any inconsistencies between the proposed Project and applicable General Plans and regional plans (California Environmental Quality Act (CEQA) Guidelines §15125). Regional plans that apply to the Project include the Bay Area Air Quality Management District CEQA Air Quality Guidelines (BAAQMD Guidelines) and the County of Napa General Plan. The purpose of the consistency analysis is to identify issues related to the assumptions and objectives of the BAAQMD Guidelines and whether the Project would interfere with the region’s ability to comply with federal and state air quality standards. Mitigation measures can be provided to reduce or eliminate any inconsistencies.

The Air Quality Assessment analysis responds to the California CEQA Guidelines, Appendix G Checklist as follows.

a) The Project will not conflict with or obstruct implementation of an applicable air quality plan. The Project is located in the San Francisco Bay Area Air Basin. The most recent clean air plan is the 2017 Clean Air Plan that was adopted by BAAQMD in April 2017. The proposed Project would not conflict with the latest Clean Air planning efforts since the Project would have emissions below the BAAQMD thresholds and implementation of the Project would not be considered growth-inducing. The Project is too small to exceed any of the criteria pollutant significance thresholds and, thus, it is not required to incorporate project specific transportation control measures listed in the latest Clean Air Plan.

b) The proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. CalEEMod Version 2016.3.1 was used to estimate emissions from construction and operation of the Project assuming full build-out using Project land use types and size and anticipated construction schedules based on CalEEMod defaults for a similar sized project. Based on the analysis, construction activity emissions are well below the BAAQMD thresholds and are considered less than significant if BAAQMD recommended best management practices (BMPs) are implemented. The BMPs have been included herein as Mitigation Measure MM AQ-1. Operational emissions for the Project were input for the Project land uses, trip generation rates for daily trips, energy use, solid waste generation, and water/wastewater use. Two model runs were conducted – one for hotel uses and one for office and winery uses. Operating year 2020 was used for the earliest full year of build-out. The modeling for operational impacts showed that all emissions are well below the BAAQMD thresholds. Therefore, operational emissions are less than significant, and no mitigation is required.
The Project will have emissions below the significance thresholds adopted by the BAAQMD related to ozone and particulate matter. Therefore, the Project would not contribute substantially to existing or projected violations of those standards. Carbon monoxide emissions from traffic generated by the Project would be the pollutant of greatest concern at the local level. However, the region has been designated as attainment for the carbon monoxide standard. Based on trip generation rates, the Project would not adversely affect high-volume intersections that have the potential to result in exceedance of an ambient air quality standard for carbon monoxide. BAAQMD screening guidance indicates that the Project would have a less than significant impact with respect to carbon monoxide levels if traffic projects indicate that traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour. Because cumulative traffic volumes at all intersections affected by the Project would have fewer than 44,000 vehicles per hour, the Project will have a less than significant effect with respect to carbon monoxide emissions.

c) The Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable State or federal ambient air quality standard.

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act. Federal and state ambient air quality standards have been attained for carbon monoxide. In an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. The thresholds are for ozone precursor pollutants (ROG and NOx), PM_{10} and PM_{2.5}. The thresholds apply to both construction and operational impacts.

d) The proposed Project will not expose sensitive receptors to substantial pollutant concentrations.

Project impacts related to community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity. The Project would not introduce new receptors and would not be a substantial source of community risk during Project operation because Project operational impacts are below thresholds. The Project does not propose any stationary TAC sources such as emergency back-up generators.

During construction of the project, diesel exhaust would be a temporary source of TACs that could affect sensitive receptors in the project vicinity. The BAAQMD recommends using a 1,000-foot screening distance for identifying areas of potentially significant impact. That is, if there are no sensitive receptors within a 1,000-foot radius of the project site, community risk from construction of the project is expected to be less than significant. A review of the project area did not reveal any sensitive receptors within 1,000 feet of the Project site. Therefore, it is concluded that community risk from the Project would be below thresholds contained in Table 5.2-1. The Project would have a less-than-significant impact with respect to exposure of receptors to substantial pollutant concentrations because no new sensitive receptors will
result from the Project and there are no sensitive receptors identified within 1,000 feet of the project site. The Project would also not contribute cumulatively to a significant community risk impact.

e) The Project will not create objectionable odors affecting a substantial number of people.

The Project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions could be noticeable from time to time at adjacent industrial and commercial developments. However, the emissions would be localized and short-term, and would not adversely affect people off-site. Long-term operations will include treatment of the industrial wastewater by on-site wastewater treatment equipment. The waste will be piped from the winery to a tank beneath the winery building and transferred through an underground pipe system to the treatment area. The treatment will occur in three cylindrical storage tanks and the treated water will be dispersed through the landscape irrigation system. No open drainage areas or storage tanks will be used, and the wastewater will be completely contained until it is purified and used for landscaping. No odors will occur since the wastewater will be enclosed in pipes and tanks during the entire process.

The Project will not include any sources of significant odors that would result in complaints from or impacts to surrounding uses. Therefore, the impact is considered less than significant.

As detailed herein, the Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment. Implementation of Mitigation Measure MM AQ-1 will reduce site preparation fugitive dust emissions to less than significant, and no other threshold for criteria pollutants is anticipated to be exceeded for either short-term construction or long-term operation. The Project will not expose sensitive receptors to substantial pollutant concentrations or create objectionable odors affecting a substantial number of people.

In addition to BAAQMD standards and policies, the proposed Project is consistent with the policies of both the Napa County General Plan and the City of Napa General Plan. Project-specific air quality impacts have been identified, and the Project will not exceed thresholds established by BAAQMD. Construction activities will comply with the BAAQMD Clean Air Plan, and emissions will be below specified thresholds. Design features will be incorporated into the Project to reduce or eliminate air quality impacts during construction and operational phases. Bicycle racks/storage will be available, and bicycle lanes on internal streets within the industrial park will be maintained. Air quality impacts due to construction and operation will be less than significant with implementation of the Mitigation Measures identified herein and compliance with policies identified in the County and City General Plans.
5.2.7 **Cumulative Impacts**

The two major projects within the immediate vicinity of the proposed Project are the Meritage Commons development and the Napa Pipe development. Environmental documents have been prepared for both projects, and mitigation measures have been adopted to reduce impacts due to short-term construction and long-term operation. It was determined in the IS/MND that the Meritage Commons project was below BAAQMD significance thresholds for construction and operational emissions. The Napa Pipe project EIR concluded that the Project would have unavoidable significant impacts related to air quality during remediation and grading based on the BAAQMD significance thresholds. The Napa Pipe project is currently in the remediation phase prior to construction. Cumulative contributions from the Napa Pipe and Meritage Commons developments, combined with the proposed Project, could be significant due to the emissions exceedance of the adjacent Napa Pipe project. However, the Project’s contribution alone to the cumulative condition would not be considerable. The proposed Project would not result in impacts that are cumulatively considerable.

5.2.8 **Unavoidable Adverse Impacts**

The air quality analysis demonstrates that the Project will not result in a significant air quality impact during either short-term construction or long-term operation. Project impacts will remain below the BAAQMD thresholds and no unavoidable adverse impacts will occur related to air quality.
5.3 Biological Resources

This section analyzes the potential biological resources impacts associated with the proposed Project. Information in this section is based on the following:

- Biological Technical Report (Biological Report) prepared by Tony Bomkamp, Glenn Lukos Associates, Inc. (GLA), dated October 2017. The Biological Report in its entirety is included herein as Appendix E.

- Tree Protection Guidelines and Long Term Maintenance Plan (Tree Guidelines) prepared by Walter Warriner Consulting Arborist (Arborist) dated February 15, 2017. The report in its entirety is included herein as Appendix F.

The scope of the Biological Report includes existing conditions of the Project site. Methods for preparation of the Biological Report include a site visit by a qualified biologist to determine if any biological resources were present on the site. The Biological Report is consistent with accepted scientific and technical standards of the U.S. Fish & Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies and organizations. The Biological Report also evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA).

5.3.1 Existing Conditions

The Project site is a vacant lot within the largely built-out Napa Valley Commons corporate park. The site, which is sparsely covered with shrubs and non-native grass, has been regularly groomed. Multiple trees exist on the eastern and southern perimeter of the site including valley oaks, live oak, and redwood trees. Near the northern Project boundary and southeast corner of the site, immediately west of the coast redwood landscape plantings, are small areas, of which Features A and C are dominated by spikerush (*Eleocharis macrostachya*) covering approximately 0.03 acre and 0.01 acre, respectively. The third area, Feature B (0.02 acre), is dominated by a mix of facultative and upland plants and needs additional evaluation during the spring.

The following aerial photograph of the site depicts the current condition and existing vegetation. (Exhibit 5.3-1, Aerial Photograph of Biological Resources) The existing trees in the photograph are numbered and discussed in further detail herein.
Exhibit 5.3-1  Aerial Photograph of Biological Resources
1. Vegetation Mapping

Vegetation mapping for the site was conducted by GLA to identify the existing vegetation on the Project site. Table 5.3-1 below provides a summary of vegetation/land use types including corresponding acreage. Ten vegetation alliances or land-cover types were identified on the site. Detailed descriptions of each vegetation type follow the table. A vegetation map is included as Exhibit 5.3-2. Photographs depicting the various vegetation types and land uses are included as Exhibit 5.3-3 and Exhibit 5.3-4.

### Table 5.3-1  Summary of Vegetation/Land Use Types for the Study Site

<table>
<thead>
<tr>
<th>Vegetation Alliances/ Land Use Type</th>
<th>Rank</th>
<th>California Code</th>
<th>Total (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eucalyptus globulus (Blue-gum eucalyptus) Semi-Natural Stands</td>
<td>NA</td>
<td>79.100.00</td>
<td>0.022</td>
</tr>
<tr>
<td>Populus fremontii (Fremont Cottonwood Forest) Forest Alliance</td>
<td>G3S3.2</td>
<td>*61.130.06</td>
<td>0.013</td>
</tr>
<tr>
<td>Quercus lobata (Valley oak woodland) Alliance</td>
<td>G3 S3</td>
<td>*71.040.05</td>
<td>0.184</td>
</tr>
<tr>
<td>Quercus rubra (Red oak woodland) Ornamental Plantings</td>
<td>NA</td>
<td>NA</td>
<td>0.016</td>
</tr>
<tr>
<td>Salix lasiolepis (arroyo willow thickets) Alliance</td>
<td>G4 S4</td>
<td>*61.201.01</td>
<td>0.003</td>
</tr>
<tr>
<td>Sequoia sempervirens (Redwood Forest) Ornamental Plantings</td>
<td>NA</td>
<td>45.230.00</td>
<td>0.052</td>
</tr>
<tr>
<td>Himalayan Blackberry brambles, Semi-Natural Stands</td>
<td>NA</td>
<td>NA</td>
<td>0.034</td>
</tr>
<tr>
<td>Avena barbata (Wild oats grasslands) Semi-Natural Herbaceous Stands</td>
<td>Not ranked</td>
<td>N/A</td>
<td>10.24</td>
</tr>
<tr>
<td>Eleocharis macrostachya (Pale Spikerush) Herbaceous Alliance</td>
<td>G4 S4</td>
<td>45.230.00</td>
<td>TBD</td>
</tr>
<tr>
<td>Disturbed/Developed</td>
<td>Not ranked</td>
<td>N/A</td>
<td>0.030</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>10.80</td>
</tr>
</tbody>
</table>

1. **Eucalyptus globulus (Eucalyptus Groves) Semi-Natural Woodland Stands.** Approximately 0.022 acre consists of blue-gum eucalyptus that have colonized the area. Understory consists of non-native grasses and forbs.

2. **Populus fremontii (Fremont Cottonwood Forest) Forest Alliance.** Approximately 0.13 acre consists of Fremont cottonwood growing at the base of the slope adjacent to Highway 221. The Fremont cottonwood forest includes two Fremont cottonwoods and comprises greater than 50% of the canopy cover and also includes a single coast live oak (*Quercus agrifolia*). Understory includes upland non-native grass and periwinkle. The two cottonwoods are not associated with a stream and are not growing in a wetland. As noted, they are growing at the base of a slope adjacent to the highway.

3. **Quercus lobata (Valley Oak Woodland) Alliance.** Approximately 0.184 acre of the study site consists of Valley Oak Woodland Alliance consisting of three individual oaks. Membership rules for this alliance include: 1) *Q. lobata* has greater than 50% relative cover in the tree canopy or greater than 30% relative cover when other tree species, such as *Q. agrifolia* or *S. lasiolepis*, are present; and 2) *Q. lobata* has greater than 35% relative cover in the tree canopy with *Acer negundo*, *Alnus rhombifolia*, *Fraxinus latifolia*, *Populus fremontii*, or *Platanus racemosa* present. The portion of the Study Site mapped as valley oak woodland consists of three large valley oak trees with an understory of wild oats.
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.3 – Biological Resources

Draft Environmental Impact Report

January 2018 Trinitas Mixed-Use Project

Source: Exhibit 3, Biological Technical Report (Appendix E to this EIR)

Exhibit 5.3-2 Vegetation Map
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.3 – Biological Resources

Draft Environmental Impact Report

Source: Exhibit 4, page 1, Biological Technical Report (Appendix E to this EIR)

Exhibit 5.3-3 Site Photographs
Photograph 3: View of non-native grassland looking southwest.

Photograph 4: View of potential seasonal feature on northern property boundary.

Source: Exhibit 4, page 2, Biological Technical Report (Appendix E to this EIR)

Exhibit 5.3-4  Site Photographs
4. **Quercus rubra** (Red Oak Woodland) Ornamental Plantings. Approximately 0.16 acres consist of ornamental plantings that include primarily red oak (**Quercus rubra**) as well as Shumard oak (**Quercus shumardii**). Understory consists of non-native periwinkle (**Vinca major**) and Japanese honeysuckle (**Lonicera japonica**).

5. **Salix lasiolepis** (Arroyo Willow Thickets) Shrubland Alliance. Approximately 0.003 acre consists of an arroyo thicket growing at the base of the slope adjacent to Highway 221. The arroyo willow thicket supports arroyo willow (**Salix lasiolepis**), which comprises greater than 50% of the canopy cover and includes a single red willow (**Salix laevigeta**). Understory includes upland non-native grass and periwinkle. The arroyo willow thicket is not associated with a stream and is not growing in a wetland; rather as noted, is growing at the base of a slope adjacent to the highway.

6. **Sequoia sempervirens** (Redwood Forest) Ornamental Plantings. Approximately 0.52 acre consists of ornamental plantings of coast redwood (**Sequoia sempervirens**) that have been planted in windrows throughout the larger industrial park area. Understory consists of periwinkle, Japanese honeysuckle, and non-native grasses and forbs.

7. **Rubus armeniacus** (Himalayan Blackberry Brambles) Semi-Natural Shrubland Stands. Approximately 0.034 acre of the Study Site consists of non-native Himalayan blackberry brambles. Membership rules require 60% cover in the shrub layer. Himalayan blackberry is the only species due to the dense growth of the vegetation.

8. **Ornamental Plantings**. Approximately 0.21 acre of the Study Site consists of non-native ornamental trees and shrubs adjacent to the areas of existing development.

9. **Avena barbata** (Wild Oats Grasslands) Semi-Natural Herbaceous Stands. Approximately 10.24 acres of the Study Site consist of **Avena barbata** (Wild Oats Grasslands) Semi-Natural Stands and **Avena barbata** subassociation (44.150.01). Membership rules for this vegetation type include: 1) **Avena** spp. has greater than 75% relative cover; other non-native or native plants have less than 5% absolute cover if present in the herbaceous layer; and 2) **Avena** spp. has greater than 50% relative cover, and native herbs have less than 10% relative cover in the herbaceous layer. Within the portions of the Study Site mapped as wild oats grasslands, **A. barbata** has approximately 75% absolute cover. Other species present include Italian ryegrass (**Festuca perennis**), fennel (**Foeniculum vulgare**), salsify (**Tragopogon porrifolius**), prickly lettuce (**Lactuca serriola**), wild radish (**Raphanus sativus**), bristly ox-tongue (**Helminthotheca echioides**), chicory (**Chicorium intybus**), gumweed (**Madia gracilis**), English plantain (**Plantago lanceolate**), field bindweed (**Convolvulus arvensis**), and giant stork’s bill (**Erodium botrys**).

10. **Disturbed/Developed**. Approximately 0.03 acre of the Study Site consists of disturbed ground that supports little or no vegetation.
11. *Eleocharis macrostachya (Pale Spikerush) Herbaceous Alliance*. Approximately 0.03 acre of the Project site consists of near monocultural stands of pale spikerush that also includes rabbitsfoot grass (*Polypogon monspeliensis*) and curly dock (*Rumex crispus*). The area was evaluated for the presence of wetlands, and approximately 0.03 acre of the spikerush potentially meets all three wetland criteria as discussed herein.

Area adjacent to the Project site also includes mixed ornamental trees that occur along the adjacent parking lots associated with the existing commercial and industrial buildings and areas of turf grass.

2. **Special-Status Habitats**

The Tree Guidelines report identifies the following vegetation communities on the Project site: Coast Redwood, Red Oak, Shumard oak, Valley Oak, Coast Live Oak, Cottonwood, Blue Gum eucalyptus. The Valley oaks and Coast live oak have been identified in the Tree Guidelines report as candidates for protection.

Exhibit 5.3-5 depicts the three Valley oaks with brief descriptions of their conditions.

The GLA report notes that the CNDDB identifies the following four special-status vegetation communities for the Cuttings Wharf, Cordelia, Mt. George, and Napa quadrangle maps: 1) coastal brackish marsh, 2) northern coastal salt marsh, 3) northern vernal pool, and 4) serpentine bunchgrass. The Study Site does not contain any of the special-status vegetation types identified by the CNDDB; however, two vegetation alliances identified at the Study Site, Valley Oak Woodland and Fremont cottonwood forest, are considered special-status because they are both classified as S3, meaning that there are 10,000 to 50,000 acres within their state ranges.
Tree 001 (shown in the photos above) has a poor structure with acute angle branch attachments that have a potential to fail. There are numerous large pruning cuts and a small cavity on the lower trunk. The bark sloughing off the trunk suggests internal decay and accompanying poor structural stability.

The rock retaining wall around Tree 002 (shown in the photos above) and the small cavity opening at its base suggests that it is likely large roots were cut when the project to the west was constructed.

The rock retaining wall around Tree 003 (shown in the photo at above left) indicates that it too had large roots cut. There is a large cavity in a scaffold branch and a cabling system to stabilize the canopy.

Source: Tree Protection Guidelines, page 5; February 15, 2017 (Appendix F to this EIR)

Exhibit 5.3-5 Valley Oaks (Trees 001, 002, and 003)
3. **Special Status Plants**

No special-status plants were detected at the Study Site, and none are expected to occur due to either a lack of suitable habitat and/or a lack of suitable soils and/or no records of a given species in the vicinity of the Study Site. Table 5.3-2 below provides a list of special-status plants evaluated for the Study Site through general biological surveys and habitat assessments. Species were evaluated based on two factors: 1) species identified by the CNDDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Study Site, and 2) any other special-status plants that are known to occur within the vicinity of the Study Site, or for which potentially suitable habitat occurs within the site.

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Status</th>
<th>Habitat Requirements</th>
<th>Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Agrostis hendersonii</em></td>
<td>Federal: None</td>
<td>Valley and foothill grassland (mesic), vernal pools. Blooming period Apr-Jun. Elevation range 70-305 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>Henderson’s bent grass</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 3.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Amorpha californica var. napensis</em></td>
<td>Federal: None</td>
<td>Openings in broadleaf upland forest, chaparral, cismontane woodland. Blooming period Apr-Jul. Elevation range 120-2000 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>Napa false indigo</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Arabis modesta</em></td>
<td>Federal: None</td>
<td>Chaparral and lower montane coniferous forest. Blooming period Mar-Jul. Elevation range 120-800 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>modest rockcress</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 4.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Astragalus tener var. tener</em></td>
<td>Federal: None</td>
<td>Alkaline soils in playas, valley and foothill grassland (adobe clay), and vernal pools. Blooming period Mar-Jun. Elevation range 1-60 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>alkali milk-vetch</td>
<td>State: SE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 4.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Atriplex joaquinana</em></td>
<td>Federal: None</td>
<td>Chenopod scrub, valley and foothill grassland, meadows and seeps, and playas. Blooming period Apr-Oct. Elevation range 1-835 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>San Joaquin spear scale</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNPS: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Balsamorhiza macrolepis</em></td>
<td>Federal: None</td>
<td>Sometimes occurs on serpentinite soils in chaparral, cismontane woodland, and valley and foothill grassland. Blooming period Mar-Jun. Elevation range 90-1555 m</td>
<td>Does not occur on site; no serpentinite soils.</td>
</tr>
<tr>
<td>big-scale balsamroot</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Brodiaea leptandra</em></td>
<td>Federal: None</td>
<td>Volcanic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Blooming period May-Jul. Elevation range 1100-915 m</td>
<td>Does not occur on site; no volcanic soils.</td>
</tr>
<tr>
<td>narrow-anthered brodiaea</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Calandrinia breweri</em></td>
<td>Federal: None</td>
<td>Sandy or loamy soils and burns and disturbed sites in chaparral and coastal scrub. Blooming period Mar-Jun. Elevation range 10-1220 m</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td>Brewer’s calandrinia</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 4.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Calochortus pulchellus</em></td>
<td>Federal: None</td>
<td>Chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Blooming period Apr-Jun. Elevation range 30-840 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>Mt. Diablo fairy-lantern</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Carex lyngbyei</em></td>
<td>Federal: None</td>
<td>Brackish or freshwater marshes and swamps. Blooming period Apr-Aug. Elevation range 0-10 m</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td>Lyngbye’s sedge</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 2B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Castilleja affinis var. neglecta</em></td>
<td>Federal: None</td>
<td>Serpentine soils in valley or foothill grassland. Blooming period Apr-Jun. Elevation range 60-400 m</td>
<td>Does not occur on site; no serpentinite soils.</td>
</tr>
<tr>
<td>Tiburon paintbrush</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR: 1B.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species Name</td>
<td>Status</td>
<td>Habitat Requirements</td>
<td>Occurrence</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>----------------------</td>
<td>------------</td>
</tr>
<tr>
<td><em>Centromadia parryi</em> ssp. <em>parryi</em> pappose tarplant</td>
<td>Federal: None State: None CRPR: 1B.2</td>
<td>Often alkaline soils in chaparral, coastal prairie, meadows and seeps, coastal salt marshes and swamps, and vernally mesic valley and foothill grassland. Blooming period May-Nov. Elevation range 0-420 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Centromadia parryi</em> ssp. <em>rudis</em> Parry's rough tarplant</td>
<td>Federal: None State: None CRPR: 4.2</td>
<td>Alkaline, vernally mesic, seeps, sometimes roadsides in valley and foothill grassland and vernal pools. Blooming period May-Oct. Elevation range 0-100 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Downingia pusilla</em> dwarf downingia</td>
<td>Federal: None State: None CRPR: 2B.2</td>
<td>Valley and foothill grassland (mesic) and vernal pools. Blooming period Mar-May. Elevation range 1-445 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Eleocharis parvula</em> small spikerush</td>
<td>Federal: None State: None CRPR: 4.3</td>
<td>Marshes and swamps. Blooming period Apr-Sept. Elevation range 1-3020 m.</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td><em>Erigeron biolletii</em> streamside daisy</td>
<td>Federal: None State: None CRPR: 3</td>
<td>Rocky mesic areas in broadleafed upland forest, cismontane woodland, and north coast coniferous forest. Blooming period Jun-Oct. Elevation range 30-1100 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Erigeron greenei</em> Greene's narrow-leaved daisy</td>
<td>Federal: None State: None CRPR: 1B.2</td>
<td>Chaparral on serpentinite or volcanic soils. Blooming period Mar-Sept. Elevation range 80-1005 m.</td>
<td>Does not occur on site; no volcanic or serpentinite soils.</td>
</tr>
<tr>
<td><em>Eriogonum luteolium</em> var. <em>caninum</em> Tiburon buckwheat</td>
<td>Federal: None State: None CRPR: 1B.2</td>
<td>Chaparral, woodland, coastal prairie, and valley and foothill grassland on sandy or gravelly serpentinite soils. Blooming period May-Sep. Elevation range 0-700 m.</td>
<td>Does not occur on site; no serpentinite soils.</td>
</tr>
<tr>
<td><em>Harmonia nutans</em> nodding harmonia</td>
<td>Federal: None State: None CRPR: 4.3</td>
<td>Chaparral, cismontane woodland on rocky or gravelly volcanic soils. Blooming period Mar-May. Elevation range 75-975 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Hesperolinon breweri</em> Brewer's western flax</td>
<td>Federal: None State: None CRPR: 1B.2</td>
<td>Chaparral, cismontane woodland, and valley and foothill grassland; usually on serpentinite soil. Elevation range 30-945 m.</td>
<td>Does not occur on site; no serpentinite soils.</td>
</tr>
<tr>
<td><em>Iris longipetala</em> coast iris</td>
<td>Federal: None State: None CRPR: 4.2</td>
<td>Mesic areas in coastal prairie, lower montane coniferous forest, and meadows and seeps. Blooming period Mar-May. Elevation range 0-600 m.</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td>Species Name</td>
<td>Status</td>
<td>Habitat Requirements</td>
<td>Occurrence</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><em>Juglans hindsii</em> Northern California black walnut</td>
<td>Federal: None State: None CRPR: 1B.1</td>
<td>Riparian forest and riparian woodland. Blooming period Apr-May. Elevation range 0-440 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Leptosiphon jepsonii</em> Jepson's leptosiphon</td>
<td>Federal: None State: None CRPR: 1B.2</td>
<td>Chaparral, cismontane woodland, usually on volcanic soils. Blooming period Mar-May. Elevation range 100-500 m.</td>
<td>Does not occur on site; no volcanic soils.</td>
</tr>
<tr>
<td><em>Lessingia hololeuca</em> woolly-headed lessingia</td>
<td>Federal: None State: None CRPR: 3</td>
<td>Broadleafed upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland on clay or serpentinite soils. Blooming period Jun-Oct. Elevation range 15-305 m.</td>
<td>Does not occur on site; no clay or serpentinite soils.</td>
</tr>
<tr>
<td><em>Lilaeopsis masonii</em> Mason's lilaeopsis</td>
<td>Federal: None State: CR CRPR: 1B.1</td>
<td>Brackish or freshwater marshes and swamps and riparian scrub. Blooming period Apr-Nov. Elevation range 0-10 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Lilium rubescens</em> redwood lily</td>
<td>Federal: None State: None CRPR: 4.2</td>
<td>Broadleafed upland forest, chaparral, lower montane coniferous forest, north coast coniferous forest, and upper montane coniferous forest. Sometimes occurs on serpentinite soils and sometimes on roadsides. Blooming period Apr-Sept. Elevation range 0-10 m.</td>
<td>Does not occur on site; no serpentinite soils.</td>
</tr>
<tr>
<td><em>Micropus amphibolus</em> Mt. Diablo cottonweed</td>
<td>Federal: None State: None CRPR: 3.2</td>
<td>Rocky areas in broadleafed upland forest, chaparral, cismontane woodland, and valley and foothill grassland. Blooming period Mar-May. Elevation range 45-825 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Monardella viridis</em> green monardella</td>
<td>Federal: None State: None CRPR: 4.3</td>
<td>Broadleafed upland forest, chaparral, cismontane woodland. Blooming period Jun-Sep. Elevation range 100-1010 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Polygonum marinense</em> Marin knotweed</td>
<td>Federal: None State: None CRPR: 3.1</td>
<td>Brackish or coastal salt marshes and swamps. Blooming period Apr-Oct. Elevation range 0-10 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Ranunculus lobii</em> Lobb's aquatic buttercup</td>
<td>Federal: None State: None CRPR: 4.2</td>
<td>Mesic areas in cismontane woodland, north coast coniferous forest, valley and foothill grassland, and vernal pools. Blooming period Feb-May. Elevation range 15-470 m.</td>
<td>Does not occur on site.</td>
</tr>
<tr>
<td><em>Rhynchospora californica</em> California beaked-rush</td>
<td>Federal: None State: None CRPR: 1B.1</td>
<td>Bogs and fens, lower montane coniferous forest, meadows and seeps, and freshwater marshes and swamps. Blooming period May-Jul. Elevation range 45-1010 m.</td>
<td>Does not occur on site.</td>
</tr>
</tbody>
</table>
### Table 5.3.1: Biological Resources

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Status</th>
<th>Habitat Requirements</th>
<th>Occurrence</th>
</tr>
</thead>
</table>
| *Sidalcea hickmanii* ssp. *viridis*  
Marin checkerbloom            | Federal: None  
State: None  
CRPR: 1B.3 | Chaparral on serpentinite soils. Blooming period May-Jun. Elevation range 50-430 m. | Does not occur on site; no serpentinite soils. |
| *Suaeda californica*  
California seablite            | Federal: FE  
State: None  
| *Symphyotrichum lentum*  
Suisun Marsh aster              | Federal: None  
State: None  
CRPR: 1B.2 | Brackish and freshwater marshes and swamps. Blooming period May-Nov. Elevation range 0-3 m. | Does not occur on site. |
| *Trichostema ruygtii*  
Napa bluecurls                  | Federal: None  
State: None  
| *Trifolium amoenum*  
two-fork clover                  | Federal: FE  
State: None  
| *Trifolium hydrophilum*  
saline clover                   | Federal: None  
State: None  
CRPR: 1B.2 | Marshes and swamps, mesic, alkaline areas in valley and foothill grassland, and vernal pools. Blooming period Apr-Jun. Elevation range 0-300 m. | Not expected to occur on site. |
| *Triteleia lugens*  
dark-mouthed triteleia           | Federal: None  
State: None  
CRPR: 4.3 | Broadleafed upland forest, chaparral, coastal scrub, and lower montane coniferous forest. Blooming period Apr-Jun. Elevation range 100-1000 m. | Does not occur on site. |
| *Viburnum ellipticum*  
Oval-leaved viburnum             | Federal: None  
State: Rare  

### Status

- **Federal**
  - FE – Federally Endangered
  - FT – Federally Threatened
  - FC – Federal Candidate

- **State**
  - SE – State Endangered
  - ST – State Threatened

### CNPS Rare Plant Rank (CRPR)

- Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
- Rank 2A – Plants rare, threatened, or endangered in California, but more common elsewhere.
- Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
- Rank 3 – Plants about which more information is needed.
- Rank 4 – Plants of limited distribution (a watch list).

### Threat Code extension

- 1 – Seriously endangered in California (over 80% occurrences threatened)
- 2 – Fairly endangered in California (20-80% occurrences threatened)
- 3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

### Occurrence

- **Does not occur** – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- **Absent** – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- **Not expected to occur** – The species is not expected to occur on-site due to low habitat quality, however absence cannot be ruled out.
- **Potential to occur** – The species has a potential to occur on-site based on suitable habitat, however its presence/absence could not be confirmed.
- **Present** – The species was detected on-site incidentally or through focused surveys.

### 4. Special-Status Animals

The GLA report states that no special-status animals were detected at the Study Site; however, several species have limited to moderate potential to occur. Table 5.3-3 provides a list of special-status animals evaluated for the Study Site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on two factors,
including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Study Site, and 2) any other special-status animals that are known to occur within the vicinity of the Study Site, for which potentially suitable habitat occurs on the site. Neither the Project nor the Study Site are located within any USFWS-designated critical habitat.

### Table 5.3-3  Special Status Animals Evaluated for the Project Site

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Status</th>
<th>Habitat Requirements</th>
<th>Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Invertebrates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Branchinecta lynchi  
Vernal pool fairy shrimp | Federal: FT  
State: None  
CDFW: None | Seasonal vernal pools                                                                 | Limited potential to occur within shallow seasonal depressions.          |
| Desmocerus californicus dimorphus  
Valley elderberry longhorn beetle | Federal: FT  
State: None  
CDFW: None | Occurs only in the central valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2 to 8 inches in diameter; some preference shown for “stressed” elderberries. | Has no potential to occur on site due to lack of suitable habitat. |
| Speyeria callippe  
Callippe silverspot butterfly | Federal: FE  
State: None  
CDFW: None | Restricted to the northern coastal scrub of the San Francisco Peninsula. Hostplant is Viola pedunculata. Most adults found on east-facing slopes; males congregate on hilltops in search of females. | Does not occur on site. |
| Syncaris pacifica  
California freshwater shrimp | Federal: FE  
State: SE  
CDFW: None | Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Inhabits shallow pools away from main streamflow. Winter: undercut banks w/exposed roots. Summer: leafy branches touching water. | Has no potential to occur on site due to lack of suitable habitat. |
| **Fish**                                          |        |                                                                                       |                                                                            |
| Hypomesus transpacificus  
Delta smelt | Federal: FT  
State: SE  
CDFW: None | Sacramento–San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay. Seldom found at salinities > 10 parts per thousand (ppt). Most often at salinities < 2 ppt. | Has no potential to occur on site due to lack of suitable habitat. |
| Oncorhynchus mykiss irideus  
steelhead - central California coast DPS | Federal: FT  
State: None  
CDFW: None | Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Russian River, south to Soquel Creek and to, but not including, Pajaro River. Also San Francisco and San Pablo Bay basins. | Has no potential to occur on site due to lack of suitable habitat. |
| Spirinchus thaleichthys  
Longfin smelt | Federal: FC  
State: ST  
CDFW: SSC | Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater. | Has no potential to occur on site due to lack of suitable habitat. |
| **Amphibians**                                    |        |                                                                                       |                                                                            |
| Rana draytoni  
California red-legged frog | Federal: FT  
State: None  
CDFW: SSC | This species occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. It requires 11-20 weeks of permanent water for larval development, and must have access to estivation habitat. | Has no potential to occur on site due to lack of suitable habitat. |
### Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

#### 5.3 – Biological Resources

#### Draft Environmental Impact Report

**January 2018 Trinitas Mixed-Use Project**

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Status</th>
<th>Habitat Requirements</th>
<th>Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Buteo swainsoni</em></td>
<td>Federal: BCC</td>
<td>Breeding range generally restricted to the Central Valley, extreme northeast California, and Mono and Inyo counties, although it has more recently bred in the Antelope Valley. Typical breeding habitat consists of open areas such as grasslands and agricultural fields with scattered groves of trees.</td>
<td>Known to forage in vicinity of site based on user-submitted eBird sightings, but not expected to nest on site.</td>
</tr>
<tr>
<td></td>
<td>State: ST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Charadrius alexandinus nivosus</strong></td>
<td>Federal: FT</td>
<td>Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rallus longirostris obsoletus</strong></td>
<td>Federal: FE</td>
<td>Salt-water &amp; brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: SE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Riparia riparia</strong></td>
<td>Federal: None</td>
<td>Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine textured sandy soils near streams, rivers, lakes, or ocean to dig nesting holes.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: ST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Reithrodontomys raviventris</em></td>
<td>Federal: FE</td>
<td>Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat. Do not burrow, build loosely organized nests. Require higher areas for flood escape.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: SE</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>CDFW: CFP</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Special-Status Wildlife Species</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Invertebrates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Calasellus californicus</em></td>
<td>Federal: None</td>
<td>Aquatic habitats; known from Lake, Napa, Marin, Santa Cruz and Santa Clara counties in freshwater springs and wells.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Pogonichthys macrolepidotus</em></td>
<td>Federal: None</td>
<td>Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay &amp; associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning &amp; foraging for young.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Rana boylii</em></td>
<td>Federal: None</td>
<td>Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reptiles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Emys marmorata</em></td>
<td>Federal: None</td>
<td>Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.</td>
<td>No potential habitat on site due to lack of stream or pond habitat.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species Name</td>
<td>Status</td>
<td>Habitat Requirements</td>
<td>Occurrence</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><em>Agelaius tricolor</em></td>
<td>Federal: BCC State: 180-day Emergency listing as Endangered (December 3, 2014) CDFW: SSC</td>
<td>Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.</td>
<td>No potential habitat on site and no potential to occur.</td>
</tr>
<tr>
<td>Tricolored blackbird (nesting colony)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Aquila chrysaetos</em></td>
<td>Federal: BCC State: None CDFW: CFP</td>
<td>In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.</td>
<td>Has potential to forage on site. Suitable nesting habitat does not occur on site.</td>
</tr>
<tr>
<td>Golden eagle (nesting and wintering)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Athene cunicularia</em></td>
<td>Federal: None State: None CDFW: SSC</td>
<td>Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.</td>
<td>Does not occur on site due to a lack of suitable burrows.</td>
</tr>
<tr>
<td>Burrowing owl (burrows and some wintering sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Buteo regalis</em></td>
<td>Federal: BCC State: None CDFW: WL</td>
<td>Open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and foothills.</td>
<td>Has potential to forage on site during wintering period.</td>
</tr>
<tr>
<td>Ferruginous hawk (wintering)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Circus cyaneus</em></td>
<td>Federal: None State: None CDFW: SSC</td>
<td>A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands. Nests on the ground in dense clumps of vegetation.</td>
<td>Has potential to forage on site.</td>
</tr>
<tr>
<td>Northern harrier (nesting)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Elanus leucurus</em></td>
<td>Federal: None State: None CDFW: FP</td>
<td>Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.</td>
<td>Has low potential to nest on site because of proximity of development to potential nesting sites.</td>
</tr>
<tr>
<td>White-tailed kite (nesting)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Geothlypis trichas sinuosa</em></td>
<td>Federal: BCC State: None CDFW: SSC</td>
<td>Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.</td>
<td>No potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td>Saltmarsh common yellowthroat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Hydroprogne caspia</em></td>
<td>Federal: BCC State: None CDFW: None</td>
<td>Nests on sandy or gravelly beaches and shell banks in small colonies inland and along the coast. Inland fresh-water lakes and marshes; also, brackish or salt waters of estuaries and bays.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td>Caspian tern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Laterallus jamaicensis coturniculus</em></td>
<td>Federal: BCC State: ST CDFW: CFP</td>
<td>Occurs in coastal saltmarsh and brackish marsh dominated by pickleweed.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td>California black rail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Melospiza melodia maxillaris</em></td>
<td>Federal: BCC State: None CDFW: SSC</td>
<td>Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td>Suisun song sparrow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Melospiza melodia samuelis</em></td>
<td>Federal: BCC State: None CDFW: SSC</td>
<td>Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the pickleweed marshes; nests in Grindelia bordering slough channels.</td>
<td>Has no potential to occur on site due to lack of suitable habitat.</td>
</tr>
<tr>
<td>San Pablo song sparrow</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.3 – Biological Resources

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Status</th>
<th>Habitat Requirements</th>
<th>Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antrozous pallidus</td>
<td>Federal: None</td>
<td>Occurs throughout western north America. Most abundant in xeric ecosystems, including the Great Basin, Mojave, and Sonoran Deserts. Found in Habitats with rocky, outcropped areas.</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td>Pallid Bat</td>
<td>State: None</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>WBWG: H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorex ornatus sinusos</td>
<td>Federal: None</td>
<td>Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean high tide line for nesting and foraging.</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td>Suisun shrew</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxidea taxus</td>
<td>Federal: None</td>
<td>Occurs drier shrub, forest, and herbaceous habitats. Needs open, uncultivated ground and friable soils for digging burrows. Preys on burrowing rodents.</td>
<td>Not expected to occur on site.</td>
</tr>
<tr>
<td>American badger</td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDFW: SSC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status**

- Federal
  - FE – Federally Endangered
  - FT – Federally Threatened
  - FPT – Federally Proposed Threatened
  - FC – Federal Candidate
  - BCC - USFWS Bird of Conservation Concern

- State
  - SE – State Endangered
  - ST – State Threatened
  - CFP – California Fully-Protected Species
  - SSC – Species of Special Concern

**Western Bat Working Group (WBWG)**

- H – High Priority
- LM – Low-Medium Priority
- M – Medium Priority
- MH – Medium-High Priority

**Occurrence**

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur on-site due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur on-site based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected on-site incidentally or through focused surveys.

5. **Special-Status Animal Species Observed within the Project Site**

No special-status wildlife species were observed within the Study site by GLA during surveys conducted in August 2017.

6. **Special-Status Wildlife Species Not Observed but with a Potential to Occur at the Study Site**

**Vernal Pool Fairy Shrimp (Branchinecta lynchi)**

The vernal pool fairy shrimp is federally listed as threatened. This species occupies two kinds of habitat, including rock basins in sandstone outcrops limited to the southeast corner of Contra Costa County. According to Clyde Eriksen and Denton Belk, “[t]he more common habitat is a small swale, earth slump or basalt-flow depression basin with a grassy, occasionally muddy bottom, in unplowed grassland.” The vernal pool fairy shrimp is long-lived, living up to 139 days, and typically requires pools that are deeper than the features observed on the site. As noted in the discussion of the wetland

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characteristics of the three features noted on the site, algal matting was observed in Features A and C (such algal mats were absent from Feature C); however, based on the site observations, ponding within Feature A likely reached between 4 and 5 inches, and only 2 to 3 inches for Feature C. Such ponding depths are generally not sufficient for the vernal pool fairy shrimp; thus, it has only limited potential to occur. Nevertheless, dry-season and wet-season surveys are proposed for the features beginning with dry season surveys in October 2017 with wet-season surveys to begin as soon as sufficient rainfall necessary to induce ponding occurs in accordance with the requirements of the USFWS protocols. Both the dry- and wet-season surveys will be conducted in accordance with the latest USFWS protocols.5

Golden eagle (nesting and wintering) (*Aquila chrysaetos*)

The golden eagle is a California CFP and USFWS BCC. It occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys and nests on rock outcrops and ledges and sometimes large trees such as eucalyptus in open areas. The golden eagle has low potential to low forage in open areas but would not nest within the Study Site.

Ferruginous hawk (wintering) (*Buteo regalis*)

The ferruginous hawk is a USFWS BCC and a CDFW watch list species. It occurs in open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and foothills. The ferruginous hawk has low potential to forage in open areas but would not winter within the Study Site.

Swainson’s hawk (nesting) (*Buteo swainsoni*)

The Swainson’s hawk is a State-listed threatened and USFWS BCC species when nesting. The breeding range is now generally restricted to the Central Valley, extreme northeast California, and Mono and Inyo counties, although it has more recently bred in the Antelope Valley, located in the western Mojave Desert (Los Angeles County). Typical breeding habitat consists of open areas such as grasslands and agricultural fields with scattered groves of trees.

Swainson’s hawks exhibit large home ranges in Central California. The Initial Study/Mitigated Negative Declaration, which is part of the three hotel projects under the ownership of Pacific Hospitality Group located in the Napa Valley Commons corporate park, also included biological analysis of the Swainson’s hawk. The report noted a single sighting of a Swainson’s hawk just west of the Meritage Commons project site. The mean home range is between 6,817 and 6,306 acres, and requires suitable nesting trees. Although not detected by GLA during biological surveys, the Swainson’s hawk has been known to forage at the Study Site, based on user reported sightings recorded on the eBird website. Similar to the findings at the Meritage Commons site, there is no

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potential for it to nest within the Trinitas Study Site due to a lack of suitable, large nesting trees.

**Northern harrier (nesting) (Circus cyaneus)**

The northern harrier is CDFW SSC when nesting, but is a common, often abundant, winter visitor throughout California from September through April. Characteristically, this hawk inhabits marshlands, both coastal salt and freshwater, but often forages over grasslands and fields. It glides and flies low over open habitats searching for prey. The northern harrier has low potential to forage in open areas and has low potential for nesting within the Project site.

**White-tailed kite (nesting) (Elanus leucurus)**

The white-tailed kite is a CDFW fully-protected species when nesting. It occurs in low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies of oaks, willows, and sycamores are used for nesting and cover.

The white-tailed kite has low potential to forage within open areas and has low potential to nest in the woodlands associated with the southeast corner of the Project site due to proximity to development and roads.

7. **Raptor Use**

Although no raptors were observed during the biological surveys by GLA, the Site provides suitable, though limited foraging habitat for a number of raptor species, including special-status raptors. The Site provides marginally suitable breeding habitat for two special-status raptor species. The GLA report states that it is important to note that the area suitable for raptor foraging covers approximately 10 acres of grassland habitat, which represents a fraction of raptors’ home range.

8. **Nesting Birds**

The Study Site contains trees, shrubs and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.6

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6 The MBTA makes it unlawful to take, possess, buy, sell, purchase or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5 and 3800 of the California Department of Fish and Game Code prohibit the take, possession or destruction of birds, their nests or eggs.
9. **Jurisdictional Determination**

The Project site contains no streams or lakes; however, the site contains three small isolated areas that exhibit seasonal ponding, in at least some years (Features A, B, and C on Exhibit 5.3-6, Potential Seasonal Features). Feature A occurs along the northern Project boundary and Features B and C near the southeast corner of the site. Features A and C support a predominance of wetland plants, dominated by pale spikerush (*Eleocharis macrostachya*). The area also exhibits hydric soils indicators with a soil color of 10YR 3/2 and 5% redoximorphic features of 10YR 5/8 (Redox Dark Surface - F6) and hydric soil indicators consisting of dried algal mats (Biotic Crust - B12) (Exhibit 5.3-7, Soils Map). Because the rainfall associated with the 2016/2017 was approximately double the annual average, the wetland indicators may not be indicative of "normal" years (i.e. 50/100 as required in the Arid West Supplement) and thus it will be necessary to conduct additional field work to further evaluate these features. The potential jurisdictional status of these feature is addressed below relative to Section 404/401, 1602, and Porter Cologne.

**Corps Jurisdiction**

As noted, no jurisdictional drainages are present on the site. Small seasonal ponding features (Features A and C) at the southeast corner of the site are dominated by pale spikerush (*Eleocharis macrostachya*, OBL). As described above, the features also exhibit indicators for the presence of hydric soils and potentially for wetland hydrology. While the presence of wetland hydrology during the past well-above-average rainfall season would not be dispositive, the presence of hydric soils and wetland plants with a status of "Obligate" indicates that the areas potentially exhibit wetland conditions during at least 50% of years.

Feature B supports a mix of facultative species such as English Plantain (*Plantago lanceolate*, FAC) and curly dock (*Rumex crispus*, FAC) as well as upland species such as bur clover (*Medicago polymorpha*, FACU) and Roundleaf cancerwort (*Kickxia spuria*, UPL) and thus exhibits less definitive vegetation relative to wetland status. This is noteworthy given that the 2016/2017 rainfall was well above average and the lack of definitive vegetation is a strong indicator that Feature B is not a wetland. Nevertheless, confirmation will be made in spring of 2018.

While Features A and C potentially meet the three criteria required for the presence of wetlands pursuant to Section 404, the areas are clearly isolated and do not connect to downstream navigable waters. Because of the nature of the site, which is bermed on all sides, rainfall that reaches this feature exhibits no potential for reaching the Napa River to the west. As such, all three features are isolated water and not subject to Section 404 jurisdiction. Because the features are not subject to Section 404 jurisdiction, they are accordingly, not subject to jurisdiction under Section 401 of the Clean Water Act.
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.3 – Biological Resources

Draft Environmental Impact Report

January 2018 Trinitas Mixed-Use Project

Source: Exhibit 6, Biological Technical Report (Appendix E to this EIR)

Exhibit 5.3-6  Potential Seasonal Features
Source: Exhibit 5, Biological Technical Report (Appendix E to this EIR)

**Exhibit 5.3-7**  Soils Map
CDFW Section 1602 Jurisdiction

As noted, there are no areas that meet CDFW’s definition of “stream” or “lake” on the site. The seasonal wetland does not meet CDFW’s definition of a stream or a lake, and any potential impacts to this feature would not be regulated under Section 1602.

Regional Water Quality Control Board Waste Discharge Requirements

The Regional Board could assert jurisdiction over areas that meet the minimum threshold for seasonal wetlands, requiring an authorization in accordance with the waste discharge requirements of Porter Cologne.

5.3.2 Regulatory Setting

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state-listed and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species that are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

1. City of Napa

As noted, the Project site contains mature trees that are regulated by the City of Napa Municipal Code, Chapter 12.45 - Trees on Private Property. This section calls for the protection of native trees on private property from the impacts of construction. Protected native trees include trees on private properties over one acre in size and zoned for commercial or industrial purposes. The code stipulates that the following trees be protected:

<table>
<thead>
<tr>
<th>Protected Species</th>
<th>Trunk Diameter Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valley oak (Quercus lobata)</td>
<td>12 inches or greater</td>
</tr>
<tr>
<td>Coast live oak (Quercus agrifolia)</td>
<td>12 inches or greater</td>
</tr>
<tr>
<td>Black oak (Quercus kelloggii)</td>
<td>12 inches or greater</td>
</tr>
<tr>
<td>Blue oak (Quercus douglasii)</td>
<td>16 inches or greater</td>
</tr>
<tr>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>36 inches or greater</td>
</tr>
<tr>
<td>California bay (Umbellularia californica)</td>
<td>12 inches or greater</td>
</tr>
<tr>
<td>Black walnut (Juglans hindsii)</td>
<td>12 inches or greater</td>
</tr>
</tbody>
</table>

The City’s tree preservation standards require the following steps to be taken during the design and construction of the proposed Project:

1. Arboricultural and related soil work must be performed under the supervision of an Arborist that is certified by the International Society of Arboriculture (ISA). All arboricultural work must be completed prior to site grading.

2. Prior to initiating any construction activity in the area, tree protection zones must be established beyond the dripline of all protected trees. The dripline is defined as the widest distance from main trunk to the furthest branch tip around the entire circumference of each individual tree canopy. This area is established
as the minimum root area generally required to preserve tree health. The City requires as much area around the circumference of tree beyond the dripline as practical for minimal intrusion into the root zones of trees to further ensure tree survival and health.

3. Temporary protective fencing must be installed around each protected tree that will be impacted by construction. This is to prevent encroachment of any construction activities, equipment, storage of materials, and/or personnel in the tree protection zone. Fencing must remain in place until all construction activities are completed. All equipment and personnel are to remain outside the fenced area at all times until Project is complete. It is the responsibility of the General Contractor to inform construction personnel and subcontractors of the purpose and importance of the tree protection zones.

4. Grade changes within a tree dripline are to be minimized wherever possible. Grade should not change from that which existed prior to grading activities without approval from the Project Arborist. The maximum cut or fill within the dripline is not allowed to exceed 6 inches. Grading should be done in conjunction with the Project Arborist to minimize and/or mitigate root damage. Grades must drain away from root crowns at a minimum of 2%. Original grade must be maintained in the immediate area of the root crown at all times. No increase in grade will be allowed under any circumstances around the root crown.

5. A retaining wall may be required to prevent soil grade from being raised in the root crown in locations where fill soil exceeds 6 inches above original grade. The wall must be installed a minimum distance of 4 feet from any tree trunk and be a permanent fixture. It is the responsibility of the Project designer to develop an appropriate retaining wall with the approval of the Project Arborist. If conditions exist where a retaining wall is going to be closer than 4 feet to tree trunk, the Project Arborist shall be consulted for details of this installation.

6. Where fill is approved and/or where paving of any type is planned within the dripline, aeration tubes may be required. Any fill soil used within the dripline should be site soil that closely matches what exists within dripline. Imported soil should have the same or slightly coarser texture than existing site soil with a pH range comparable to the site soils and able to support plant growth.

7. All approved soil cuts within the dripline may require the reduction of foliage to balance any potential root loss. Soil excavation near preserved trees should be avoided where possible, or mitigated under the guidance of the Project Arborist.

8. The existing root system within the dripline should not be severed by construction activities of any type. For roots that extend beyond the dripline the Project Arborist must be consulted for any root over 2” in diameter to determine the impact on tree health.

9. Roots are to be pruned with proper hand tools when major structural roots are encountered over one inch in diameter. The tree or the City of Napa will not tolerate the tearing of roots.
10. The City of Napa recommends that underground utilities be placed well outside the dripline. Underground work within tree driplines must be avoided.

11. All underground work required within the dripline of the trees and below original grade shall be previewed by the Project Arborist to determine potential impact on trees and to prepare mitigation measures. The Project Arborist must be present during that actual underground work.

12. Prior to any construction the protected trees may require pruning. Pruning shall be as minimal as possible with the objective of removing only dead wood, damaged branches and structural defects. The Project Arborist must be consulted prior to initiation of any pruning. Pruning may be required to create access for construction equipment. This pruning is to be done only by a qualified arborist, and shall by no means be done by construction personnel under any circumstances.

2. **State of California Endangered Species Act (CESA)**

CESA defines endangered species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The state defines a threatened species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.”

Candidate species are defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.” Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080-2085 of the CESA addresses the taking of threatened, endangered or candidate species by stating “No person shall import into this state, export out of this state, or take, possess, purchase or sell within this state any species or any part or product thereof that the commission determines to be an endangered species or a threatened species, or attempt any of these acts except as otherwise provided.” Under CESA, “take” is defined as “hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.
3. **Federal Endangered Species Act (FESA)**

The FESA of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined as “…harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct.” USFWS has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” When a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS which makes determinations about “take” on a case-by-case basis.

4. **California Fish and Game Code**

The *California Fish and Game Code* Division 2, Chapter 6, §§1600-1603 regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream or lake that supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or episodically and that is defined by the area in which water currently flows, or has flowed, over the given course during the historic hydrologic regime, and where the width of its course can reasonably to identified by physical or biological indicators.” This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.”

5. **Army Corps of Engineers (ACOE)**

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term “waters of the United States” is defined in Corps regulations at 33 CFR Part 328.3(a) as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
   i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   ii. From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
   iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section;
(8) Waters of the United States do not include prior converted cropland.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM), which is defined at 33 CFR 328.3(e) as:

... that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the manual and the Arid West Supplement generally require that, to be considered a wetland, the vegetation, soils and hydrology of an area exhibit at least minimal hydric characteristics. A wetland should normally meet each of the following three criteria:

1. More than 50% of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands);
2. Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
3. Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least 5% of the growing season during a normal rainfall year, the Arid West Supplement does not include quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intra-state) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by

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migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that *abutted* a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

> In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.

Therefore, GLA believes that the court’s opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

### 6. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the *California Fish and Game Code*, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW definition of “lake” includes “natural lakes or man-made reservoirs.”

CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFW Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...

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8 *California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.*
• Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFW jurisdictional limits closely mirror those of the Corps. Exceptions are CDFW’s addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area’s federal wetland status.

7. **Regional Water Quality Control Board**

Section 401 of the Clean Water Act requires any applicant for a Section 404 permit to obtain certification from the state that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California, this Section 401 certification is obtained from the Regional Water Quality Control Board. The Corps, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived.

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program. The memorandum states:

> California’s right and duty to evaluate certification requests under section 401 is pendant to (or dependent upon) a valid application for a section 404 permit from the Corps, or another application for a federal license or permit. Thus if the Corps determines that the water body in question is not subject to regulation under the COE’s 404 program, for instance, no application for 401 certification will be required...

The SWANCC decision does not affect the Porter Cologne authorities to regulate discharges to isolated, non-navigable waters of the states....

Water Code section 13260 requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements).” (Water Code §13260(a)(1) (emphasis added)) The term “waters of the state” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” (Water Code §13050(e).) The U.S. Supreme Court’s ruling in SWANCC has no bearing on the Porter-Cologne definition. While all waters of the United States that are within the borders of California are also waters of the state, the converse is not true—waters of the United States is a subset of waters of the state. Thus, since Porter-Cologne was enacted California always had and retains authority to regulate discharges of waste into any waters of the state, regardless of whether the COE has concurrent jurisdiction under section 404. The fact that often Regional Boards opted to regulate discharges to, e.g., vernal pools, through the 401 program in lieu of or in addition to issuing waste discharge requirements (or waivers thereof) does not preclude the

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regions from issuing WDRs (or waivers of WDRs) in the absence of a request for 401 certification.

In this memorandum, the SWRCB’s Chief Counsel has made the clear assumption that fill material to be discharged into isolated waters of the United States is to be considered equivalent to “waste” and therefore subject to the authority of the Porter Cologne Water Quality Act.\textsuperscript{10}

8. \textbf{California Environmental Quality Act (CEQA) Section 15380}

CEQA requires evaluation of a project’s impacts on biological resources and provides guidelines and thresholds for use by lead agencies to evaluate the significance of proposed impacts. In addition, CEQA Guidelines §15380 provides protection for non-listed species that could potentially meet the criteria for state listing. CDFW recognizes that plants on Lists 1A, 1B or 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants in California may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants that are regionally important.

\textbf{Non-Listed Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA}

1. \textbf{Federally Designated Special-Status Species}. Within recent years, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. This term is employed in this document, but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For this report, GLA used the following acronyms for federal special-status species:

- FE Federal listed as Endangered
- FT Federal listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FC Federally Candidate Species (former C1 species)
- FSC Federal Species of Concern (former C2 species)

2. \textbf{State-Designated Special-Status Species}. Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the \textit{California Fish and Game Code}, §4700 and §3511, respectively. California SSC are

\textsuperscript{10} On July 21, 2017, the SWRCB issued a draft “Procedures for Discharges of Dredged or Fill Materials to Waters of the State” which provides definitions for wetlands, procedures for jurisdictional delineations, and procedures for obtaining permits for impacts to waters of the state.

http://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.shtml
designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report, GLA used the following acronyms for State special-status species:

- **SE**: State-listed as Endangered
- **ST**: State-listed as Threatened
- **SR**: State-listed as Rare
- **SCE**: State Candidate for listing as Endangered
- **SCT**: State Candidate for listing as Threatened
- **SFP**: State Fully Protected
- **SP**: State Protected
- **SSC**: State Species of Special Concern

3. **CNDDB Global/State Rankings.** The CNDDB provides global and state rankings for species and communities based on a system developed by The Nature Conservancy to measure rarity of a species. The ranking provides a shorthand formula about how rare a species/community is, and is based on the best information available from multiple sources, including state and federal listings, and other groups that recognize species as sensitive (e.g., Bureau of Land Management, Audubon Society). State and global rankings are used to prioritize conservation and protection efforts so that the rarest species/communities receive immediate attention. In both cases, the lower ranking (i.e., G1 or S1) indicates extreme rarity. Rare species are given a ranking from 1 to 3. Species with a ranking of 4 or 5 is considered common. If the exact global/state ranking is undetermined, a range is generally provided. For example, a global ranking of “G1 G3” indicates that a species/community global rarity is between G1 and G3. If the animal being considered is a subspecies of a broader species, a “T” ranking is attached to the global ranking. The following are descriptions of global and state rankings:

- **Global Rankings**
  - **G1** – Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or because of some factor(s) making it especially vulnerable to extinction.
  - **G2** – Imperiled globally because of rarity (6-20 occurrences), or because of some other factor(s) making it very vulnerable to extinction throughout its range.
  - **G3** – Either very rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g., a physiographic region), or because of some other factor(s) making it vulnerable to extinction throughout its range.
  - **G4** – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
  - **G5** – Common, widespread and abundant.
• State Rankings
  • S1 – Extremely rare; typically 5 or fewer known occurrences in the state; or only a few remaining individuals; may be especially vulnerable to extirpation.
  • S2 – Very rare; typically between 6 and 20 known occurrences; may be susceptible to becoming extirpated.
  • S3 – Rare to uncommon; typically 21 to 50 known occurrences; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed.
  • S4 - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
  • S5 - Common, widespread, and abundant in the state.

4. **California Native Plant Society.** The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS’s Eighth Edition of the California Native Plant Society’s Inventory of Rare and Endangered Plants of California separates plants of interest into five ranks. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS and CDFW have jointly assigned five California Rare Plant Ranks (CRPR) which are summarized in the table below:

<table>
<thead>
<tr>
<th>CNPS/CNPR Rank</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank 1A – Presumed Extinct in California</td>
<td>Thought to be extinct in California based on a lack of observation or detection for many years.</td>
</tr>
<tr>
<td>Rank 1B – Rare or Endangered in California and Elsewhere</td>
<td>Species that are generally rare throughout their range and are also judged to be vulnerable to other threats such as declining habitat.</td>
</tr>
<tr>
<td>Rank 2A – Presumed Extinct in California, More Common Elsewhere</td>
<td>Species that are presumed extinct in California but more common outside of California</td>
</tr>
<tr>
<td>Rank 2B - Rare or Endangered in California, More Common Elsewhere</td>
<td>Species that are rare in California but more common outside of California</td>
</tr>
<tr>
<td>Rank 3 – Need More Information</td>
<td>Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.</td>
</tr>
<tr>
<td>Rank 4 – Plants of Limited Distribution</td>
<td>Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the “Inventory” and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.</td>
</tr>
</tbody>
</table>
### 5.3.3 Thresholds of Significance

Environmental impacts regarding biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, *California Public Resources Code* §21001(c). Accordingly, the State of California legislature has established it to be the policy of the State of California:

> Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels and preserve for future generations representations of all plant and animal communities...

The thresholds of significance in this DEIR for evaluating Project impacts on biological resources utilized by the City of Napa are based on Appendix G in the CEQA Guidelines. The Project would result in a significant impact if it would:

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

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

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan.

### CNPS/CNPR Rank

<table>
<thead>
<tr>
<th>Extension</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>.1 – Seriously endangered in California</td>
<td>Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.</td>
</tr>
<tr>
<td>.2 – Fairly endangered in California</td>
<td>Species with 20-80% of occurrences threatened.</td>
</tr>
<tr>
<td>.3 – Not very endangered in California</td>
<td>Species with &lt;20% of occurrences threatened or with no current threats known.</td>
</tr>
</tbody>
</table>
5.3.4 Project Impacts Prior to Mitigation

To adequately identify biological resources in accordance with the requirements of CEQA, GLA and the Arborists assembled biological data consisting of three main components:

- Performance of vegetation mapping for the Project site;
- Performance of site specific habitat assessments and general biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and Federal and State regulations; and
- Identification of potential aquatic resources (including wetlands and riparian habitat to the extent that either occurs on site), potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (Regional Board) and CDFW.

1. Methodology

   Biological Survey

   The focus of the Biological Report was determined through site reconnaissance on August 2, 2017, a review of the CNDDB (CDFW 2017), CNPS 8th Edition online inventory (CNPS 2010), Natural Resources Conservation Service (NRCS) soil data, other pertinent literature and knowledge of the region. Site-specific observations within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified herein. Vegetation was mapped directly onto a 200-scale (1’ = 200’) aerial photograph following the currently accepted list of Vegetation Alliances and Associations (or Natural Communities List). All flora and fauna identified on the site during vegetation mapping will be included in floral and faunal compendia prepared for the property. Vegetation communities not listed under the above-mentioned vegetation classification systems were named based on the dominant plant species present.

   Individual plants and wildlife species were evaluated based on their “special-status.” For this report, plants were considered “special-status” based on one or more of the following criteria:

   - Listing through the Federal and/or State Endangered Species Act (ESA);
   - Occurrence in the CNPS Rare Plant Inventory/California Rare Plant Rank (Rank 1A/1B, 2A/2B, 3, or 4); and/or
   - Occurrence in the CNDDB inventory.

   Wildlife species were considered “special-status” based on one or more of the following criteria:

   - Listing through the federal and/or state ESA; and
   - Designation by the state as a Species of Special Concern (SSC), California Fully Protected (CFP) species, and/or Watch List (WL) Species.
Vegetation communities and habitats were considered “special-status” based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of category 3 or less based on CDFW (see Section 3.2.2 below for further explanation); and
- Wetlands for which the Corps, CDFW or RWQCB require mitigation pursuant to Section 404 of the Clean Water Act, Section 1602 of the Fish and Game Code, and/or Section 401 of the Clean Water Act or the Waste Discharge Requirements of the Porter Cologne Act.

**Tree Survey**

The arborist’s report was based on an on-site inventory of the existing trees. A total of 50 trees are on the Project site. Recommendations for the preservation or removal were included in the report. The identified trees are as follows, including the number of each species:

- Coast redwood (31)
- Red Oak (7)
- Shumard oak (3)
- Valley Oak (4)
- Coast Live Oak (2)
- Cottonwood (2)
- Blue Gum (1)

**2. Summary of Surveys**

**Arborist Analysis**

The 50 identified trees on the Project were analyzed in terms of size, location, current condition and anticipated survival rate based on existing condition. The survey determined that of the 46 non-protected trees on site, 43 trees are worth preserving based on their condition. These trees will be minimally impacted by construction and will most likely tolerate the minimal amount of root pruning that will be required during construction.

The analysis of on-site trees shows that four trees (three valley oaks and one coast live oak) will be protected per the City of Napa regulations. Out of the 46 non-protected trees on-site, 43 are worth preserving based on their condition, but not required by the City. These trees will be minimally impacted by construction and will most likely tolerate the minimal amount of root pruning that will be required during construction. The breakdown of individual species and recommendations for each is as follows:
<table>
<thead>
<tr>
<th>Species</th>
<th>Quantity</th>
<th>Recommendation</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coast redwood</td>
<td>31</td>
<td>Retain in place</td>
<td>Not required</td>
</tr>
<tr>
<td>Red oak</td>
<td>7</td>
<td>Retain in place</td>
<td>Not required</td>
</tr>
<tr>
<td>Shumard oak</td>
<td>3</td>
<td>Retain in place</td>
<td>Not required</td>
</tr>
<tr>
<td>Valley oak</td>
<td>4</td>
<td>Retain in place</td>
<td>Required (3 only)</td>
</tr>
<tr>
<td>Coast live oak</td>
<td>2</td>
<td>Retain in place</td>
<td>Required (1 only)</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>2</td>
<td>Remove</td>
<td>Not required</td>
</tr>
<tr>
<td>Blue gum</td>
<td>1</td>
<td>Remove</td>
<td>Not required</td>
</tr>
</tbody>
</table>

**GLA On-Site Survey**

GLA conducted an on-site biological reconnaissance to identify the presence of biological resources and analyze any potential impacts to biological resources associated with the Project. Observations of all plant and wildlife species were recorded during the on-site survey. The survey conducted included the three components listed above. The following table provides a summary of survey dates, survey types, and personnel.

**Table 5.3-5  Summary of Biological Surveys for the Project Site**

<table>
<thead>
<tr>
<th>Survey Type</th>
<th>Survey Dates</th>
<th>Biologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biological Surveys, Habitat Assessments, Preliminary Jurisdictional</td>
<td>August 2, 2017</td>
<td>Tony Bomkamp</td>
</tr>
<tr>
<td>Determination/Delineation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Botanical Resources**

A site-specific survey program was designed to document botanical resources within the Project site, including the potential for the site to support special-status plants: 1) a literature search; 2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; 3) general field reconnaissance surveys; 4) vegetation mapping according to the Holland (1986) classification system; and 5) habitat assessments and for special-status plants.

**Literature Search**

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS *Inventory of Rare and Endangered Plants of California* (eighth edition). Rare Plant Advisory Committee, David Tibor, Convening Editor, California Native Plant Society. Sacramento, CA x + 388 pp; (CNPS 2010); and
- CNDDB for the USGS 7.5’ quadrangles: Cuttings Wharf, Cordelia, Mt. George, and Napa (CNDDB 2017).

**Vegetation Mapping**

Vegetation communities within the Study Site were mapped in accordance with the List of Vegetation Alliances and Associations (or Natural Communities List). The list is based on *A Manual of California Vegetation, Second Edition* or MCVII.
which is the California expression of the National Vegetation Classification. Where necessary, deviations were made when areas did not fit into exact habitat descriptions. These vegetation communities were named based on the dominant plant species present. Plant communities were mapped in the field directly onto a 150-scale (1” = 150’) aerial photograph. A vegetation map is included as Exhibit 5.3-2 (page 5.3-4). Representative site photographs are included as Exhibit 5.3-3 (page 5.3-5). Exhibit 5.3-8, Vegetation Map – Site Plan depicts vegetation overlain with the proposed Site Plan.

Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special status plants with the potential to occur within the Study site. The CNDDB was initially consulted to determine documented occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2010) and soil survey for the Study Site.

Based on the above information, vegetation profiles, and a list of target sensitive plant species and habitats that could occur within the Study Site were developed and incorporated into a mapping and survey program to achieve the following goals: 1) characterize the vegetation associations and land use; 2) prepare a detailed floristic compendium; 3) identify the potential for any special status plants that may occur within the Study Site; and 4) prepare a map showing the distribution of any sensitive botanical resources associated with the Study Site, if applicable.

3. Botanical Surveys

GLA senior biologist Tony Bomkamp visited the site on August 2, 2017 to conduct general botanical surveys and habitat assessments for special-status plants. Surveys were conducted in accordance with accepted botanical survey guidelines. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Study Site. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984) (updated by CNPS in 2001 as referenced above). A complete list of the plant species observed is provided in Appendix A of the Biological Technical Report. Scientific nomenclature for plants used in the Biological Technical Report follow Baldwin et al. (2012) (Jepson Manual: Vascular Plants of California, Second Addition). It is important to note that the subject site has been highly modified through importation of fill material and associated grading along with regular mowing for fuel modification resulting in the removal of suitable conditions for most of the special-status plants listed in Table 5.3-2, Special-Status Plants Evaluated for the Study Site (page 5.3-10), which provides a summary relative to the potential for occurrence of each species considered due to records from the region as recorded in the CNDDB.
Exhibit 5.3-8    Vegetation Map – Site Plan
Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance included inspection of the entire Project site by direct observation, including the use of binoculars. Physical evidence and direct sightings of wildlife were recorded in field notes. Appendix B to the Biological Technical Report (Appendix E to this EIR) includes a complete list of wildlife species observed. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments and/or focused surveys for special-status animals is discussed herein.

Birds - During the general biological and reconnaissance survey within the Study Site, birds were identified opportunistically within each habitat type. Birds were detected by both direct observation and by vocalizations, and were recorded in field notes.

Mammals - During general biological and reconnaissance survey within the Study Site, mammals were identified opportunistically within each habitat type. Mammals were detected both by direct observations and by the presence of diagnostic sign (i.e., tracks, burrows, scat).

Reptiles and Amphibians - During general biological and reconnaissance surveys within the Study Site, reptiles and amphibians were identified opportunistically during surveys within each habitat type. Habitats were examined for diagnostic reptile signs, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic signs, were recorded in field notes.

Special Status Animal Species Evaluated for the Study Site - A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Study Site. Species were evaluated based on two factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on the site or in vicinity of the Study Site, and 2) any other special-status animals that are known to occur within the vicinity of the Study Site, or for which potentially suitable habitat occurs on the Study Site.

Habitat Assessment for Special Status Animal Species - GLA biologist Tony Bomkamp conducted habitat assessments for special-status animal species on August 2, 2017. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Study Site.

4. Jurisdictional Delineation

Prior to beginning the field investigation, a 150-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine whether the site contained any potential areas of Corps/CDFW jurisdiction. No streams or lakes or other potential aquatic resources such as vernal pools were discernable in aerial photographs. While in the field, the site was reviewed for the presence of definable channels and/or wetland vegetation, soils and hydrology. Three areas were detected that supported potential
Wetland habitats based on the presence of a predominance of plants with a wetland indicator status of Facultative (FAC) or wetter and indicators for hydric soils determined using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual\textsuperscript{11} (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).\textsuperscript{12} Two of the areas exhibited signs of wetland hydrology based on the presence of algal mats ("Biotic Crust" in the Arid West Supplement). Given that the 2016/2017 rainfall season was approximately well over double the normal rainfall,\textsuperscript{13} it was not possible to make a definitive determination that the three areas are wetlands and review of the site during the normal wet season would be required to make a definitive determination. The areas evaluated for potential wetland conditions are depicted on Exhibit 5.3-9, Potential Seasonal Features – Site Plan.

### 5.3.5 Impact Analysis

Impacts can be considered either direct or indirect. Direct impacts are those that involve the loss, modification, or disturbance of plant communities, which directly affects the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples include increases in ambient levels of noise or light, predation by domestic pets, competition with exotic plants and animals, introduction of toxics, including pesticides, and other human disturbances such as hiking, off-road vehicle use, and unauthorized dumping. Indirect effects may be both short-term and long-term.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the Project when added to other closely related past, present and reasonably foreseeable probably future projects.


\textsuperscript{13} Weather Underground reports rainfall for Napa for the 2016/2017 rainfall season as 36.77 inches; whereas average annual rainfall is 16.08 inches.
Exhibit 5.3-9  Potential Seasonal Features – Site Plan
### 1. Impacts to Native Vegetation

A summary of vegetation alliance impacts and avoidance/preservation is presented in Table 5.3-6. Impacts are also depicted on Exhibit 5.3-8, Vegetation Map – Site Plan (page 5.3-38).

#### Table 5.3-6 Summary of Vegetation/Land Use Impacts

<table>
<thead>
<tr>
<th>Vegetation Alliance/Land Use Type</th>
<th>Impact Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Eucalyptus globulus</em> (Blue-gum eucalyptus) Semi-natural stands</td>
<td>0.034</td>
</tr>
<tr>
<td><em>Populus fremontii</em> (Fremont Cottonwood Forest) Alliance</td>
<td>0.013</td>
</tr>
<tr>
<td><em>Quercus lobata</em> (Valley oak woodland) Alliance*</td>
<td>0.0</td>
</tr>
<tr>
<td><em>Quercus rubra</em> (Red Oak Woodland) Ornamental Plantings</td>
<td>0.0</td>
</tr>
<tr>
<td><em>Salix lasiolepis</em> (Arroyo willow thickets) Alliance*</td>
<td>0.003</td>
</tr>
<tr>
<td><em>Avena barbata</em> (Wild oats grasslands) Semi-Natural Herbaceous Stands</td>
<td>10.24</td>
</tr>
<tr>
<td><em>Eleocharis macrostachya</em> (Pale Spikerush) Herbaceous Alliance</td>
<td>0.04</td>
</tr>
<tr>
<td>Disturbed Developed</td>
<td>0.030</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10.61</strong></td>
</tr>
</tbody>
</table>

1. **Blue Gum Eucalyptus.** Grading for the Project would result in removal of 0.034 acre of non-native blue gum eucalyptus, which is considered an invasive exotic plant. Impacts would not be significant.

2. **Fremont Cottonwood Woodland.** Fremont cottonwood woodland is listed as S3 in the CNDDB; however, given that cottonwoods on the site are growing with a mix of ornamental redwoods and non-native eucalyptus, the two cottonwood trees are not part of a larger cottonwood forest. Furthermore, the Project arborist has evaluated the two trees and recommends removal due to poor condition.\(^{14}\) Given these factors, impacts to two Fremont cottonwoods, accounting for 0.013 acre would not be considered a significant impact.

3. **Arroyo Willow Thicket.** Grading for the Project would result in removal of a small thicket of arroyo willow covering 0.003 acre that is growing from the slope adjacent to Highway 29. Impacts to 0.003 acre of arroyo willow thicket would not be considered significant, because the thicket is not associated with a stream or wetland area.

4. **Wild Oats Grassland.** Grading for the Project would impact 10.24 acres of non-native annual grassland dominated by slender wild oats. The loss of 10.24 acres of non-native grassland would not be significant.

### 2. Impacts to Special-Status Vegetation Communities – Trees

The Project will impact some of the existing trees on the Project site through removal. The arborist’s recommendation is for retention of the four trees requiring preservation under the City’s municipal code. However, the three valley oaks requiring preservation, while aesthetically beneficial to the site, have structural issues. The recommendation is that a full tree risk assessment be conducted prior to start of construction to determine the structural stability and health of all three trees. The report suggested providing adequate grow space for the trees to survive. To accommodate this recommendation, the site plan for the Project

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was redesigned to eliminate four parking spaces, which will allow the protection zones and grow spaces to be expanded to benefit the protected oaks. The valley oaks protected under the City's municipal code are trees 001, 002 and 003. The protected coast live oak recommended for retention is tree 040 as shown on Exhibit 5.3-1 on page 5.3-2.

The stand of redwood trees that is located on the southeast side of the Project site can be retained with minimal conflict to construction activities. Tree protection measures would be required for protection from construction as identified by the Guidelines and Maintenance Plan.

In addition to identifying specific trees for preservation, the Arborist Report identified three (tagged) trees for removal. A single, 90-foot-tall eucalyptus (044) and two cottonwood trees (045 and 047) are located within the stand of trees at the southeast corner of the Project site. All three trees have multiple trunks that are poorly attached and have the potential for failure in the future. In addition, it is recommended that a large acacia shrub be removed from this stand due to poor form and condition.

Two additional trees, a willow and a eucalyptus, although still growing, were not tagged because they have collapsed and should be removed. None of the trees recommended for removal are protected and can be removed without a permit. The trees are depicted on the following photographs.
Table 5.3-7 below depicts the tree inventory, number, diameter at breast height (DBH), and comments by the arborist.

Table 5.3-7  Tree Inventory

<table>
<thead>
<tr>
<th>ID</th>
<th>Common Name</th>
<th>DBH</th>
<th>Significant</th>
<th>Protected Native</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Valley oak (Quercus lobata)</td>
<td>42.0</td>
<td>No</td>
<td>Yes</td>
<td>Acute-angle attachments of scaffold limbs; small cavity opening on lower trunk; many large pruning cuts; sloughing bark on lower trunk. A full tree risk assessment is recommended before retention.</td>
</tr>
<tr>
<td>002</td>
<td>Valley oak (Quercus lobata)</td>
<td>48.0</td>
<td>No</td>
<td>Yes</td>
<td>Small cavity opening at root collar; many large pruning cuts. A full tree risk assessment is recommended before retention.</td>
</tr>
<tr>
<td>003</td>
<td>Valley oak (Quercus lobata)</td>
<td>49.0</td>
<td>No</td>
<td>Yes</td>
<td>Large pruning cut decayed; 2 cables installed. A full tree risk assessment is recommended before retention.</td>
</tr>
<tr>
<td>004</td>
<td>Red oak (Quercus rubra)</td>
<td>23.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>005</td>
<td>Shumard oak (Quercus shumardii)</td>
<td>15.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>006</td>
<td>Shumard oak (Quercus shumardii)</td>
<td>15.5</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>007</td>
<td>Red oak (Quercus rubra)</td>
<td>13.5</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>008</td>
<td>Red oak (Quercus rubra)</td>
<td>17.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>009</td>
<td>Red oak (Quercus rubra)</td>
<td>16.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>010</td>
<td>Shumard oak (Quercus shumardii)</td>
<td>10.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>011</td>
<td>Red oak (Quercus rubra)</td>
<td>15.5</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>012</td>
<td>Red oak (Quercus rubra)</td>
<td>22.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>013</td>
<td>Red oak (Quercus rubra)</td>
<td>20.5</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>014</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>24.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>015</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>20.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>016</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>19.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>017</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>13.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>018</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>21.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>019</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>19.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>020</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>18.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>021</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>22.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>022</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>20.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>023</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>23.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>024</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>22.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>025</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>21.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>026</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>19.0</td>
<td>No</td>
<td>No</td>
<td>Dead top (recovering).</td>
</tr>
<tr>
<td>027</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>15.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>028</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>20.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>029</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>21.0</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>030</td>
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<td>Valley oak (Quercus lobata)</td>
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<td>043</td>
<td>Coast redwood (Sequoia sempervirens)</td>
<td>28.0</td>
<td>No</td>
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</tr>
</tbody>
</table>
### ID | Common Name | DBH | Significant | Protected | Native | Comments
--- | --- | --- | --- | --- | --- | ---
044 | Blue gum (*Eucalyptus globulus*) | Multi-trunk | No | No | Poor form. Multiple co-dominant trunks with acute-angle attachments. Recommend removal. |
045 | Fremont cottonwood (*Populus fremontii*) | Multi-trunk | No | No | Co-dominant trunks with acute-angle attachments. Recommend removal. |
046 | Coast live oak (*Quercus agrifolia*) | 7.0 | No | No | |
047 | Fremont cottonwood (*Populus fremontii*) | Multi-trunk | No | No | Co-dominant trunks with acute-angle attachments. Recommend removal. |
048 | Coast redwood (*Sequoia sempervirens*) | 27.0 | No | No | |
049 | Coast redwood (*Sequoia sempervirens*) | 27.0 | No | No | |
050 | Coast redwood (*Sequoia sempervirens*) | 28.0 | No | No | |

Source: Tree Protection Guidelines, page 5 (Appendix F to this EIR)

The Tree Guidelines specifically suggest that the three valley oak trees to be protected have installed Silva Cells beneath the new hardscape areas to provide a dedicated zone for root growth. Silva cells are a modular suspended pavement system that uses soil volumes to support large tree growth and can be used under paving to support growth and absorb storm water where it falls while still retaining hardscape integrity. Each Silva Cell is composed of a frame and deck. The frame sections are 48” long × 24” wide × 16” high and contain approximately 10 cubic yards of soil, creating a necessary soil transition zone to the open space areas adjacent to the tree where a larger volume of soil exists. Six rigid vertical posts protrude from the bottom of the frame to support hardscapes and the weight of any load they carry. The rounded edges prevent significant stress concentrations and the supported hardscapes will not sink as a result of compressive forces or soil settling. Each cell is an individual component and can be adjusted to accommodate utilities and can be adjusted individually to create a utility corridor. The Silva Cell Location Diagram below depicts the suggested boundaries of the tree protections zones and the placement of the Silva cells in relation to the protection zones.

**Silva Cell Location Diagram**
3. **Impacts to Special-Status Plants**

No special-status plants are expected to occur within the Study Site and as such will not be impacted by Project implementation.

4. **Impacts to Special-Status Animals**

No special-status animals were detected at the Study Site. As noted above, the limited seasonal ponding features identified on the site exhibit limited potential for supporting the federally listed threatened vernal pool fairy shrimp (*Branchinecta lynchi*). The potential for the project to result in impacts to the federally threatened fairy shrimp are considered to be low because fairy shrimp require ponds that are deeper than those observed on the Project site. Nevertheless, it is assumed that fairy shrimp may be found within the 0.06 acres of potential wetlands that may be directly impacted by Project grading and development. As such, mitigation will be required through the purchase of credits from an approved mitigation bank at a 2:1 ratio or in another manner acceptable to the City at the 2:1 ratio.

Specifically, dry- and wet-season protocol surveys for the listed fairy shrimp will be conducted to determine whether fairy shrimp are present on-site. A dry-season protocol survey was initiated in October 2017. The wet-season protocol survey will be conducted once rainfall starts and ponding occurs consistent with the USFWS established protocol. If fairy shrimp, or other listed branchiopods are detected, the Project Applicant will be required to obtain a permit from the USFWS to allow for such impacts.

In addition to fairy shrimp, there is low potential for five special-status avian species to occur within the Study Site. For all five species there would either be no impacts or impacts would be less than significant as further detailed below.

1. **Golden eagle (nesting and wintering) (*Aquila chrysaetos*).** The golden eagle has low potential to forage in open areas but would not nest within the site. Given the large amount of available foraging area in the vicinity of the Study Site relative to the limited impacts to potential foraging habitat (10.24 acres of wild oats grassland) the impacts to foraging golden eagle would be less than significant.

   Specifically, breeding densities are directly related to territorial spacing and foraging requirements for the species and vary substantially across North America and within California. Territory size has been estimated to average 124 square kilometers (48 square mile) in northern California, but can vary largely with habitat conditions. Higher densities within a 316-square-mile area near Livermore supported at least 44 pairs of golden eagles in 1997, with a density of 1 pair per 7.3 square miles. This density is among the highest reported for the species.\(^{15}\) Using this very conservative estimate, the approximately 10 acres of suitable habitat on the site, which is surrounded by development on three sides

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\(^{15}\) http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/final-hcp-rev/pdfs/apps/AppD/04a_goldeneagle_9-28-06_profile.pdf
and a state highway on the fourth side, represents approximately 0.2% of a home range, the loss of which would not be considered significant.

2. **Ferruginous hawk (wintering)** (*Buteo regalis*). The ferruginous hawk has low potential to forage in open areas but would not winter within the Study Site. Given the large amount of available foraging area in the vicinity of the Site relative to the limited impacts to potential foraging habitat (10.24 acres of wild oats grassland), impacts to foraging ferruginous hawk would be less than significant.

3. **Swainson's hawk (nesting)** (*Buteo swainsoni*). Although not detected by GLA during biological surveys, the Swainson's hawk has been reported via an eBird entry, depicted in what is now a developed area approximately 0.30 to 0.40 miles south of the Site. As such, given the single sighting, the potential frequency of use is not known. Nesting on the site is unlikely because potential nesting trees are growing in what are essentially developed areas.

Swainson's hawks exhibit large home ranges in Central California. Based on 12 territories, Estep reports the mean between 2,760 and 2,553 hectares (336-8,718) and Babcock reports a mean of 4,038 and 2663 hectares (724-7,659). Using the data from Estep, the mean home range in acres is between 6,817 and 6,306 acres.16

No substantial evidence exists that the Project site is subject to use by Swainson's hawks. The nearest known Swainson’s hawk nest recently recorded by CDFW is more than 5 miles from the site. Given the large amount of available foraging area in the vicinity of the Study Site relative to the limited impacts to potential foraging habitat (10.24 acres of wild oats grassland) and given that the 10.24 acres of suitable habitat represents about 0.1% of a mean home range, impacts to foraging Swainson’s hawk would be less than significant. The Project site represents a small amount of relatively low-quality Swainson’s hawk foraging habitat. Development of the Project would not result in a significant impact due to 1) the small amount of habitat reduction, 2) the low quality of the habitat available, and 3) the developed setting of the Project site.

4. **Northern harrier (nesting)** (*Circus cyaneus*). The northern harrier has low potential to forage in open areas but would not nest within the Study Site. Given the large amount of available foraging area in the vicinity of the Study Site relative to the limited impacts to potential foraging habitat (10.24 acres of wild oats grassland), impacts to foraging northern harrier would be less than significant.

5. **White-tailed kite (nesting)** (*Elanus leucurus*). The white-tailed kite has potential to forage within open areas and low potential to nest in the woodlands on the site given their proximity to developed areas as well as a major highway. Given that the impacts to potential nesting habitat are minimal, and white-tailed

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16  http://www.prbo.org/calpif/htmldocs/species/riparian/swainsons_hawk.htm
kite are not known to nest at the Study Site, there would be no impacts to nesting white-tailed kite. Given the large amount of available foraging area in the vicinity of the Study Site relative to the limited impacts to potential foraging habitat (10.24 acres of wild oats grassland), impacts to foraging white tailed kite would be less than significant.

5. **Impacts to Critical Habitat**

The proposed Project will not impact lands designated as critical habitat by the USFWS.

6. **Impacts to Nesting Birds**

The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and the *California Fish and Game Code*. A Project-specific mitigation measure is identified herein to avoid impacts to nesting birds.

7. **Impacts to Potentially Seasonal Freshwater Wetlands**

Grading for the proposed Project would result in the fill of approximately 0.06 acre associated with three isolated seasonal features that may be wetlands. Because the potential wetlands are isolated and not connected to be navigable waters, they would not be subject to regulation under Section 404 of the Clean Water Act and the impacts would not require authorization under Section 404, even if they are determined to be wetlands. The isolated features do not meet CDFW’s criteria for a lake or stream and would therefore not be regulated under §1602 of the *California Fish and Game Code*.

As detailed above, given that the 2016/2017 rainfall season was approximately well over double the normal rainfall, it was not possible to make a definitive determination that the three areas are wetlands and review of the site during the normal wet season would be required to make a definitive determination. If determined to be wetlands, the isolated features could be regulated pursuant to the Waste Discharge Requirements of the state’s Porter Cologne Act, under which the Regional Boards in California exercise broad discretion in defining and regulating "Waters of the State." It is anticipated that the Project will result in a direct impact to approximately 0.06 acre of potential seasonal freshwater wetlands and mitigation will be required.

8. **Indirect Impacts to Biological Resources**

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to native open space. Potential indirect effects associated with development include water quality impacts associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as

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17 Weather Underground reports rainfall for Napa for the 2016/2017 rainfall season as 36.77 inches; whereas average annual rainfall is 16.08 inches.
recreational activities (including off-road vehicles and hiking), pets, and dumping. 
Temporary, indirect effects may also occur as a result of construction-related activities. 
The Project has the potential for both temporary and permanent indirect effects. Section 5.3.6 below identifies mitigation measures to reduce indirect effects to below a level of significance. 

5.3.6 Mitigation Measures 

1. Standard Mitigation Measures 
None required. The City of Napa Policy Resolution No. 27 does not include mitigation measures in the area of biological resources.

2. Special Mitigation Measures 
The following are recommended Project-specific mitigation/avoidance measures and best management practices for potential impacts to biological resources.

| MM Bio-1 | Prior to issuance of grading permits, the Project Applicant shall provide a tree risk assessment for the three valley oaks proposed to be preserved in place to determine their health and stability. Recommendations in the tree risk assessment shall be enforced to protect trees determined healthy enough for preservation. |
| MM Bio-2 | Prior to issuance of grading permits the Applicant shall submit to the City grading/site preparation plans that reflect that the roots of the oak trees to be protected are severed around the entire perimeter of the tree protection zones to ensure subsequent construction can proceed outside the tree protection zone without further impacting the trees. |
| MM Bio-3 | Prior to issuance of building permits, the Applicant shall ensure that the construction documents depict that Silva Cells are to be installed in three locations beneath the new hardscape areas to provide a dedicated zone for oak tree root growth, consistent with the locations identified on the Silva Cell Location Diagram on page 5.3-45 herein. |
| MM Bio-4 | Prior to issuance of a grading permit, the Applicant shall ensure that the grading plans and relevant construction documents incorporate the Tree Protection and Maintenance Guidelines set forth in the Arborist’s report, included on pages 15 through 30 of Appendix F. |
| MM Bio-5 | Prior to issuance of a grading permit, the Applicant shall ensure that vegetation clearing outside of the nesting season (February 1 through August 31) for all vegetation alliances or land-cover types on the site is conducted. If vegetation clearing is not feasible outside of the nesting season, the Project Applicant shall submit a nesting bird survey, prepared by a qualified biologist, within three days prior to any disturbance of the site, including disk, demolition activities and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests consisting of as much as 500 feet for raptors |
and 300 feet for non-raptors, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

**MM Bio-6** Prior to issuance of a grading permit, the Applicant shall ensure that dry-season and wet-season protocol surveys are completed to determine whether the potential seasonal wetland features observed on the site support listed fairy shrimp, including the vernal pool fairy shrimp.

**MM Bio-7** Prior to the issuance of grading permit, the Applicant shall provide to the City or its biologist for review, the fairy shrimp protocol surveys to determine presence or absence of fairy shrimp. If listed fairy shrimp are detected within any of the potential seasonal wetland features, impacts to occupied habitat shall be mitigated at a 2:1 ratio. Fee payment shall be made through an approved mitigation bank that covers the vernal pool fairy shrimp. The mitigation bank shall be located within the service area that covers the Project site. Alternate mitigation may be approved by USFWS, to the satisfaction of the City of Napa.

**MM Bio-8** Prior to issuance of a grading permit, the Applicant shall ensure the completion of a formal wetland determination demonstrating whether or not the potential seasonal wetlands features meet the minimum threshold for wetlands. If the wetland determination does not meet the minimum threshold for wetlands no additional mitigation would be required. If the wetland determination meets the minimum threshold for wetlands, the Applicant shall be required to mitigate at a 2:1 ratio for any freshwater wetlands dominated by pale spikerush. The mitigation may be satisfied through purchase of credits in an approved mitigation bank with a service area that covers the Project site, or in an acceptable manner to the City, so long as the 2:1 ratio is met.

**Best Management Practices**

**BMP-1** The Tree Protection Guidelines provide Best Management Practices (BMPs) to be implemented prior to, during and subsequent to construction of the proposed Project to ensure the safety and continuing health and stability of the protected trees. Mitigation Measure MM Bio-4 requires adherence to the general Tree Protection and Preservation Plan recommendations as summarized below. The BMPs are found in their entirety in the Tree Protection Guidelines (pages 15-30) included herein as Appendix F.

1. Preconstruction Requirements - include meetings with City staff and construction personnel, review of site plans, establishment of tree protection zones on plans, fencing locations, warning signs
2. Identification of activities permitted within the tree protection zones
3. Restricted and/or controlled activities during demolition and construction activities
4. Trenching excavation and equipment use
5. Tree pruning recommendations
6. Tree root management
7. Tree maintenance during construction
8. Damage to trees
9. Long-term maintenance

BMP-2 During construction, no grade changes within the perimeter of the tree protection zones and driplines for trees 001, 002, 003 and 040 will occur from grading activities. Grade changes outside the dripline shall not exceed 6 inches and all grading shall be done in conjunction with the Project arborist to minimize and/or mitigate root damage.

BMP-3 A protection fence shall be in place at all times during construction activities to prevent encroachment into the tree protection zones.

5.3.7 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state the Project would have a significant impact if it would:

a) Have a substantial adverse effect through habitat modifications on a species identified as a candidate, sensitive or special status species,

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community,

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act,

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites,

e) Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance, or

f) Conflict with the provisions of an adopted Habitat Conservation Plan, a Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

As identified in the Biological Report, the Project will not result in significant impacts to native vegetation, special-status plants, or critical habitat. A mitigation measure has been included herein to ensure that no impacts will result from construction activities to nesting birds. The Project has the potential to result in impacts to the fairy shrimp, which is Federally listed as threatened. While the potential for impacts are considered to be low because the ponding depths observed on-site were not found to be of adequate depth required to support fairy shrimp, protocol surveys will be conducted consistent with Mitigation Measure MM Bio-6 to establish presence or absence of fairy shrimp. If fairy shrimp are found to be present, mitigation consistent with Mitigation Measure MM Bio-7 in the form of fee payment to an established mitigation bank will reduce impacts to below the level of significance.

No ACOE jurisdictional drainages occur on the site. Impacts to potentially seasonal freshwater wetlands do not meet the criteria required pursuant to Section 404, because the three features are isolated and do not connect to downstream navigable waters. Similarly, the features are
not subject to jurisdiction under Section 401 of the Clean Water Act. The isolated features do not meet CDFW’s criteria for a lake or stream and would not be regulated under Section 1602 of the Fish and Game Code. If the isolated features are determined to be wetlands, they could be regulated pursuant to the Waste Discharge Requirement of the Porter Cologne Act. The state requirement is “no-net-loss,” meaning mitigation at a 1:1 ratio, assuming that a mitigation bank includes created wetlands and not just preservation. Mitigation Measure MM Bio-8 reduces impacts to less than significant with the requirement that mitigation bank credits at a 2:1 ratio be used to offset any potential impacts to seasonal wetlands.

The Tree Protection Guidelines and Long Term Maintenance Plan (Appendix F) identifies trees on the Project site which are subject to the City of Napa tree preservation standards. The Tree Guidelines document also provides guidance for the protection and preservation of trees during all phases of construction as well as on-going maintenance to ensure future health and stability of the existing trees to be preserved. Adherence to Mitigation Measures MM Bio-1 through MM Bio-5 and compliance with the best management practices identified herein and in the Tree Guidelines Report will result in a less than significant impact to trees.

The proposed Project will not have substantial adverse effect on any species identified as a candidate, sensitive or special status species, riparian habitat or other sensitive natural community, or federally protected wetlands with implementation of the Mitigation Measures included herein. The Project will not substantially interfere with the movement of any native resident or migratory fish or wildlife species. There will be no conflict with any local policies or ordinances protecting biological resources and the Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. All potential biological resources impacts can be reduced to a less than significant level in accordance with Mitigation Measures MM Bio-1 through MM Bio-8 and the Best Management Practices recommended for the protection and preservation of on-site trees.

5.3.8 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed Project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project.

The Project as currently proposed has no potential for significant impacts to special-status plants and, therefore, there is no potential contribution to cumulative impacts. No cumulative impacts to special-status plants will occur with Project implementation.

Potential cumulative impacts associated with the Project are limited to isolated wetlands. The Project could potentially contribute to cumulative impacts to isolated wetlands (Waters of the State) and mitigation has been included to purchase mitigation bank credits to reduce any potential impacts. However, because the potential wetlands are considered “isolated,” no downstream or adjacent cumulative impacts will occur. The proposed Project would not result in a cumulative impact.
5.3.9 Unavoidable Adverse Impacts

With implementation of the recommended mitigation measures and best management practices, impacts to biological resources will be reduced to a less than significant level. Therefore, there are no unavoidable adverse impacts associated with biological resources with the development of the Project as proposed.
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.4 – Cultural Resources

The archaeological resources of the proposed Project site are discussed in this section. The potential cultural resources impacts associated with the proposed Project are identified and associated mitigation, if required, is proposed. Information in this section is based on an Archaeological Inventory Survey (Archaeological Survey) prepared by Genesis Society (Sean Michael Jenson, M.A.) dated August 30, 2017. The report in its entirety is included herein as Appendix G.

5.4.1 Existing Conditions

The proposed Project is located within a portion of the Tulucay Ranch Land Grant as shown on Exhibit 5.4-1, USGS Napa, California, 7.5’ Series Quadrangle. The area of potential effect (APE) for the Archaeological Survey is the entire 11.5-acre Project site. The elevation within the APE averages 20 feet above mean sea level (AMSL) and no naturally occurring sources of surface water are located within the APE. The Project site is currently vacant but is surrounded by development within Napa Valley Commons corporate park. The site has been rough graded and consists of vegetation comprising grasses, weeds, and mature oak trees that are regularly groomed.

The area lies within the Coast and Interior Coast Ranges, near the terminal intersection of the southwestern terminus of the Vaca Mountains and the San Pablo Bay delta region. The APE is situated on relatively flat terrain adjacent to rolling hills that comprise the foothills that form the eastern margin of the Napa River.

Elevations rise to the east and short grasses and occasional valley oak dominate the local vegetation. The dominant plant communities of the area have evolved protective measures due to typical summer drought conditions such as thick, waxy cuticles on their leaves to reduce water loss. These plant communities dominated the vegetation surrounding the Project area prior to the 20th century and supplied the needed resources for a variety of fauna.

The APE is located within the Coast Ranges Geomorphic Province of California. This province is characterized by northwest trending topographic and geologic features and includes many separate ranges, coalescing mountain masses and several major structural basins. The province is bounded on the east by the Great Valley Geomorphic Province and on the west by the Pacific Ocean. The Coast Ranges region extends north into Oregon and south to the Transverse Ranges and Ventura County.

Outside of the valley setting, geology consists of Franciscan formation, undivided Cretaceous marine deposits, lower Cretaceous marine deposits and ultrabasic intrusive rocks (all formed during the Mesozoic era between 66 and 252 million years ago) and, therefore, does not have the potential to contain deeply buried archaeological resources.
TOPOGRAPHIC MAP

Source: Figure 3, Archaeological Inventory Survey; Sean Michael Jensen, M.A.; August 30, 2017 (Appendix G)

Exhibit 5.4-1  USGS Napa, California, 7.5’ Series Quadrangle
Historic Background

The archaeological record of the San Francisco Bay Area has typically fallen into two systems:

- The Early-Middle-Late Period nomenclature known as the Central California Taxonomic System
- The Archaic-Emergent temporal structure

Due to established nomenclature for the North Bay area within which the Project is located, the terms Archaic-Emergent are used co-equally with the Early, Middle and Late Period terms. Within the general region, data recovery and observations revealed a pattern suggesting that Paleo-Indians initially foraged the lacustrine zones of the region. This group was followed by evidence of Lower Archaic and Middle Archaic forager residential camps along marshes and on grasslands which ultimately yielded to Upper Archaic (post-500 BC) people establishing forager residential camps and semi-permanent collector villages. After approximately 1000 AD, semi-permanent collector villages in oak woodlands and residential camps along marshes characterized the shift noted in the Emergent Period.

The Archaic period is divided into three sub-periods: the Lower Archaic (8,000 BP to 5,000 BP), the Middle Archaic (5,000 BP to 1,500 BP) and the Upper Archaic (2,500 BP to 1,000 BP). Overall, Archaic occupants continued to practice relatively high geographic mobility but with an increase in permanent/semi-permanent resource procurement bases. The range of resources increases during this period, as evidenced by the diversity of artifacts, including the addition of milling stone tools and obsidian and chert concave-based projectile points. The Middle Archaic witnesses the introduction of the bowl mortar, further supporting the intensification of across as a subsistence resource. The increase in geographical/resource diversity, along with an expanding population during the Upper Archaic, contributed to an increase in the number of permanent settlements and additional complexities in the cultural manifestations.

During the Emergent period, the archeological record became more complex as specialized adaptations to locally available resources were developed and populations expanded. Further, interactions with cultures from the Sacramento Valley, the Delta and the San Francisco Bay regions resulted in numerous cultural changes for the North Coastal region inhabitants. Many sites dated to this time period contain mortars and pestles and/or are associated with bedrock mortars implying the intense exploitation of the acorn. The range of subsistence resources utilized along with regional exchange systems expanded significantly. Archeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items.

5.4.2 Regulatory Setting

California Environmental Quality Act

CEQA states that it is state policy to: “take all action necessary to provide the people of this state with . . . historic environmental qualities.” CEQA requires detailed studies that analyze the environmental effects of a proposed project. If a project is determined to have a potential significant environmental effect, the Act requires that alternative plans and mitigation measures be considered. CEQA includes historic, archaeological and paleontological
resources as integral features of the environment. If such resources are identified as being within the proposed Project study area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

California Register of Historical Resources

The Register is a listing of all properties considered to be significant historical resources in the state. These include all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks. The criteria for listing are the same as those of the National Register. The California Register statute specifically provides that historical resources listed or determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA.

Resources eligible for listing include buildings, sites, structures, objects or historic districts that retain historic integrity and are historically significant at the local, state or national level under one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- It is associated with the lives of persons important to local, California or national history;
- It embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

California Public Resources Code §5097.5

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of the state, or any city, county, district, authority or public corporation, or any agency thereof.
California Health and Safety Code

Human remains are sometimes associated with archaeological sites. According to CEQA, “archaeological sites known to contain human remains shall be treated in accordance with the provisions of California Health and Safety Code §7050.5.” The protection of human remains is also ensured by California Public Resources Code §5097.94, §5097.98, and §5097.99. If human remains are exposed during construction, California Health and Safety Code §7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code §5097.98. Construction must halt in the area of the discovery of human remains, the project proponent must assure that the area is protected, and consultation and treatment shall occur as prescribed by law.

Assembly Bill 52

In September 2014, legislation was enacted that imposes new requirements for consultations regarding projects that may affect a tribal cultural resource and includes a list of recommended mitigation measures. AB 52 states that tribal cultural resources must meet the following:

1. Included or determined to be eligible for inclusion in the California Register of Historical Resources
2. Included in a local register of historical resources
3. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1
4. A cultural landscape that meets one of the above criteria and is geographically defined in terms of the size and scope of the landscape
5. A historical resource described in PRC 21084.1, a unique archaeological resource described in PRC 21083.2 or a non-unique archaeological resource if it conforms to the above criteria

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency’s environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

Lead agencies are to provide notice to tribes traditionally or culturally affiliated with the geographic area of the proposed Project that may have expertise with regard to their tribal history and practices. Tribes can request consultation which may include discussing the type of environmental review necessary, the significance of the tribal cultural resources, the significance of the project’s impacts on the resource and the alternatives and mitigation measures recommended by the tribe.

Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be
considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place
- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria
- Local regulations/ordinances

The City of Napa General Plan – Envision Napa 2020 – includes a chapter entitled Historic Resources which identifies policies for the preservation of archaeological resources as follows. The General Plan does not identify paleontological resources in the surrounding area. However, standard mitigation measures requiring consultation and preservation of resources found during development are applicable to the Project.

- HR-6.1 - The City shall enforce current federal and state and procedure for identifying, preserving and protecting prehistoric sites.
- HR-6.2 - The City shall require investigation during the planning process for all proposed developments in archaeologically sensitive areas in order to determine whether prehistoric resources may be affected by the project and, if so, require that appropriate mitigation measures be incorporated into the project design.
- HR-6.3 - Recognizing that Native American burials or archaeological artifacts may be encountered at unexpected locations, the City shall continue to enforce state mandates with its current mitigation requirement, applied to all development permits and tentative subdivision maps, that upon discovery of remains during construction, all activity will cease until qualified professional archaeological examination and reburial in an appropriate manner is accomplished.

### 5.4.3 Thresholds of Significance

Thresholds of significance for evaluation of the proposed Project’s impacts are based on the County of Napa Environmental Checklist and the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines). The Project would result in a significant impact if it would:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5,
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5,
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature,
- d) Disturb any human remains, including those interred outside of formal cemeteries.
Per CEQA, an archaeological resource is considered “unique” (§21083.2(g)) when the resource not merely adds to the current body of knowledge, but when there is a high probability that the resource also:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information,
- Has a special and particular quality such as being the oldest of its type or the best available example of its type,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A project may have a significant impact or adverse effect on cultural resources/historic properties if the project will or could result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance or values of the resource would be materially impaired.

Fossils are considered to be significant if one or more of the following criteria apply:

a) The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct,

b) The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein,

c) The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas,

d) The fossils demonstrate unusual or spectacular circumstances in the history of life,

e) The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation and are not found in other geographic locations.

5.4.4 Project Impacts Prior to Mitigation

The Project, as proposed, will include grading and excavation to construct the hotel, winery, and office components identified. Preliminary earthwork calculations indicate that as much as 31,300 cubic yards of cut will occur. This ground disturbance has the potential to uncover archaeological or paleontological resources that have not previously been encountered during previous grading activities. The results of the archaeological survey, including extensive research regarding potential to uncover cultural resources on the Project site, are discussed below.

1. Archaeological Resources

The Archaeological Survey includes a detailed explanation of the prehistoric and historic setting of the Project site and area generally. The entire report is included herein in Appendix G. The City's General Plan does not identify paleontological resources on the Project site or within the immediate vicinity. Following is a summary of the historical information as well as the results of the pedestrian survey of the Project site conducted by
Sean Jensen of Genesis Society. The specific tasks performed by Genesis Society in compliance with CEQA requirements and guidelines follow.

- Conducted a records search at the Northwest Information Center of the California Historical Resources Information System and consulted with the Native American Heritage Commission. The goals of the records search and consultation were to determine: 1) the extent and distribution of previous archaeological surveys, 2) the locations of known archaeological sites and any previously recorded archaeological districts, and 3) the relationships between known sites and environmental variables.

- Conducted a pedestrian survey of the area of potential effect (APE) to record and evaluate any previously unidentified cultural resources. Based on map review, a complete coverage, intensive survey was conducted given the presence of moderate to high archaeological sensitivity within the property. The purpose of the pedestrian survey was to ensure that any previously identified sites are relocated and evaluated in relation to the present project/undertaking.

- Prepared a Final Report identifying Project effects and recommending appropriate mitigation measures for sites that might be affected by the undertaking and that are considered significant or potentially significant per CEQA and/or eligible or potentially eligible for inclusion on the California Register of Historical Resources.

All field survey work followed guidelines provided by the State Historic Preservation Office (Sacramento) and conforms to accepted professional standards.

2. **Ethnography**

The Project area is located within territory claimed by the Southern Patwin near the border shared with the Coast Miwok at the time of initial contact with European/American culture. The territorial boundaries of the Patwin are described as extending along the Sacramento River from the town of Princeton to the San Pablo and Suisun bays, abutting the Pomo and Wappo to the west.

The basic social unit for the Patwin was the family, although the village may also have functioned as a social, political, and economic unit. Villages were usually located near water sources, with major villages inhabited mainly in the winter as it was necessary for at least some of the population to relocate into the hills and higher elevation zones to establish temporary camps during food gathering seasons (i.e., spring, summer, and fall). Villages typically consisted of a variable number of bark houses, numbering from four or five to several dozen in larger villages such as the large village once situated to the north, in Napa, with each house containing a single family of from three to seven people.

As with all northern California Indian groups, economic life for the Patwin revolved around hunting, fishing, and collecting plant foods. Deer was an important meat source, and the animals were hunted by individuals by stalking or snaring, or by groups in community drives. Salmon runs and other food resources available along the Napa River and its major tributaries also contributed significantly to local economies. While much of the fish protein was consumed immediately, a significant percentage, particularly during the fall salmon run, was prepared for storage and consumed during winter months. Acorns represented one of
the most important vegetal foods and were particularly abundant within the Oak Park Woodland, which once dominated lands within the study area along the Napa River, and in association with higher ground and natural stream courses both east and west of Napa.

The ceremonial chief directed the entire tribelet’s Kuksu Cult, a religious cult and secret society that performed tribal initiations, ghost ceremonies, and curing ceremonies. The Patwin were documented by Asians and Europeans as early as the late 16th century, and their populations remained relatively stable until the incursion of Spanish settlers and missionaries during the latter portion of the 18th century. The indigenous populations at this time were “missionized” and relocated to various missions south of their traditional territory. Due to “missionization,” inter-tribal marriages became more common, and new missions were established throughout the tribe’s traditional lands.

Mexico gained independence from Spain in 1821, and the Mission Period officially ended in 1834. The newly established secular government resulted in the Patwin being freed from the Franciscan missionaries, only to find themselves serving new land-grant masters. In 1837, a smallpox epidemic resulted in the deaths of a substantial portion of the native population in Napa County, and subsequent epidemics continued to erode their population.

3. Historic Setting

Interior California was initially visited by Anglo-American fur trappers, Russian scientists, and Spanish-Mexican expeditions during the early part of the 19th Century. These early explorations were followed by a rapid escalation of European-American activities, which culminated in the massive influx fostered by the discovery of gold at Coloma in 1848. Early Spanish expeditions arrived from Bay Area missions as early as 1804, penetrating the northwestern San Joaquin Valley. By the mid-1820s, hundreds of fur trappers were annually traversing the Valley on behalf of the Hudson’s Bay Company. By the late 1830s and early 1840s, several small permanent European-American settlements had emerged in the Central Valley and adjacent foothill lands, including Ranchos in the interior Coast Range, and, of course, the settlement at New Helvetia (Sutter’s Fort) at the confluence of the Sacramento and American Rivers (Sacramento).

With the discovery of gold in the Sierra Nevada, large numbers of European-Americans, Hispanics, and Chinese arrived in and traveled through the Valley. The Valley’s east-side mining communities’ demands for hard commodities led quickly to the expansion of ranching and agriculture throughout the Great Central Valley and the interior valleys of the Coast Range. Stable, larger populations arose, and permanent communities slowly emerged in the Central Valley, particularly along major transportation corridors.

The current APE is located within Napa County, which is one of California’s original counties. The County’s first courthouse and seat of government was established in Napa in 1851. Napa itself was founded in 1847 by Nathan Coombs, who had received the future town site property from Nicolas Higuera, the original holder of the Rancho Entre Napa Mexican land grant.

The onset of the gold rush resulted in an influx of population to the region as miners and their families sought a refuge from the harsh Sierra Nevada winters. However, in 1858, the great
silver rush began in the Napa Valley, and miners flocked the region. Mining continued to expand throughout the 1860s, and by 1872, Napa was incorporated. The Napa State Asylum for the Insane, located north of the present APE, was opened in 1876, and the Napa Valley Opera House opened in 1880.

Early settlers into the county cultivated fruits and vegetables for local consumption, and grains were grown on a larger scale for exportation. Dry farm crops such as wheat and oats, used for cattle fodder, proved profitable in the area despite limited irrigation. Initially, agricultural products were transported via the waterways, but with the completion of the California Pacific Railroad, connecting directly with the Transcontinental Railroad in 1869, goods were transported by rail.

While agriculture dominated the northern portion of the county, banking and business enterprises intensified within the City of Napa. Among these businesses were leather workers and some of the early electronic technology efforts that ultimately led to the foundation of Magnavox Company in 1917. While these endeavors continued throughout the 20th century, concerns for regional flooding became an important theme that continues to the present day.

4. Record Searches/Sources Consulted

Several types of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the Project area. The information evaluated prior to conducting the pedestrian survey includes data maintained by the Northwest Information Center, and available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Northwest Information Center Records

The official Napa County archaeological records were examined on August 15, 2017 (NWIC File No. 17-0316). These records document the following existing conditions for a one-eighth mile radius of the APE.

- According to the information center, the existing APE has been subjected to archaeological survey as a result of two previous investigations. A linear survey in 1978 included the eastern portion of the present APE (S-001200). An archaeological survey conducted for the Napa Industrial Park project (1981) involved approximately 246-acres, including the existing APE (S-2547). Five archaeological investigations have been conducted on lands within one-eighth mile of the present APE: S-21260, 47936, 38004, 13188 and 13025. However, there appears to be no overlap of these previous investigations with the present APE configuration. Additionally, 13 reports, located within the search radius, are classified as Other Reports. These reports involved little or no fieldwork, or are missing maps.

- According to the Information Center’s records, no cultural resources have been formally documented within the subject APE. One resource (P-28-001212), a rock wall fence, has been documented within the search radius, but outside of the
present APE. This site was recommended and determined not eligible/significant, and was subsequently destroyed.

**AB 52 - Native American Consultation**

The City of Napa initiated consultation communications with the Yocha Dehe Winton Nation on June 29, 2017, via letter, and the Tribe responded, via letter, on July 18, 2017, indicating that the Project is located within traditional Yocha Dehe lands, and requesting copies of any archaeological investigations prepared in conjunction with this Project.

Initial consultation with the Native American Heritage Commission (NAHC) was undertaken by the City of Napa. On August 4, 2017, the NAHC responded to the City of Napa with a five-page letter outlining various laws, codes, and ordinances. The NAHC letter did not indicate that a search of their Sacred Lands Files (SLF) had been undertaken, nor was there an appended list of “Native American Contacts.” The City of Napa has completed the requirements for Native American consultation per AB 52 and no additional consultation is required.

**Additional Sources**

Genesis Society also initiated consultation with the NAHC regarding sacred land listings for the property via an information request letter that was delivered to the NAHC on August 9, 2017. The NAHC responded on August 18, 2017, indicating that “Sacred Sites and Tribal Cultural Resources were identified in the project area provided.” The NAHC advised contacting Chairman Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley to provide notice of the proposed Project and obtain additional information concerning this data. As noted herein, the Project is within traditional Yocha Dehe Winton Nation lands, and the City has sent Project information to the tribal contact for Yocha Dehe. The Mishewal-Wappo Tribe has not requested placement on the City’s contact list.

In addition to examining the archaeological site and survey records of Napa County maintained at the Northwest Information Center, the following sources were also included in the search conducted at the Information Center, or were evaluated separately:

- National Register of Historic Places (1986, Supplements)
- California Register of Historical Resources
- California Inventory of Historic Resources (State of California 1976)
- California Historical Landmarks (State of California 1996)
- California Points of Historical Interest (May 1992 and updates)
- Historic Property Data File (OHP 2014)
- California Place Names (Gudde 1969)
- Napa 7.5’ Quadrangle (1951, Photorevised 1980)
- 1859 Tulucaay Rancho Map
- 1863 GLO, T5N, R4W
5.4 – Cultural Resources

These sources, reviewed below, provided a general environmental and cultural context by means of which to assess likely site types and distribution patterns for the project area.

5. Survey Methods/Results

The entire APE was subjected to intensive pedestrian survey by means of walking systematic transects, spaced at 20-meter intervals. In searching for cultural resources, the surveyor considered the results of background research and was alert for any unusual contours, soil changes, distinctive vegetation patterns, exotic materials, artifacts, feature or feature remnants, and other possible markers of cultural sites.

Fieldwork was undertaken on August 27, 2017 by Sean Michael Jensen and Sutter Jensen. Mr. Jensen is a professional archaeologist with 31 years’ experience in archaeology, history, and architectural history. He meets the Secretary of Interior’s Standards for Professional Qualification, as demonstrated in his listing on the California Historical Resources Information System list of qualified archaeologists and historians. No special problems were encountered, and all survey objectives were satisfactorily achieved.

Fieldwork identified the following general conditions within the APE. The majority of the APE has been subjected to intensive disturbance as a result of past demolition, grading, and re-contouring. Examination of the USGS and aerial images provided by NETR provided a visual historic context for the APE, which is listed and summarized below.

USGS Maps

- 1942 Two structures present in southeast corner (one residence, one barn), railroad present along eastern boundary
- 1952 Two structures present in southeast corner (one residence, one barn)
- 1958 Structure present in southeast corner
- 1963 Two structures present in southeast corner (one residence, one barn)
- 1966 Structure present in southeast corner
- 1967 Vacant
- 1969 Two structures present in southeast corner (one residence, one barn)
- 1975 Two structures present in southeast corner (one residence, one barn)
- 1980 Vacant
- 1982 Vacant
- 1984 Structure present in southeast corner
Aerial Maps

- 1948 Structures present within the extreme southeast property corner
- 1968 Vacant, demolition scars evident within the southeast property corner
- 1993 Vacant
- 2002 Vacant
- 2005 Vacant
- 2009 Vacant
- 2010 Vacant
- 2012 Vacant

The evidence gleaned from the USGS quadrangles and aerial photographs demonstrates that a small complex, likely a family farm/ranch, existed within the southeastern portion of the present APE prior to 1949, and that by 1968 the entire complex had been razed. Over the subsequent decades, the entire APE and surrounding lands were subject to intensive disturbance associated with adjacent commercial development.

According to the Northwest Information Center, no prehistoric or historic-era sites have been documented within the APE. In addition, no prehistoric or historic-era sites were identified during the pedestrian survey conducted in August 2017.

6. Conclusion

The results of the Archaeological Survey analysis indicate there are no known archaeological or built environment historic resources within the Project area. The Project area is considered to have low sensitivity for prehistoric and historical archaeological deposits, because a records search and a pedestrian survey failed to identify any significant historical resources or unique archaeological resources within the APE. Mitigation Measures MM CR-2 and MM CR-3 and a standard mitigation measure from the City’s General Plan are included herein to ensure that if archaeological or historic resources are found during the construction of the proposed Project, appropriate measures are undertaken to ensure protection of the resources.

5.4.5 Mitigation Measures

1. Standard Mitigation Measures

The proposed Project would be subject to the following standard mitigation measures, as required by the City of Napa Policy Resolution 27.

| MM CR-1 | During site preparation and grading activities, the Project applicant shall ensure that, if any archaeological materials or objects are unearthed during Project construction, all work in the vicinity shall be immediately halted until a qualified archaeologist is retained by the City to evaluate the finds. The Project applicant shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds. |
2. Special Mitigation Measures

Special Mitigation Measures MM CR-2 and MM CR-3 were included in the Archaeological Survey.

| MM CR-2 | During the construction phase, the Project applicant shall ensure that if any human remains are uncovered, work shall be halted within the immediate vicinity of the discovery and state law shall be followed, which includes immediately contacting the County Coroner’s office and a representative of the Yocha Dehe Wintun Nation. |
| MM CR-3 | During the construction phase, the Project applicant ensure that if any unidentified cultural materials are encountered on or below the surface, archaeological consultation should be sought immediately. |

5.4.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that a project would have a significant impact if it would:

a) Cause a substantial adverse change in the significance of a historical resource,

b) Cause a substantial adverse change in the significance of an archaeological resource,

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or

d) Disturb any human remains, including those interred outside of formal cemeteries.

The Archaeological Survey concludes that based on the absence of any contributing components of any significant historical resources/unique archaeological resources within the APE, archaeological clearance is recommended for the Project as presently proposed including the mitigation measures identified herein. The proposed Project, with mitigation, is consistent with the Historic Resources Chapter of the City of Napa General Plan because any discovered cultural resources within the Project site will be identified, evaluated and preserved. In addition, no archaeological resources have been discovered on the Project site that are “unique” per California Public Resources Code §21083.2(g) and that contain important historic information, have a special or particular quality, or are directly associated with a recognized important prehistoric or historic event or person. No fossils have been found that meet the CEQA criteria for significance.

The Cultural Resources Assessment analysis responds to CEQA Guidelines, Appendix G Checklist as follows.

The proposed Project will not cause a substantial adverse change in the significance of a historical resource as defined in §15064 of the CEQA Guidelines because no cultural resources, including human remains, are known to exist within the Project site.
The proposed Project will not cause a substantial adverse change in the significance of an archeological resource as defined in §15064 of the CEQA Guidelines, because no cultural resources, including human remains, are known to exist within the Project site.

The proposed Project will not directly or indirectly destroy a unique paleontological resource or unique feature, because no cultural resources, including human remains, are known to exist within the Project site.

The proposed Project will not disturb any human remains, including those interred outside of dedicated cemeteries, because no cultural resources, including human remains, are known to exist within the Project site.

However, a mitigation measures have been included to address unanticipated discovery of cultural resources during Project grading operations including the City’s Policy Resolution No. 27 mitigation (MM CR-3). With implementation of the recommended mitigation measures, any Project impacts to archeological resources, including human remains and cultural materials, will be reduced to a less than significant level.

### 5.4.7 Cumulative Impacts

With mitigation, development of the proposed Project is not anticipated to significantly impact cultural resources within or adjacent to the Project boundaries. Individual Project impacts are evaluated and mitigated on a project-by-project basis. The Project's individual contribution when combined with other area projects would not be cumulatively considerable. The proposed Project would not result in a cumulative impact on cultural, scientific, or historic resources because the area has not been identified as containing archaeological, paleontological or historic resources that could contribute to a significant cumulative impact.

### 5.4.8 Unavoidable Adverse Impacts

With implementation of the recommended mitigation measures, impacts to cultural, scientific or historic resources will be reduced to a less than significant level. Therefore, there are no unavoidable adverse impacts to cultural resources associated with the development of the proposed Project.
5.5 Geology and Soils

This section analyzes the potential geology and soils impacts associated with the proposed Project. Information in this section is based on a Geotechnical Study Report (Geotechnical Report) dated July 13, 2015, by RGH Consultants (RGH) (Appendix H herein). The Geotechnical Report included a Seismic Refraction Survey (Seismic Survey) in support of the geotechnical investigation. The Project description at the time the report was prepared was the development of a winery complex and did not include the hotel and office components proposed in the current Project description. However, geologic and soils conditions have not changed since the report was prepared and the site continues to be undeveloped and covered with grasses, weeds and mature oak trees along the southern and western property lines.

5.5.1 Existing Conditions

1. Geology

Napa County lies within the California Coast Range geomorphic province. This province is a geologically complex and seismically active region characterized by sub-parallel northwest trending faults, mountain ranges and valleys. The oldest bedrock units are the Jurassic-Cretaceous Franciscan Complex and Great Valley sequence sediments originally deposited in a marine environment. Younger rocks such as the Tertiary-age Sonoma Volcanics group, the Plio-Pleistocene-age Clear Lake Volcanics and sedimentary rocks such as the Guinda, Domengine, Petaluma, Wilson Grove, Cache, Huichica and Glen Ellen formations were subsequently deposited throughout the province. Extensive folding and thrust faulting during late Cretaceous through early Tertiary geologic time created complex geologic conditions that underlie the highly varied topography of today. Published geologic maps indicate the property is underlain by Mafic flows and breccias.

2. Surface Conditions

The Project site is undeveloped but has been previously graded. Vegetation on site consists of a growth of grasses, weeds and mature oak trees. At the time the investigation was performed, the site was an unpaved, topographically flat vacant lot. Staking and flagging on the site surface indicates that underground utility lines cross the site at three locations. Natural drainage consists of sheet flow over the ground surface that concentrates in man-made surface drainage elements such as roadside ditches and natural drainage elements such as swales, ravines and creeks.

3. Sub-Surface Conditions

Based on laboratory tests and test pits, RGH determined that the natural surface soils, which vary from a few inches to approximately one foot thick, are sandy clays and clayey sands that are weak to moderately strong and slightly compressible. The site is substantially blanketed with heterogeneous clayey sand fill, ranging from a few inches to about 5 feet, and containing variable amounts of gravel and occasional cobbles and boulders. The fill soils exhibit low to moderate plasticity and low expansion potential.
Bedrock extends from beneath the surface materials to the maximum depths explored (8½ feet). The northeast corner of the site contains bedrock that is extremely hard, resistant Andesite. The remainder of the Project site is generally moderately hard, moderately weathered siltstone, sandstone and conglomerate.

4. **Landslides**

The Project site is not within a designated landslide area as shown on Exhibit 5.5-1, Generalized Relative Landslide Susceptibility Map below from the City’s General Plan, Chapter 8, Health and Safety.

5. **Soil Erosion**

Soil erosion is a naturally occurring process that can be worsened by human activities. Susceptibility to soil erosion varies based on geologic materials and slope steepness in the area. Geologic materials that are susceptible to slope failure include sandstones, shales and mudstones. Development, with its grading, construction and land alteration, can cause excessive erosion and sedimentation if not regulated properly. Grading for building pads, roads and landscaping removes natural vegetation that protects topsoil from erosion. The Project site is topographically flat with no likelihood of hillside erosion due to natural elements or construction activities. However, construction activities could result in the loss of topsoil and will require mitigation measures to reduce impacts from surface drainage and erosion.

6. **Groundwater**

No free groundwater was observed by RGH in the test pits. On hillsides, rainwater typically percolates through the porous surface materials and migrates downslope in the form of seepage at the interface of the surface materials and bedrock, and through fractures in the bedrock. Fluctuations in the seepage rates typically occur due to variations in rainfall intensity, duration and other factors such as periodic irrigation.

7. **Seismic Hazards**

**Regional Faulting and Seismicity**

Data estimates the chance of one or more large earthquakes (magnitude 6.7 or greater) in the San Francisco Bay region within the next 30 years to be approximately 63%. Future seismic shaking should be anticipated at the Project site. Exhibit 5.5-2, Generalized Relative Landslide Susceptibility Map shows the areas within the Project vicinity where fault activity occurs.

**Faulting**

The Project site is not within a current Alquist-Priolo Earthquake Fault Zone. However, the site is within an area affected by strong seismic activity. Several northwest-trending Earthquake Fault Zones are in close proximity to and within several miles of the site. Table 5.5-1 below identifies the faults and distances from the Project.
Exhibit 5.5-1  Generalized Relative Landslide Susceptibility Map
Exhibit 5.5-2 Generalized Relative Landslide Susceptibility Map
Table 5.5-1  \textbf{Active Fault Proximity}

<table>
<thead>
<tr>
<th>Fault</th>
<th>Direction</th>
<th>Distance-Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Andreas</td>
<td>SW</td>
<td>32.5</td>
</tr>
<tr>
<td>Healdsburg-Rogers Creek</td>
<td>SW</td>
<td>12.5</td>
</tr>
<tr>
<td>Concord-Green Valley</td>
<td>SE</td>
<td>5</td>
</tr>
<tr>
<td>Cordelia</td>
<td>E</td>
<td>7.5</td>
</tr>
<tr>
<td>West Napa</td>
<td>SW</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Exhibit 5.5-3, Ground Shaking Intensity (West Napa Fault) shows the Project site proximity to areas identified as susceptible to intense ground shaking.

On August 24, 2014, a magnitude 6.0 earthquake (South Napa Earthquake) occurred on the West Napa Fault. The epicenter of the earthquake was approximately 9 miles south of the City and approximately 4 miles from the Project site. Prior to the 2014 South Napa Earthquake, the last major seismic event on the West Napa Fault was a magnitude 5.2 temblor near Yountville in September 2000.

\textbf{Liquefaction}

Soil liquefaction results from loss of strength during cyclic loading such as imposed by earthquakes. Liquefaction occurs when water-saturated, cohesionless soil loses its strength and liquefies during intense and prolonged ground shaking. Soils most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage, such as silty sands or sands and gravels capped by or containing seams of impermeable sediment or non-plastic fine-grained soils. Geologic units generally susceptible to liquefaction include late Quaternary alluvial and fluvial sedimentary deposits and artificial fill.

Effects of liquefaction can range from minor settling of foundations and structures to severe subsidence. According to the City’s General Plan EIR, liquefaction hazards occur generally along the length of Napa Creek, Redwood Creek north to Redwood Road, along Browns Valley Creek west to Thompson Avenue, along the Napa River from Trancas Street south to John F. Kennedy Memorial Park and in the southernmost portion of the City below State Route 29. These areas are known to consist of Holocene Alluvium and Bay Muds that may be subject to liquefaction or subsidence.

\textbf{Settlement}

Grading of the Project site will result in removal and re-compaction of underlying unsuitable or unstable soils. Detailed grading plans, as approved by the City, will ensure that appropriate measures are applied to conform with local grading requirements for soil settlement.
Exhibit 5.5-3  Ground Shaking Intensity (West Napa Fault)

Source: Figure 8-1A, Envision Napa 2020, Policy Document, Chapter 8: Health and Safety
5.5.2 Thresholds of Significance

The state encourages local agencies to adopt their own thresholds. For purposes of this DEIR, the thresholds of significance for evaluating project impacts are based on suggested criteria from the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines). According to the CEQA Guidelines, the proposed Project would have a potentially significant impact with respect to geology and soils if it would:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist or the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
   ii) Strong seismic ground shaking.
   iii) Seismic-related ground failure, including liquefaction.
   iv) Landslides.

b) Result in substantial soil erosion or the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

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

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

5.5.3 Project Impacts Prior to Mitigation

The Geotechnical Report identified primary geotechnical concerns during design and construction of the Project as follows:

1. The presence of a few inches to approximately 5 feet of heterogeneous fill;
2. The moderately hard to hard, resistant bedrock present below the surface soils and heterogeneous fill; and
3. The strong ground shaking predicted to impact the site during the life of the project.

The report provides recommendations for the following potential issues as analyzed during the site investigation.

1. **Heterogeneous Fill** - Fills of unknown quality and unknown method of placement can settle and/or heave erratically under the load of new fills, structures, slabs and pavements. Where not removed by planned grading, the heterogeneous fill must be excavated and replaced as an engineered fill if it is to be used for structural support.
2. **Foundation, Slab and Pavement Support** - After remedial grading, satisfactory foundation support can be obtained from spread footings bottomed on the engineered fill or bedrock. Interior slab-on-grade floors, exterior slabs and pavements can also be satisfactorily supported on the engineered fill or bedrock.

3. **Soil Quality** - All fill materials used in the building and paved areas must be as described in the report recommendations. The report notes that with the exception of organic matter and rocks or lumps larger than 6 inches in diameter, the excavated material will be suitable for re-use as select fill. The report recommends approval by the geotechnical engineer for use of on-site soils as select fill during grading.

4. **Settlement** - The report estimates that total settlement of heavily loaded column footings will be about one-half inch and settlement of the strip footings will be one-quarter inch provided remedial grading is performed as recommended.

5. **Surface Drainage** - Surface runoff can be concentrated by the planned site grading, landscaping and drainage. The surface runoff can pond against structures and seep into the slab rock. Strict control of surface runoff is necessary to provide long-term satisfactory performance.

6. **Landslides** - No impacts due to landslides were identified in the report and the Project site is not within the City’s General Relative Landslide Susceptibility Map (Exhibit 5.5-1, page 5.5-3).

7. **Soil Erosion** - To prevent impacts due to soil erosion during construction activities, the developer will be required to provide an erosion and sediment control plan (ESCP) per Policy Resolution No. 27 - Standard Mitigation Measures. The ESCP will identify best management practices to be implemented during all phases of construction as approved by the Public Works Director. Section 5.8, Hydrology and Water Quality, includes discussion and mitigation measures that will prevent impacts from storm water and erosion runoff to reduce impacts to water quality.

8. **Groundwater** - No impact to groundwater was identified in the report as none was observed during the drilling of test pits. It is unlikely that the Project will result in an impact to groundwater and no mitigation is recommended.

9. **Seismic Hazards** - The Project site is located in an area that is subject to intense ground shaking due to proximity to faults in the area that range from 1.5 to 32.5 miles in distance from the Project. Policy Resolution No. 27 requires that all construction meet the Uniform Building Code regulations for seismic safety to reduce the potential for building failure and injury due to seismic shaking. While the report notes that risk of fault rupture is low at the Project site, Mitigation requiring adherence to the City’s Policy 27 will ensure that impacts are reduced.

10. **Liquefaction** - While the Project site is not within the identified areas that could be subject to liquefaction or subsidence due to earthquakes, adherence to state and local building codes and regulations will reduce potential impacts. The report notes that no subsurface conditions would suggest the presence of materials that
may be susceptible to seismically induced densification, liquefaction or lurching; however, mitigation requiring adherence to state and local regulations is included herein to reduce potential impacts.

Foulk Civil Engineering, Inc. has provided a letter dated September 15, 2017 detailing the preliminary earthwork calculations for the Project. The letter is included herein as Appendix I. The calculations were based on grading plans provided by Fuscoe Engineering and are summarized as follows.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Site Excavation (cut)</td>
<td>31,300 cubic yards</td>
</tr>
<tr>
<td>Total Site Embankment (fill)</td>
<td>1,000 cubic yards</td>
</tr>
<tr>
<td>Total Shrinkage (15%)</td>
<td>150 cubic yards</td>
</tr>
<tr>
<td>Net Export</td>
<td>30,150 cubic yards</td>
</tr>
</tbody>
</table>

The Project will be required to comply with the grading and construction recommendations contained in the Geotechnical Study Report including the following.

### 2013 CBC Seismic Criteria

<table>
<thead>
<tr>
<th>Spectral Response Parameter</th>
<th>Acceleration (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ss (0.2 second period)</td>
<td>2.001</td>
</tr>
<tr>
<td>S1 (1 second period)</td>
<td>0.714</td>
</tr>
<tr>
<td>Sms (0.2 second period)</td>
<td>2.001</td>
</tr>
<tr>
<td>Sm1 (1 second period)</td>
<td>0.714</td>
</tr>
<tr>
<td>Sds (0.2 second period)</td>
<td>1.334</td>
</tr>
<tr>
<td>Sd1 (1 second period)</td>
<td>0.476</td>
</tr>
</tbody>
</table>

### Grading

- **Site Preparation** – Areas to be developed should be cleared of vegetation and debris. Voids created during clearing shall be backfilled with engineered fill as recommended.

- **Stripping** – Areas to be graded should be stripped of the upper few inches of soil containing organic matter. Actual depth should be determined by a representative of the geotechnical engineer in the field at the time of stripping. The strippings should be removed from the site or, if suitable, stockpiled for re-use as topsoil in landscaping.

- **Excavations** – Excavations extending below the proposed finished grade should be backfilled with suitable materials compacted to the requirements given herein. Within building, fill and paved areas, the old fill and natural surface soils should be excavated to within six inches of their entire depth. The excavation of old fills and surface soils should extend at least five feet beyond the outside edge of the exterior footings of the proposed buildings and three feet beyond the edge of exterior slabs and pavements. Temporary construction excavations should conform to the regulations of the State of California, Department of Industrial Relations, Division of Industrial Safety or other stricter governing regulations. The stability of temporary cut slopes, such as those constructed during the installation of underground utilities, should be the responsibility of the contractor. Depending on the time of year when grading is performed, and the surface conditions exposed, temporary
cut slopes may need to be excavated to 1½:1 or flatter. The tops of the temporary cut slopes should be rounded back to 2:1 in weak soil zones.

- **Fill Quality** – All fill materials should be free of perishable matter and rocks or lumps over 6 inches in diameter, meet the criteria set forth herein for select fill and must be approved by the geotechnical engineer prior to use. The suitability of on-site soils for use as select fill should be verified during grading.

- **Select Fill** – Select fill should be free of organic matter, have a low expansion potential, and conform in general to the following requirements.

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing (by dry weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 inch</td>
<td>100</td>
</tr>
<tr>
<td>4 inch</td>
<td>90-100</td>
</tr>
<tr>
<td>No. 200</td>
<td>10-64</td>
</tr>
</tbody>
</table>

In general, imported fill, if needed, should be select. Material not conforming to these requirements may be suitable for use as import fill; however, it shall be the contractor’s responsibility to demonstrate that the proposed material will perform in an equivalent manner. The geotechnical engineer should approve imported materials prior to use as compacted fill. The grading contractor is responsible for submitting, at least 72 hours in advance of its intended use, samples of the proposed import materials for laboratory testing and approval by the soils engineer.

- **Fill Placement** – The surface exposed by stripping and removal of heterogeneous fill and surface soils should be scarified to a depth of at least 6 inches, uniformly moisture-conditioned to at least 2% above optimum and compacted to at least 90% of the maximum dry density of the materials as determined by ASTM Test Method D-1557. Approved fill material should then be spread in thin lifts, uniformly moisture-conditioned to at least 2% above optimum and compacted to at least 90% relative compaction. In areas where a building pad straddles bedrock and fill, the fill beneath the building and for a distance of 5 feet beyond the edges of the footings should be compacted to at least 95% relative compaction. All structural fills, including those placed to establish site surface drainage, should be compacted to at least 90% relative compaction.

- **Permanent Cut and Fill Slopes** – In general, cut and fill slopes should be designed and constructed at slope gradients of 2:1 (horizontal to vertical) or flatter, unless otherwise approved by the geotechnical engineer in specified areas. Where steeper slopes are required, retaining walls should be used.

- **Wet Weather Grading** – Generally, grading is performed more economically during the summer months when on-site soils are usually dry of optimum moisture content. Delays should be anticipated in site grading performed during the rainy season or early spring due to excessive moisture in on-site soils. Special and relatively expensive construction procedures, including dewatering of excavations and importing granular soils, should be anticipated if grading must be completed.
during the winter and early spring or if localized areas of soft saturated soils are found during grading in the summer and fall.

Foundation Support

Provided the site grading is performed as recommended herein, the proposed structures can be supported on continuous and isolated spread footings that bottom on select engineered fill or bedrock.

• **Spread Footings** – Spread footings should be at least 18 inches wide and should bottom on select engineered fill or on undisturbed bedrock, as applicable, at least 12 inches below lowest adjacent grade. Additional embedment or width may be needed to satisfy code and/or structural requirements. The bottoms of all footing excavations should be thoroughly cleaned out or wetted and compacted using hand-operated tamping equipment prior to placing steel and concrete. This will remove the soils disturbed during footing excavations, or restore their adequate bearing capacity, and reduce post-construction settlements.

• **Bearing Pressures** – Footings installed in accordance with these recommendations may be designed using allowable bearing pressures of 2,000, 3,000 and 4,000 pounds per square foot (psf), for dead loads, dead plus code live loads, and total loads (including wind and seismic), respectively. For footings bottomed entirely on bedrock, the above pressures can be increased to 3,000, 4,500 and 6,000 psf.

• **Lateral Pressures** – The portion of spread footing foundations extending into undisturbed bedrock or select engineered fill may impose a passive equivalent fluid pressure and a friction factor of 350 pcf and 0.35, respectively, to resist sliding. Passive pressure should be neglected within the upper 6 inches, unless the soils are confined by concrete slabs or pavements.

Retaining Walls

Retaining walls constructed at the site must be designed to resist lateral earth pressures plus additional lateral pressures that may be caused by surcharge loads applied at the ground surface behind the walls. Retaining walls free to rotate (yielding greater than 0.1% of the wall height at the top of the backfill) should be designed for active lateral earth pressures. If walls are restrained by rigid elements to prevent rotation, they should be designed for “at rest” lateral earth pressures. In the absence of backdrains, the retaining walls should be designed to resist full hydrostatic pressure. Retaining walls should be designed to resist the following earth equivalent fluid pressures (triangular distribution):

<table>
<thead>
<tr>
<th>Location Condition</th>
<th>Pressure (pcf)</th>
<th>Additional Seismic Pressure (pcf)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active – Level backfill</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>Active - Sloping Backfill 3:1 or Flatter</td>
<td>56</td>
<td>37</td>
</tr>
<tr>
<td>At Rest - Level Backfill</td>
<td>65</td>
<td>38</td>
</tr>
</tbody>
</table>

* If required
These pressures do not consider additional loads resulting from adjacent foundations or other loads. If these additional surcharge loadings are anticipated, additional evaluation should be provided. Where retaining wall backfill is subject to vehicular traffic, the walls should be designed to resist an additional surcharge pressure equivalent to two feet of additional backfill.

Retaining walls will yield slightly during backfilling. Therefore, walls should be backfilled prior to building on, or adjacent to, the walls. Backfill against retaining walls should be compacted to at least 90 and not more than 95% relative compaction. Overcompaction or the use of large compaction equipment should be avoided because increased compactive effort can result in lateral pressures higher than those recommended above.

- **Foundation Support** – Retaining walls should be supported on spread footings designed in accordance with the recommendations presented in this report. Retaining wall foundations should be designed by the project civil or structural engineer to resist the lateral forces set forth in this section.

- **Wall Drainage and Backfill** – Retaining walls should be backdrained. The backdrains should consist of 4-inch diameter, rigid perforated pipe embedded in Class 2 permeable material. The pipe should be PVC Schedule 40 or ABS with SOR 35 or better, and the pipe should be sloped to drain to outlets by gravity. The top of the pipe should be at least 8 inches below lowest adjacent grade. The Class 2 permeable material should extend to within 1 ½ feet of the surface. The upper 1 ½ feet should be backfilled with compacted soil to exclude surface water.

**Slab-On-Grade**

Provided grading is performed in accordance with the recommendations presented herein, slabs should be underlain by undisturbed bedrock and/or select engineered fill. Slab-on-grade subgrade should be rolled to produce a dense, uniform surface. The future expansion potential of the subgrade soils should be reduced by thoroughly presoaking the slab subgrade prior to concrete placement. The moisture condition of the subgrade soils should be checked by the geotechnical engineer no more than 24 hours prior to placing the capillary moisture break. The slabs should be underlain with a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel (excluding pea gravel) at least one-quarter inch and no larger than three-quarters inch in size. Interior slabs subject to vehicular traffic may be underlain by Class 2 aggregate base. The use of Class 2 aggregate base should be reviewed on a case by case basis. Class 2 aggregate base can be used for slab rock under exterior slabs. Interior area slabs should be provided with an underdrain system.

Slabs should be designed by the Project civil or structural engineer to support the anticipated loads, reduce cracking and provide protection against the infiltration of moisture vapor. Slabs subjected to heavy concentrated wheel loads, such as forklift or trailer-trucks, should be designed to carry the anticipated wheel loads.
A vapor barrier should be placed under all slabs-on-grade that are likely to receive an impermeable floor finish or be used for any purpose where the passage of water vapor through the floor is undesirable. RGH recommends that a qualified person be consulted to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. This person should provide recommendations for mitigation of the potential adverse impact of moisture vapor transmission on various components of the structure as deemed appropriate.

**Utility Trenches**

The shoring and safety of trench excavations is solely the responsibility of the contractor. Attention is drawn to the State of California Safety Orders dealing with “Excavations and Trenches.”

Unless otherwise specified by the County of Napa, on-site, inorganic soil may be used as general utility trench backfill. Where utility trenches support pavements, slabs and foundations, trench backfill should consist of aggregate baserock. The baserock should comply with the minimum requirements in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Trench backfill should be moisture-conditioned as necessary, and placed in horizontal layers not exceeding 8 inches in thickness, before compaction. Each layer should be compacted to at least 90% relative compaction as determined by ASTM Test Method D-1557. The top 6 inches of trench backfill below vehicle pavement subgrades should be moisture conditioned as necessary and compacted to at least 95% relative compaction. Jetting or ponding of trench backfill to aid in achieving the recommended degree of compaction should not be attempted.

**Pavements**

Based on the study, RGH believes the near-surface soils and heterogeneous fill will have a low supporting capacity, after proper compaction, when used as a pavement subgrade. An R-value of 12 was measured on a bulk sample of near-surface soil. Because of potential variation in the on-site soils, RGH selected an R-value of 10 for use in pavement design calculations. Based on the selected R-Value and our experience with similar projects and soils, it is recommended that the pavement sections listed in the table below be used. The assumed Traffic Indices (TI) are not based on actual truck traffic counts or predictions of counts. Actual truck traffic counts may require revision of these traffic indices. The Project engineer, in consultation with City/County officials, should choose the pertinent (TI) for this Project.

<table>
<thead>
<tr>
<th>TI</th>
<th>Asphalt Concrete (feet)</th>
<th>Class 2 Aggregate Base (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0</td>
<td>0.35</td>
<td>1.15</td>
</tr>
<tr>
<td>6.0</td>
<td>0.25</td>
<td>1.05</td>
</tr>
<tr>
<td>5.0</td>
<td>0.20</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Pavement thicknesses were computed using Caltrans design procedures and are based on a pavement life of 20 years. These recommendations are intended to provide support for traffic represented by the indicated Traffic Indices. They are not intended
to provide pavement sections for heavy concentrated construction storage or wheel loads such as forklifts, parked truck-trailers and concrete trucks or for post-construction concentrated wheel loads such as self-loading dumpster trucks. In areas where heavy construction storage and wheel loads are anticipated, the pavements should be designed to support these loads. Support could be provided by increasing pavement sections or by providing reinforced concrete slabs. Alternatively, paving can be deferred until heavy construction storage and wheel loads are no longer present. Loading areas for self-loading dumpster trucks should be provided with reinforced concrete slabs at least 6 inches thick, and reinforced with No. 4 bars at 12-inch centers each way. Alternatively, the asphalt concrete section should be increased to at least 8 inches in these areas.

Prior to placement of aggregate base, the upper 6 inches of the pavement subgrade soils should be scarified, uniformly moisture-conditioned to near optimum, and compacted to at least 95% relative compaction to form a firm, non-yielding surface.

Aggregate base materials should be spread in thin layers, uniformly moisture-conditioned, and compacted to at least 95% relative compaction to form a firm, non-yielding surface. The materials and methods used should conform to the requirements of the County of Napa and the current edition of the Caltrans Standard Specifications, except that compaction requirements should be based on ASTM Test Method D-1557. Aggregate used for the base course should comply with the minimum requirements specified in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base.

- **Wet Weather Paving** – In general, the pavements should be constructed during the dry season to avoid the saturation of the subgrade and base materials, which often occurs during the wet winter months. If pavements are constructed during the winter, a cost increase relative to drier weather construction should be anticipated. Unstable areas may have to be over-excavated to remove soft soils. The excavations will probably require backfilling with imported crushed (ballast) rock. The geotechnical engineer should be consulted for recommendations at the time of construction.

**Geotechnical Drainage**

Surface water should be diverted away from slopes, foundations and edges of pavements. Surface drainage gradients should slope away from building foundations in accordance with the requirements of the CBC or local governing agency. Roofs should be provided with gutters and the downspouts should empty onto splash blocks that discharge directly onto paved areas or be connected to closed (glued Schedule 40 PVC or ABS with SOR of 35 or better) conduits discharging well away from foundations, onto paved areas or erosion resistant natural drainages or into the site’s surface drainage system. Roof downspouts and surface drains must be maintained entirely separate from the slab underdrains recommended hereinafter.

Water seepage or the spread of extensive root systems into the soil subgrade of footings, slabs or pavements could cause differential movements and consequent
distress in these structural elements. Landscaping should be planned with consideration for these potential problems.

- **Slab Underdrains** – Where interior slab subgrades are less than 6 inches above adjacent exterior grade and where migration of moisture through the slab would be detrimental, slab underdrains should be installed to dispose of surface and/or groundwater that may seep and collect in the slab rock. Slab underdrains should consist of 6-inch wide trenches that extend at least 6 inches below the bottom of the slab rock and slope to drain by gravity. The slab underdrain trenches should be spaced no further than 20 feet, both ways. Additional drain trenches should be installed, as necessary, to drain all isolated under slab areas. Four-inch-diameter perforated pipe (SOR 35 or better) sloped to drain to outlets by gravity should be placed in the bottom of the trenches. Slab underdrain trenches should be backfilled to subgrade level with clean, free draining slab rock. If slab underdrains are not used, it should be anticipated that water will enter the slab rock, permeate through the concrete slab and ruin floor coverings.

**Maintenance**

Periodic land maintenance will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary or at least annually.

### 5.5.4 Mitigation Measures

**1. Standard Mitigation Measures**

The City's Policy Resolution No. 27 identifies standard mitigation measures applicable to the proposed Project, which are included herein.

| MM Geo-1 | All Project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications. |
| MM Geo-2 | All construction activities shall meet the Uniform Building Code regulations for seismic safety (e.g., reinforcing perimeter and/or load bearing walls, bracing parapets). |
| MM Geo-3 | Developer shall provide an erosion and sediment control plan and a schedule for implementation of approved measures to the Public Works Director for approval prior to the issuance of any grading permits. No grading and excavation shall be performed except in accordance with the approved plan and schedule. |
| MM Geo-4 | Hydrosedging of all disturbed slopes shall be completed by October 1. Developer shall provide sufficient maintenance and irrigation of the slopes such that growth is established by November 1. |
2. Special Mitigation Measures

Recommendations have been included in the Geotechnical Report (pages 7-14) and are detailed herein as mitigation.

| MM Geo-5 | Prior to the issuance of building permits and grading permits, the City of Napa shall ensure the grading and building plans demonstrate compliance with the recommendations included in the Geotechnical Study Report by RGH consultants dated July 13, 2015 related to seismic design criteria for structures, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, drainage and maintenance. |
| MM Geo-6 | Prior to issuance of grading permits, the Applicant shall have prepared a haul route plan showing the construction materials haul routes, the number of trips per day, and the location where grading export materials will be taken. |

5.5.5 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state the Project would have a significant impact if it would:

a) Expose people or structures to potential substantial adverse effects involving earthquakes, seismic ground shaking, seismic-related ground failure or landslides,

b) Result in substantial soil erosion or loss of topsoil,

c) Be located on a geologic unit that is unstable or becomes unstable due to landslide, lateral spreading, subsidence, liquefaction or collapse,

d) Be located on expansive soil, or

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

The Geotechnical Report states that nearly the entire site is blanketed with from a few inches to about 5 feet of heterogeneous fill which is a material with varying density, strength, compressibility and shrink-swell characteristics. Bedrock extends from beneath fill and topsoil to the explored depth of 8½ feet. No groundwater was observed, and no subsurface conditions suggested the presence of materials that may be susceptible to seismically induced densification, liquefaction or lurching. No faults are located on the site; however, future seismic shaking should be anticipated. Strong seismic ground shaking is endemic in southern California and future occupants of the Project components will not be exempt from the risk, if it occurs. Grading and construction activities could result in erosion or the loss of topsoil. The Project has been conditioned to prepare an erosion control plan as detailed in Mitigation Measure MM Geo-3 to prevent impacts from erosion.

Based on the findings, the Geotechnical Report included a number of recommendations which have been included herein as mitigation measures to reduce potential impacts from expansive oils, lateral spreading, subsidence, liquefaction or collapse. In addition, the City's Policy 27 Standard Mitigation, which is included herein, requires compliance with Building Code regulations for seismic safety.
Adherence to the recommendations and mitigation included for Project implementation will ensure that the Project will not expose people or structures to a significant risk of loss, injury or death due to earthquakes or ground-shaking, result in substantial soil erosion or loss of topsoil, be located on a geologic unit that is unstable or be located on expansive soils. The Geotechnical Report contains recommendations that include seismic design criteria, foundation support, drainage and paving details to ensure that risks and exposures are less than significant. There are no septic systems or alternative wastewater disposal systems included in Project design and there will be no impact related to such systems. Mitigation Measure MM Geo-5 requires compliance with all recommendations in the Geotechnical Report to reduce impacts in the area of Geology and Soils to below a level of significance.

### 5.5.6 Cumulative Impacts

The Project, as proposed, will not result in a cumulatively considerable impact when combined with other proposed projects in the vicinity. Soils and geology impacts are site specific and the Project is not in close proximity to the projects identified herein as having the potential for cumulative impacts related to geology and soils. Mitigation has been included in this DEIR to prevent significant impacts due to construction activities and all other potential geologic impacts are reduced through mitigation, recommendations, and best management practices. There will be no significant cumulative impacts due to the implementation of the Project as proposed.

### 5.5.7 Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures specified above will reduce all potentially significant geological impacts to a less than significant level and, therefore, there are no unavoidable adverse impacts associated with development of the Project.
5.6 Greenhouse Gas Emissions

This section analyzes the potential air quality impacts related to greenhouse gas (GHG) emissions associated with the proposed Project in terms of short-term construction and long-term operational impacts. The existing setting has been detailed in Section 5.2, Air Quality, and is summarized in this section. Information in this section is based on the Air Quality and Greenhouse Gas Assessment (Air Quality Assessment) prepared by Illingworth & Rodkin, Inc. dated September 7, 2017. The complete Air Quality and Greenhouse Gas Assessment, including appendices, are included herein as Appendix D.

5.6.1 Existing Conditions

The Project is located in the San Francisco Bay Area Air Basin (SFBAAB) in the Napa Valley. The Valley is bordered by relatively high mountains with an average ridgeline height of approximately 2,000 feet with some peaks approaching 3,000 to 4,000 feet. The mountains are effective barriers to the prevailing northwesterly winds. The Project is in an area currently designated nonattainment for the state 1-hour and 8-hour ozone standards, nonattainment for the state 24-hour and annual PM$_{10}$ standard, and nonattainment for the state annual PM$_{2.5}$ standard. It is also designated as nonattainment for the national 8-hour ozone standard and nonattainment for the national 24-hour PM$_{2.5}$ standard.

5.6.2 Regulatory Setting

Greenhouse gases (GHG) – gases that trap heat in the atmosphere – regulate the earth’s temperature. This phenomenon, known as the “greenhouse gas effect,” is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO$_2$) and water vapor. Other important GHGs are methane (CH$_4$), nitrous oxide (N$_2$O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF$_6$). These gases are released into the earth’s atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally:

- CO$_2$ and N$_2$O – byproducts of fossil fuel combustion
- N$_2$O – associated with agricultural operations such as fertilization of crops
- CH$_4$ – commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations
- Chlorofluorocarbons (CFCs) – previously widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty
- HFCs – now used as a substitute for CFCs in refrigeration and cooling
- PFCs and sulfur hexafluoride emissions – commonly created by industries such as aluminum production and semi-conductor manufacturing

Each GHG has its own potency and effect upon the earth’s energy balance. This is expressed in terms of a global warming potential (GWP), with CO$_2$ assigned a value of 1 and sulfur...
hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

Global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates as reported in an expanding body of scientific research. The research also indicates that this trend will continue in the future. California has experienced adverse effects to its climate and naturally occurring resources due to the warming trend. Increased precipitation and sea level rise increases coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress, an increase in climate-sensitive diseases, more frequent and intense natural disasters such as flooding, hurricanes and drought, and increased levels of air pollution.

The earth’s climate has always been in the process of changing due to a variety of natural factors, including changes in the earth’s orbit, volcanic eruptions, and varying amounts of energy released from the sun. In addition, many human activities have augmented the amount of GHGs being released into the atmosphere, such as burning fossil fuels (coal and oil) and deforestation. Some of the effects of climate change include changes to rainfall, wind and current weather patterns, as well as snow and ice cover and sea level. Global GHG emissions are measured in million metric tons of carbon dioxide equivalent (MMTCO₂eq) units. A metric ton is approximately 2,205 pounds. Some GHGs emitted into the atmosphere are naturally occurring, while others are caused solely by human activities. The principal GHGs that enter the atmosphere due to human activities are:

- **Carbon dioxide** (CO₂) enters the atmosphere through burning fossil fuels (oil, natural gas, and coal), agriculture, irrigation, and deforestation, as well as the manufacturing of cement.
- **Methane** (CH₄) is emitted through the production and transportation of coal, natural gas, and oil, as well as from livestock. Other agricultural activities influence methane emissions as well as the decay of waste in landfills.
- **Nitrous oxide** (N₂O) is released most often during the burning of fuel at high temperatures. This greenhouse gas is caused mostly by motor vehicles, which also include non-road vehicles, such as those used for agriculture.
- **Fluorinated Gases** are emitted primarily from industrial sources, which often include hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Though they are often released in smaller quantities, fluorinated gases are referred to as High Global Warming Potential Gases because of their ability to cause global warming. Fluorinated gases are often used as substitutes for ozone-depleting substances.

These gases have different potentials for trapping heat in the atmosphere, called global warming potential (GWP) gases. For example, 1 pound of methane has 21 times more heat-capturing potential than 1 pound of carbon dioxide. When dealing with an array of emissions,
the gases are converted to carbon dioxide equivalents for comparison purposes. The GWPs for common greenhouse gases are shown in Table 5.6-1 below.

**Table 5.6-1 Global Warming Potential Gases**

<table>
<thead>
<tr>
<th>Gas</th>
<th>Global Warming Potential (carbon dioxide equivalents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide</td>
<td>1</td>
</tr>
<tr>
<td>Methane</td>
<td>28</td>
</tr>
<tr>
<td>Nitrous oxide</td>
<td>265</td>
</tr>
<tr>
<td>Nitrogen trifluoride</td>
<td>16,100</td>
</tr>
<tr>
<td>Hydrofluorocarbons</td>
<td>100-12,000</td>
</tr>
<tr>
<td>Perfluorocarbons</td>
<td>7,000-11,000</td>
</tr>
<tr>
<td>Sulfur hexafluoride (SF₆)</td>
<td>23,500</td>
</tr>
</tbody>
</table>

Source: CARB, “First Update to the Climate Change Scoping Plan,” May 2014

As noted above, long-term environmental impacts of global warming may include sea level rise that could cause devastating erosion and flooding of coastal cities and villages. Locally, global warming could cause changing weather patterns with increased storm and drought severity. Changes to local and regional ecosystems include the potential loss of species and a significant reduction in winter snow pack (e.g., estimates include a 30% to 90% reduction in snow pack in the Sierra Nevada mountain range). The California Climate Change Center (2006) predicted that California could witness the following events:

- Temperature rises between 3 °F and 10.5 °F
- 6 to 20 inches or more increase in sea level
- 2 to 4 times as many heat-wave days in major urban centers
- 2 to 6 times as many heat-related deaths in major urban centers
- 1 to 1.5 times more critically dry years
- 10 to 55% increase in the risk of wildfires

An increase in the frequency of extreme events may result in more event-related deaths, injuries, infectious diseases, and stress-related disorders.

Higher temperatures could likely increase electricity demand due to higher air conditioning use. Even if the population remained unchanged, toward the end of the century annual electricity demand could increase by as much as 20% if temperatures rise into the higher warming range. Implementing aggressive efficiency measures could lower this estimate. Higher temperatures may require that the proposed Project consume more electricity for cooling. Additionally, more water may be needed for the landscaping. However, sea level rise will not impact the Project, because it is distant from the ocean.

**Sources of Greenhouse Gases in California**

The California Energy Commission (CEC) categorizes GHG generation by source into eight broad categories. The categories are:

1. **Transportation** – includes the combustion of gasoline and diesel in automobiles and trucks. Transportation also includes jet fuel consumption and bunker fuel for ships.
2. **Agriculture** – GHG emissions are composed mostly of nitrous oxide from agricultural soil management, methane from enteric fermentation, and methane and nitrous oxide from manure management.

3. **Commercial and residential** uses generate GHG emissions primarily from the combustion of natural gas for space and water heating.

4. **Industrial** – GHG emissions are produced from many industrial activities. Major contributors include oil and natural gas extraction; crude oil refining; food processing; stone, clay, glass, and cement manufacturing; chemical manufacturing; and cement production. Wastewater treatment plants are also significant contributors to this category.

5. **Electric generation** includes emissions from power plants in California as well as power plants located outside the state that supply electricity to the state.

6. **Recycling and waste** includes primarily landfills.

7. **High global warming potential** emissions consist of ozone-depleting substance substitutes and electricity grid SF6 losses.

8. **Forestry** emissions are due to wildfires.

1. **Federal Plans, Policies, Regulations, and Laws**

   The federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the U.S. EPA to propose a “coordinated national policy on global climate change,” and ordered the Secretary of State to work “through the channels of multilateral diplomacy” to coordinate efforts to address global warming. In 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs.

   The U.S. EPA (EPA) has several regulatory initiatives to reduce greenhouse gas emissions. On August 3, 2015, the EPA issued the Clean Power Plan, which put the nation on track to cut harmful pollution from the power sector by 32% below 2005 levels, while also cutting smog- and soot-forming emissions that threaten public health by 20%. Previously, on May 13, 2010, EPA set greenhouse gas emissions thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these Clean Air Act permitting programs to limit covered facilities to the nation’s largest greenhouse gas emitters: power plants, refineries, and cement production facilities.

   The EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles through reduced greenhouse gas emissions and improved fuel use. Together, the enacted and proposed standards are expected to save more than six billion barrels of oil through 2025 and reduce more than 3,100 million metric tons of carbon dioxide emissions. Additionally, EPA is also responsible for developing and implementing regulations to ensure that
transportation fuel sold in the United States contains a minimum volume of renewable fuel. By 2022, the Renewable Fuel Standard (RFS) program will reduce greenhouse gas emissions by 138 million metric tons, about the annual emissions of 27 million passenger vehicles, replacing about 7% of expected annual diesel consumption and decreasing oil imports by $41.5 billion.

The EPA has issued two proposals to further reduce GHG emissions from municipal solid waste landfills. The EPA has proposed a suite of requirements that would reduce GHG emissions from the oil and natural gas industry.

2. **California State Plans, Policies, Regulations, and Laws**

In the past several years, California has distinguished itself as a national leader in efforts to address global climate change by enacting several major pieces of legislation, engaging in multi-national and multi-state collaborative efforts, and preparing a wealth of information on the impacts associated with global climate change.

In November 2008, the Governor issued Executive Order S-13-08 directing state agencies to plan for sea level rise and other climate change impacts. There are four key actions in the Executive Order: 1) initiation of a climate change adaptation strategy that will assess the state’s expected climate change impacts where the state is most vulnerable, with recommendations by early 2009; 2) an expert panel on sea level rise will inform state planning and development efforts; 3) interim guidance to state agencies on planning for sea level rise in coastal and floodplain areas for new projects; and 4) initiation of a report on critical existing and planned infrastructure projects vulnerable to sea level rise.

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (*California Health and Safety Code* §38500, et seq.). AB 32 codifies the State of California’s GHG emissions target by directing California Air Resources Board (CARB) to reduce the state’s global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, CARB, the California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California’s main strategies to reduce GHGs from business-as-usual (BAU) emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 million metric tons of CO\textsubscript{2}e
(MMTCO₂eq) as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector-or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMTCO₂eq. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMTCO₂eq. Thus, an estimated reduction of 80 MMTCO₂eq is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

AB 32 considers the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring CARB to recommend a de minimis (minimal importance) threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire state to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

California has passed several bills, and the Governor has signed at least four executive orders regarding GHG. GHG statutes and executive orders (EO) include AB 32, SB 1368 (Chapter 596, Statutes of 2000), EO S-03-05, EO S-20-06, EO S-01-07 and EO B-30-15. Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, greater use of renewable energy, and increased structural energy efficiency. CARB’s Scoping Plan (2008) and First Update (May 2014) provide a framework for actions to reduce California’s GHG emissions and require CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global warming potential GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. Additionally, through the California Climate Action Reserve, general and industry-specific protocols for assessing and reporting GHG emissions have been developed. The California Climate Action Reserve is a program of the Climate Action Reserve committed to solving climate change through emissions accounting and reduction. GHG sources are categorized into direct sources (i.e., company owned) and indirect sources (i.e., not company owned). Direct sources include combustion emissions from on-road and off-road mobile sources and fugitive emissions. Fugitive emissions are defined as gases or vapors emitted from pressurized equipment due to leaks and other unintended or irregular releases of gases, generally from industrial activities. Indirect sources include off-site electricity generation and non-company-owned mobile sources.


In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state’s electricity mix to 20% by 2017. The state’s most recent 2005 Energy Action Plan raises the renewable energy goal from 20% by 2017, to 33% by 2020.
Title 24, Part 6, California Code of Regulations (2005)

In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings to reduce California’s energy consumption. This program has been partially responsible for keeping California’s per capita energy use approximately flat over the past 30 years.

Climate Action Registry (2001)

California Senate Bills 1771 and 527 created the structure of the California Climate Action Registry (Registry), and former Governor Gray Davis signed the final version of the Registry’s enabling legislation into law on October 13, 2001. These bills establish the Registry as a non-profit entity to help companies and organizations establish GHG emissions baselines against which future GHG emissions reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual GHG emissions with the Registry. In return for this voluntary action, the State of California promises to offer its “best efforts” to ensure that participants receive consideration for their early action if they are subject to any future state, federal, or international emissions regulatory scheme.

3. San Francisco Bay Area Plans, Policies, Regulations and Laws

The Bay Area Air Quality Management District (BAAQMD) has jurisdiction over an approximately 5,600-square-mile area commonly referred to as the San Francisco Bay Area. BAAQMD is the lead agency in developing plans to address attainment and maintenance of National Ambient Air Quality Standards and California Ambient Air Quality Standards. The BAAQMD CEQA Air Quality Guidelines18 (Guidelines) were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. In June 2010, the BAAQMD’s Board of Directors adopted CEQA thresholds of significance and an update of their CEQA Guidelines. The Guidelines were amended in May 2011 to include a risk and hazards threshold for new receptors and modify procedures for assessing impacts related to risk and hazard impacts.

With regard to GHG emissions analysis, a Qualified GHG Reduction Strategy is a climate action plan that meets certain requirements outlined by BAAQMD, which allows for a consistency analysis of a project’s design features with the goals, policies, and measures of the qualified GHG reduction strategy as opposed to a quantified approach and comparison with thresholds of significance. The City of Napa does not have a Climate Action Plan; therefore, the quantified approach using thresholds of significance was used.

5.6.3 Thresholds of Significance

The California Environmental Quality Act (CEQA) Guidelines do not include or recommend any particular threshold of significance. Rather, that decision is left to the discretion of the lead agency. During the development of the CEQA Guidelines Update to address GHG, the

Natural Resources Agency concluded that the CEQA Guidelines do not establish significance thresholds for other potential impacts, and SB 97 did not authorize the development of a statewide threshold as part of the guidelines update.19

The California Resources Agency developed guidelines for the treatment of GHG emissions under CEQA in response to requirements of SB 97. The guidelines became state laws under Title 14 of the California Code of Regulations in March 2010. Appendix G of the CEQA Guidelines states that a project would have a potentially significant impact if it:

- a) Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or
- b) Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the CEQA Guidelines provides that emissions identification may be quantitative, qualitative, or based on performance standards. CEQA Guidelines allow the selection of the model or methodology the lead agency considers most appropriate. Use of a computer model such as CalEEMod is the most common practice for emissions quantification to determine the significance of the emissions. The threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The Guidelines are clear that a zero net emissions threshold is not required. A lead agency may rely on thresholds adopted by another agency with greater expertise if the lead agency has not yet formally adopted its own significance threshold.

Bay Area Air Quality Management District

The significance thresholds contained in the 2011 BAAQMD Air Quality Guidelines were applied to the proposed Project in the Air Quality and Greenhouse Gas Assessment prepared for the Project. The significance thresholds for GHG as presented in the Guidelines require:

- Compliance with a Qualified GHG Reduction Strategy, or
- 1,100 metric tons per year or 4.6 metric tons per capita

5.6.4 Project Impacts Prior to Mitigation

Local air quality impacts/emissions are usually divided into short-term and long-term impacts. Short-term impacts are normally the result of demolition, construction, or grading operations. Long-term impacts are associated with the built-out condition of the proposed Project and are the result of the day-to-day operation and maintenance, use of consumer products, natural gas use, and vehicle trips associated with employees, visitors, and hotel guests.

Development of the Project site is anticipated to take approximately 14 months to complete, with construction estimated at approximately 13 months. The work performed will include

general site work and construction of the hotel, the winery, and the office. Site work is anticipated to last 90 days, including grading, site preparation, and utility infrastructure. Work on the hotel is anticipated to be ongoing for the entire 13 months of estimated construction time, with winery and office work anticipated to each take 11 months.

1. **Short-Term Construction GHG Emissions**

   The primary source of temporary GHG emissions generated by construction activities is from use of diesel-powered construction equipment. Typical emission rates for construction equipment were obtained using CalEEMod 2016.3.1. The CalEEMod program can be used to estimate emissions including operation (vehicle and area) sources, as well as construction projects associated with land development projects.

   The Project will include site preparation, grading, construction of the hotel(s), office building and winery, paving, and painting. It is anticipated that construction will occur over a 19-month period. CalEEMod was used to estimate GHG emissions, which are estimated to be 950 metric tons of CO$_2$e (MTCO$_2$e) for the total construction period. This number represents emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. The following table depicts the estimated GHG construction emissions over an anticipated 3-year construction time frame. Total construction emissions, which are all below BAAQMD thresholds, are analyzed in Section 5.2, Air Quality. As analyzed, air quality impacts, including construction GHG emissions, are less than significant.

<table>
<thead>
<tr>
<th>Year 2017</th>
<th>Year 2018</th>
<th>Year 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmitigated GHG emissions</td>
<td>213.9 MTCO$_2$e</td>
<td>672.5 MTCO$_2$e</td>
</tr>
</tbody>
</table>

Neither the City of Napa nor the BAAQMD has an adopted threshold of significance for construction-related GHG emissions. The BAAQMD standard is 1,100 metric tons or 4.6 metric tons per capita for total Project emissions. However, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the proposed Project include, but are not limited to, using local building materials of at least 10% and recycling or reusing at least 50% of construction waste or demolition materials. In addition, Mitigation Measure MM AQ-1 (Section 5.2, Air Quality, page 5.2-12) requires implementation of best management practices that minimize idling times and maintaining all equipment to run in property condition.

2. **Long-Term Operational GHG Emissions**

   The primary sources of GHG emissions generated by the proposed Project will be from vehicular traffic within the Project vicinity, energy and water usage, and solid waste disposal. The winery component of the proposed Project would result in CO$_2$ emissions from the fermentation of grapes.
CalEEMod 2016.3.1 was used to estimate GHG emissions from operation of the Project assuming full build-out. Land use types and size and other Project-specific information were input into the model. Two model runs were conducted – one for the hotel uses and one for the office and winery uses – to apply the expected hotel occupancy rate. Annual emissions would be affected by the occupancy of the hotel. Operational mobile, water usage, and solid waste generation emissions associated with the hotel were reduced to adjust for annual occupancy. CalEEMod provides emissions for transportation, area sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste land filling and transport. An adjustment was made to CalEEMod for GHG modeling. The model has a default rate of 641.3 pounds of CO2 per megawatt of electricity produced, which is based on PG&E’s 2008 emissions rate. The PG&E rate was updated to the 2020 rate predicted by PG&E, which is 290 pounds of CO2 per megawatt of electricity produced.\footnote{PG&E, Greenhouse Gas Emission Factors: Guidance for PG&E Customers, November 2015. Available online: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf (accessed 8/23/2017)}

### Winery Operations

Emissions from wine fermentation are not included in the CalEEMod modeling program. Although the CO2 released during fermentation of grapes is considered a biogenic emission, the emissions were included in the GHG analysis. The amount of emissions is dependent on many variables, including the type of wine produced and the winemaking process. The International Wine Carbon Calculator (IWCC version 1.3) is an Excel spreadsheet that provides GHG emissions estimates from various winery operations. This program was utilized to generally estimate CO2 emissions from fermentation, because specific details of the wine making were not known at the time of the analysis. Assuming approximately 925 tons of grapes would be used to produce 50,000 cases of wine, CO2 emissions would be approximately 105 metric tons per year.

The Project includes an on-site water treatment feature. The industrial wastewater from the winery will be held in a tank beneath the winery and transferred through an underground piping system to an on-site wastewater treatment area located immediately to the southwest of the winery across an internal drive aisle. The wastewater treatment area will be approximately 2,800 square feet in size and includes three cylindrical water storage tanks and the wastewater treatment system itself, eliminating the need to haul winery wastewater to an off-site location.

### Service Population Emissions (Employees)

The Project service population is based on the number of future full-time employees. The hotel will employ up to 50 personnel. The office will employ approximately 120 workers based on an approximate 4 employees per 1,000 square feet. The winery will employ approximately 20 workers. The total service population for the Project was estimated at 190.
**Hotel Occupancy (Guests)**

Guest occupancy of the hotel will affect annual GHG emissions. The number of future occupants is estimated at 202 guests, assuming that the hotel operates at 80% occupancy. Operational mobile, water usage, and solid waste generation emissions associated with the proposed hotel(s) were reduced to adjust for annual occupancy.

### 3. Operational Emissions Calculations

The CalEEMod model, along with the Project vehicle trip generation rates, were used to estimate daily emissions associated with the operation of the fully built-out site as proposed. The service population (SP) threshold was used to determine the significance of the Project emissions. In year 2020 (buildout), annual net emissions resulting from the operation of the proposed Project are estimated to be 2,277 metric tons carbon dioxide equivalents (MTCO$_2$e) as shown in Table 5.6-3 below.

<table>
<thead>
<tr>
<th>Source Category</th>
<th>2020 Proposed Project</th>
<th>Winery and Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hotel$^1$</td>
<td></td>
</tr>
<tr>
<td>(metric tons CO$_2$ equivalents)</td>
<td>1,144</td>
<td>186</td>
</tr>
<tr>
<td>Energy consumption</td>
<td>397</td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>&lt;1</td>
<td>323</td>
</tr>
<tr>
<td>Solid waste generation</td>
<td>56</td>
<td>30</td>
</tr>
<tr>
<td>Water usage</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Fermentation (biogenic)</td>
<td>–</td>
<td>105</td>
</tr>
<tr>
<td>Total Project emissions</td>
<td>2,277 MT of CO$_2$e per year</td>
<td></td>
</tr>
<tr>
<td>Emissions per capita$^2$</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>BAAQMD threshold</td>
<td>1,100 MTCO$_2$e per year OR 4.6 MTCO$_2$e per capita</td>
<td></td>
</tr>
<tr>
<td>Significant?</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

1 Assumes 80% occupancy  
2 Based on a service population of 190

As shown above, the Project will result in annual estimated GHG emissions of 2,277 MTCO$_2$e per year, which exceeds the BAAQMD threshold of 1,100 MTCO$_2$e per year. In addition, emissions of 12.0 MTCO$_2$e per capita would exceed the BAAQMD threshold of 4.6 MTCO$_2$e per capita. Therefore, a significant impact will occur and mitigation will be required.
Mitigation Measures/Project Design Features

The Air Quality Assessment identified mitigation measures based on reductions in GHGs from energy use, mobile emissions, water use, and waste. CalEEMod runs were conducted which included the following:

- Implement NEV Network (electronic vehicle charging stations)
- Exceed Title 24 by 20%
- Install High Efficiency Lighting (20% reduction)
- Apply Water Conservation Strategy (20% indoor and 20% outdoor)
- Institute Recycling and Composting Services (20% reduction)
- Sequestration (planting of at least 430 trees)

In addition, Project daily trip generation rates were adjusted as a result of a shuttle program as outlined in Section 5.13, Transportation and Traffic.

1. **Standard Mitigation Measures**

   None required. The City of Napa Policy Resolution 27 does not include mitigation measures in the area of Greenhouse Gas Emissions.

2. **Special Mitigation Measures**

   With incorporation of the following mitigation measure, operational GHG emissions would be reduced; however, GHG emissions would still exceed the BAAQMD significance threshold.

   **MM GHG-1** Prior to the issuance of building permits, the City shall ensure that building plans reflect the following measures are to be implemented in the areas of Transportation, Energy-Efficiency, Water and Waste Consumption Measures to Reduce Project GHG Emissions.

   1. Ensure that all winery-related industrial wastewater is treated on-site and instate a program to reduce indoor and outdoor water use by at least 20%;
   2. Instate a program to ensure that 2013 Title 24 energy standards (used by the CalEEMod model) for energy use and lighting are exceeded by at least 20%. Adherence to CalGreen 2016 Title 24 energy standards and other measures would be necessary including, but not limited to:
      a. Sensors shall be installed in all rooms that detect if a guest is in the room and activate the HVAC.
      b. A separate system requires the guest room key to be inserted for the lights to work in the hotel rooms.
      c. LED lights installed throughout
      d. All new appliances would be energy efficiency rated for the hotel;
   3. Instate a recycling and compost program that would divert at least 20% of waste created on-site.
3. **Project Design Features**

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that the Project would have a significant impact if it: The following Project Design Features (PDFs) will further reduce operational greenhouse gas impacts as analyzed in the Air Quality and Greenhouse Gas Assessment:

- Designate at least 53 clean air vehicle (i.e. electric vehicle) parking spaces
- Plant at least 430 new trees on the Project site
- Expand a shuttle program that would reduce project trip generation by at least 180 trips per day

5.6.6 **Level of Significance after Mitigation**

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that a project would have a significant impact if it would:

a) Generate GHG emissions, directly or indirectly, or
b) Conflict with an applicable plan, policy or regulation adopted to reduce GHG emissions.

1. **Short-Term Construction Emissions**

As discussed above, short-term construction GHG emissions are anticipated to be 950 MTCO₂e per year. The BAAQMD standard is 1,100 MTCO₂e or 4.6 MTCO₂e per capita, and the proposed Project would be below the threshold. Therefore, no mitigation is required for short-term construction emissions.

2. **Long-Term Operational Emissions**

Table 5.6-4 below shows the mitigated Project GHG emissions, including the percent reduction per source category. Implementation of Mitigation Measure MM GHG-1 and the PDFs identified above would reduce operational GHG emissions to 10.8 MTCO₂e per capita based on service population, which would still exceed the BAAQMD threshold of 4.6 MTCO₂e per capita. The City of Napa does not have a climate action plan; therefore, the quantified approach using thresholds of significance for analysis of GHG impacts was used. As shown below, the impact would remain significant and unavoidable.

<table>
<thead>
<tr>
<th>Source Category</th>
<th>2020 Proposed Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hotel¹ (metric tons CO₂ equivalents)</td>
</tr>
<tr>
<td>Area</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Energy Consumption (Exceed Title 24, Install High-Efficiency Lighting)</td>
<td>334</td>
</tr>
<tr>
<td>Mobile (Implement NEV Network, Shuttle Program)</td>
<td>1,051</td>
</tr>
<tr>
<td>Solid Waste Generation (Institute Recycling and Composting Services)</td>
<td>45</td>
</tr>
<tr>
<td>Water Usage (Apply Water Conservation Strategy)</td>
<td>9</td>
</tr>
</tbody>
</table>

Trinitas Mixed-Use Project
### GHG Emissions Summary

<table>
<thead>
<tr>
<th>Source Category</th>
<th>Hotel(^1) (metric tons CO(_2) equivalents)</th>
<th>Winery and Other (metric tons CO(_2) equivalents)</th>
<th>Percent Reduction by Source Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Tree Planting (Sequestration)</td>
<td>-10</td>
<td>--</td>
<td>na</td>
</tr>
<tr>
<td>Fermentation (Biogenic)</td>
<td>--</td>
<td>105</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total Project Mitigated Emissions</strong></td>
<td><strong>2,058 MTCO(_2)e per year</strong></td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Emissions per capita(^2)</td>
<td></td>
<td></td>
<td>10.8</td>
</tr>
<tr>
<td>BAAQMD Threshold</td>
<td>1,100 MTCO(_2)e per year OR 4.6 MTCO(_2)e per capita</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significant?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Assumes 80% occupancy

\(^2\) Based on a service population of 190

na = not applicable

The table below shows mitigated and unmitigated GHG emissions in both metric tons per year and per capita emissions.

#### Table 5.6-5  GHG Emissions Summary

<table>
<thead>
<tr>
<th></th>
<th>Metric Tons CO(_2) Equivalent Per Year</th>
<th>Per Capita Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmitigated GHG Emissions</td>
<td>2,277</td>
<td>12.0</td>
</tr>
<tr>
<td>Mitigated GHG Emissions</td>
<td>2,058</td>
<td>10.8</td>
</tr>
<tr>
<td>Total Reduction with Mitigation</td>
<td>-219</td>
<td>1.2</td>
</tr>
</tbody>
</table>

As shown in the tables above, long-term operational emissions will result in an exceedance of the BAAQMD threshold of 1,100 MTCO\(_2\)e per year by approximately 1,058 MTCO\(_2\)e per year with mitigation. The exceedance is due, in large measure, to mobile emissions and energy consumption for hotel workers and guests. Therefore, the Project will generate GHG emissions that will have a significant impact on the environment.

The Scoping Plan adopted as a result of AB 32 has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, and voluntary actions, among others, to reduce GHG impacts on a statewide level. The current statewide emissions limit is a baseline of 507 MMTCO\(_2\)eq. An additional reduction of 80 million metric tons is necessary to reduce statewide emissions to meet the AB 32 target by 2020. The proposed Project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB’s Scoping Plan.

The Project would comply with requirements of the Green Building Code. Proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures and water-efficient irrigation systems. Implementation of Mitigation Measure MM GHG-1 and Project Design Features will result in a reduction of 219 MTCO\(_2\)e but would not reduce operational emissions to a level below adopted thresholds. Therefore, GHG emissions will result in a significant and unavoidable impact.
5.6.7 **Cumulative Impacts**

The proposed Project will contribute GHG emissions that exceed the BAAQMD threshold. Mitigation based on existing required state and local reduction measures has been included herein. Project emissions, combined with emissions from the adjacent and previously approved developments of Napa Pipe and Meritage Commons, as well as reasonably foreseeable projects in the Project vicinity, will contribute to an exceedance of BAAQMD standards on a cumulative basis. The cumulative operational impact will remain significant and unavoidable.

5.6.8 **Unavoidable Adverse Impacts**

The Project’s operational emissions with mitigation and Project Design Features will remain above thresholds and will, therefore, result in an unavoidable and adverse impact.
5.7 Hazards and Hazardous Materials

This section provides an analysis of risks to the public and the environment posed by the proposed Project related to hazards and hazardous materials. A “material” is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. Information in this section is based in large part on a Phase I Environmental Site Assessment (Phase I ESA) prepared by National Due Diligence Services (NDDS) dated February 3, 2015. The assessment was conducted utilizing generally accepted ESA industry standards in general accordance with ASTM Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I ESA Process. The Phase I ESA, including appendices, is included herein as Appendix J.

5.7.1 Existing Conditions

1. Project Setting and Existing Use

The Project is located in an incorporated commercial and undeveloped area of the City of Napa, Napa County and consists of three irregular-shaped parcels of land that total approximately 11.55 acres. The parcels are structurally vacant with generally open land covered with grasses and limited trees. As reported in the Phase I ESA, the property appears to have been historically developed with a farm in the southern portion during the 1940s but the farm was removed and the property has remained undeveloped since at least 1958.

2. Topography

The United States Geological Survey (USGS), Napa California Quadrangle 7.5 minute series topographic map was reviewed for the Phase I ESA. Based on the USGS map, the Project is located in an area of low rolling hills that is approximately 21 feet above mean sea level (AMSL). According to the Soil Survey of Napa County, California from the U.S. Department of Agriculture, Natural Resource Conservation Service, the soils are composed of Coombs gravelly loam, which has slopes of approximately 2% to 5%. The geology of the site is summarized as volcanic flow rocks with minor pyroclastic deposits of the Tertiary period.

3. Hydrology

Information obtained from the Soil Survey of Napa County, California USDA, NRCS website, indicated that the depth to the high groundwater table is estimated to be greater than 80 inches below the ground surface. Information specific to the Project site was not available. Based on local topography, groundwater in the general vicinity of the Project is inferred to flow radially to the west/northwest. The City of Napa Water District provides the Project and the vicinity with public water. Groundwater beneath the Project site is not utilized for domestic and/or commercial purposes.
4. **Other Service Systems**

Sanitary discharges from the Project site are discharged into the municipal sanitary sewer system operated by the Napa Sanitation District. PG&E provides electricity and natural gas to the area. Solid waste is collected by independent contractors.

5.7.2 **Regulatory Setting**

In the 1980s following a judicial decision related to liability of property owners to effect site cleanup, the demand for Phase I and II Environmental Site Assessments increased significantly. Consistent with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), the courts have held that remediation for hazardous substances is required and a Phase I ESA is the tool by which hazardous substances are identified prior to approval and construction of a development. In 1998, Congress approved the Superfund Cleanup Acceleration Act of 1998 requiring purchasers of commercial property to perform a Phase I study meeting the specific standard of ASTM E1527: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The Phase I ESA is generally considered the first step in the process of environmental due diligence. Standards for performing a Phase I site assessment have been promulgated by the US Environmental Protection Agency and are based in part on ASTM in Standard E1527-13. If a site is considered contaminated a Phase II ESA, which is a more detailed investigation involving chemical analysis for hazardous substances, is conducted.

On a local level, the City of Napa Fire Department is responsible for inspecting facilities containing toxic and/or hazardous materials. The Fire Department will review the Project plans to ensure all policies and regulations related to state and local codes will be enforced for both fire protection and presence or use of hazardous materials.

Proximity to airports is considered a hazard depending on the site location in relation to flight paths, noise and proposed building heights. The Project is not located within the Napa Valley Airport flight plan area. However, the Napa County Airport Land Use Compatibility Plan (ALUCP) shows the Project site is within compatibility zones C, D and E, which are the least restrictive zones. A consistency analysis of the Project’s land uses related to the Napa County Airport ALUCP is contained in Section 5.7.4, Subsection 3, Aircraft Hazards (page 5.7-16. Section 5.9, Land Use and Planning evaluates Project ALUCP consistency with the Health and Safety Element of the General Plan.

5.7.3 **Thresholds of Significance**

For the purpose of this DEIR, the thresholds of significance for evaluation of project impacts are based upon suggested criteria from the City of Napa Environmental Checklist and the California Environmental Quality Act (CEQA) Environmental Checklist found within Appendix G of the CEQA Guidelines. This Project would result in a significant impact if it would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment

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

f) For a project within the vicinity of private airstrip, result in a safety hazard for people residing or working in the project area

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

h) Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

The City's General Plan, Chapter 8 - Health and Safety - discusses hazardous materials in terms of hazardous wastes resulting from manufacturing and processing goods. The City of Napa Fire Department is a part of the Napa Interagency Hazard Incident Team. The response team responds to uncontrolled releases, identifies the category of chemicals involved, contains the spill if possible, oversees cleanup activities and makes sure that the site is safe to be occupied again. In addition, the County Department of Environmental Management (DEM) coordinates with the County Agricultural Commissioner Office (ACO) to implement various hazardous materials programs. The General Plan includes the following Policies to reduce the risks to health and safety from hazardous wastes:

HS-7.1 The City shall continue to monitor, modify if necessary and implement goals of the Household Hazardous Wastes Element.

HS-7-2 The City shall support the Countywide Integrated Solid Waste Management Plan.

HS 7-4 The City shall seek to further develop and support policies such as green chemistry and Extended Producer Responsibility that will reduce the overall generation of hazardous wastes and/or provide more sustainable funding and collection opportunities for the local residents and businesses.

5.7.4 Project Impacts Prior to Mitigation

Information from standard federal and state environmental record sources was provided through Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database by EDR. Records from one government source are compared to records from others to clarify any ambiguities for the property being researched. The demographic and geographic information available provides assistance in identifying and managing risk with an accuracy of approximately ±300 feet for geocoded locations. The records review included the following:
Federal National Priorities List (NPL) – NPL is the Environmental Protection Agency (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program. The Project site is not listed as an NPL facility and none are listed within the prescribed research radii.

Federal Delisted NPL Sites – These are sites previously on the NPL list which have been remediated and have been removed from the EPA’s priority list. The Project site is not listed as a Delisted NPL facility and no such facilities are within the prescribed research radii.

Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) – This list is a compilation of sites that EPA has investigated or is currently investigating for a release or threatened release of hazardous substances. The Project site is not listed as a CERCLIS facility. However, Napa Pipe Corp. is listed as a CERCLIS facility and is located to the northwest at a distance of approximately 2,493 feet. However, the facility appears to be located in a different hydrogeological flow area, which appears to be down gradient relative to the Project site. The Napa Pipe site was considered low priority for further assessment in 1990.

Federal CERCLIS No Further Remedial Action Planned Sites List (NFRAP) – This list is a compilation of sites that the EPA has investigated and has determined does not pose a threat to human health or the environment under the CERCLA framework. The Project site is not listed as a CERCLIS-NFRAP facility and no properties within the prescribed research radii are listed.

Federal Resource Conservation and Recovery Act (CORRACTS) Facilities List (RCRA) – The RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Treatment, Storage and Disposal (TSD) database is a compilation by the EPA of reporting facilities that treat, store or dispose of hazardous waste. The CORRACTS database is the EPA’s list of treatment storage or disposal facilities subject to corrective action under RCRA. The Project site is not listed as a RCRA CORRACTS TSD facility and no such facilities are listed within the prescribed research radii.

Federal Resource Conservation and Recovery Act (RCRA) Non-CORRACTS TSD Facilities List – The RCRA TSD database is a compilation by the EPA of reporting facilities that treat, store or dispose of hazardous waste. The Project site is not listed as an RCRA-TSD facility and no such facilities are listed within the prescribed research radii.

Federal RCRA Generator List – The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators database is a compilation by the EPA of reporting facilities that generate hazardous waste. The Project site is not listed as a RCRA facility and no such facilities are listed on an adjacent property.

Federal Institutional Control/Engineering Control Registries – The Federal Institutional Control/Engineering Control Registries is a database used to record
institutional controls, land use restrictions and engineering control requirements on contaminated properties. No Federal Institution Control or Engineering Controls were listed for the Project site.

**Federal Emergency Response Notification System (ERNS)** – The ERNS system is a national database used to collect information on reported release of oil or hazardous substances. No ERNS sites were listed on the Project site or on the adjacent properties.

**State and Tribal Priority List (NPL Equivalent)** – The California Department of Environmental Protection (CAL/DEP) maintains a State NPL-equivalent list of sites under investigation that could be and/or are potentially contaminated and present a possible threat to human health and the environment. The Project site is not listed as a State NPL-equivalent facility and no such facilities are listed within the prescribed research radii.

**State and Tribal CERCLIS-Equivalent List** – The CAL/DEP maintains a State CERCLIS-equivalent List of sites under investigation that could be actually or potentially contaminated and presenting a possible threat to human health and the environment. The Project site is not listed as a State CERCLIS-equivalent facility. However, two State CERCLIS-equivalent facilities are listed as being within the prescribed search radii:

- NOVA Group, Inc., 741 Napa Vallejo Highway, is listed as a CERCLIS-equivalent facility by the CAL/DEP. Based on its location, the facility appears to be in a different hydrogeological flow area which appears to be cross gradient relative to the Project site. NDDS concludes that this facility is not a concern to the Project site due to its cross gradient location, the suburban nature of the surrounding area and the fact that the responsible party is identified.

- Napa Pipe-SLIC/Sub15, 1052 Kaiser Road, is listed as CERCLIS-equivalent facility by the CAL/DEP and is generally located approximately 2,493 feet northwest of the Project site. Based on its location, the facility appears to be located in a different hydrogeological flow area which appears to be down gradient relative to the Project site. NDDS concludes that this facility is not a concern to the Project due to its down gradient location, the suburban nature of the surrounding area and the fact that the responsible party is identified.

**State and Tribal Solid Waste/Landfill Facilities (SWF/LF)** – A database of SWF/LF is prepared by the CAL/DEP. The Project is not listed as a SWF/LF facility and no such facilities are listed within the prescribed research radii.

**State and Tribal Leaking Underground Storage Tank List (LUST)** – The CAL/DEP compiles lists of all leaks of hazardous substances from underground storage tanks. The Project site is not listed as a LUST facility. Two LUST facilities are listed within the prescribed search radii as follows:

- Kaiser Permanente, 2600 Napa Valley Corporate Drive, is listed as a LUST facility by the CAL/DEP. The site is located approximately 1,048 feet northwest of the Project site and is identified in the EDR report as a case closed LUST facility as of October 12, 2009. The facility appears to be located in a different hydrogeological
flow area down gradient relative to the Project site. NDDS concludes that this facility is not a concern to the Project site due to its status, down gradient location, the suburban nature of the surrounding area and the fact that the responsible party is identified.

Napa Pipe-SLIC/Sub15, 1025 Kaiser Road, is listed as a CERCLIS-equivalent facility by the CAL/DEP and is listed as a LUST facility by the CAL/DEP and is generally located approximately 2,587 feet to the north of the Project site. It is identified in the EDR report as a case closed LUST facility as of July 21, 2009. The facility appears to be located in a different hydrogeological flow area, which appears to be down gradient relative to the Project. NDDS concludes that this facility is not a concern to the Project due to its down gradient location, the suburban nature of the surrounding area and the fact that the responsible party is identified.

**State and Tribal Underground Storage Tank List (UST)** – The CAL/DEP compiles a list of UST locations. The Project site is not listed as a registered UST facility and none are listed on the adjoining/adjacent properties.

**State and Tribal Institutional Control/Engineering Control Registries** – The CAL/DEP compiles a list of Institutional Control and Engineering Controls. The Project site is not listed as having an Institutional Control or Engineering Control.

**State and Tribal Voluntary Cleanup Sites** – The CAL/DEP compiles a list of Voluntary Cleanup Sites (VCS). The Project site is not listed as a VCS and no such sites are listed within the prescribed research radii.

**State and Tribal Brownfields Sites** – The CAL/DEP compiles a list of Brownfields Sites. The Project is not listed as a Brownfields Site and none are listed within the prescribed research radii.

**Dry Cleaners** – The CAL/DEP and its sub-agencies compile lists of Dry Cleaner Sites. The Project is not listed as a Dry Cleaner facility and no such sites are within the prescribed search radii.

**Spills** – The CAL/DEP and its sub-agencies compile a list of Spill Sites. The Project site is not listed as a Spill Site.

**California Hazardous Material Incident Report System (CHMIRS)** – The CAL/DEP and its sub-agencies compile lists of CHMIRS facilities that have disposed of hazardous materials or had reported hazardous material incidents (accidental releases or spills). The Project site is not identified on the CHMIRS lists.

**Napa County Masters List (NCML)** – Napa County compiles a list of facilities that have deposited hazardous materials. The disposal can be either a one-time event or an ongoing operation. The Project site is not identified on the NCML list.
1. **Hazardous Materials**

A Phase I ESA was prepared by NDDS in February 2015 to identify apparent and potential sources of contamination that, by their association or proximity to the Project site, could represent a recognized environmental condition (REC), Controlled REC (CRECs), and/or Historical REC (HRECs) as defined by the American Society for Testing and Materials (ASTM) Standard No. E1527-13. “REC,” “CREC,” and “HREC” are defined as follows:

- An REC is the presence of likely presence of any hazardous substances or petroleum products in, on or at a property under the following conditions: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment, or 3) under conditions that pose a material threat of a future release to the environment. As such, de minimus conditions are not RECs.

- A CREC is an REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g. as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by the regulatory authority), with hazardous substances or petroleum products allowed to remain in-place subject to the implementation of required controls (e.g., property use restrictions, activity and use limitation, institutional controls, or engineering controls).

- An HREC is a past release of any hazardous substances or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, activity and use limitation, institutional controls or engineering controls).

The Phase I ESA permits the user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner or bona fide prospective purchaser limitations identified as liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601). ASTM Standard E1527-13 constitutes “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined at 42 U.S.C. §9601(35)(B).

The scope of work included:

- Site reconnaissance (1/25/14 and 9/1/14) to visually assess current site utilization, potential on-site use or storage of hazardous materials and indications of surface and subsurface contamination.
- Review of local geology and hydrogeology using readily available data.
- Review of current and historical conditions and uses of the site and immediate vicinity using available resources, including:
  - Historical aerial photographs and topographic maps,
  - Environmental and geologic reports and maps
  - State and federal government databases, and
  - Local agency files.
The site visits were conducted on January 25, 2014 by Matt Christensen and September 24, 2014 by Michael K. Stewart of NDDS. The purpose of the site visits was to assess the possible presence of petroleum products and hazardous materials on the site and to visually search for indications of surface and subsurface contamination. Observations made at that time included:

- None of the following were observed on the site:
  - Hazardous materials and/or petroleum products
  - Above-ground or underground storage tanks
  - Solid waste containers
  - Structures on the property
  - Water wells or cisterns
  - Oil or gas wells
  - Indications of industrial wastewater disposal or treatment facilities
  - Evidence of releases of hazardous materials and petroleum products
  - On-site transformers
  - Evidence of on-site landfilling
  - On-site pits, ponds or lagoons
  - Sumps or catch basins other than for storm water removal
  - Radiological substances or equipment
  - Settling ponds, lagoons, surface impoundments, wetlands or natural catch basins

The Project site is structurally vacant with generally open land covered with grasses and limited trees. Surface water drainage from the property is via sheet flow to the northwest. No hazardous materials are generated on the property. A review of the standard historical sources did not yield evidence that storage tanks or vessels used for the storage of hazardous materials or petroleum products were present on the adjoining properties.

The Project site is connected to the City of Napa Water District. The 2011 Water Quality Report stated that the drinking water supplied to the site is within state and federal standards, including lead and copper.

Flood Insurance Rate Map No. 306055C0519F dated September 29, 2010, shows the Project site is located in Flood Zone "X," which consists of areas outside the 100- and 500-year flood zones.

The Phase I ESA also included the following analysis.

**Asbestos Containing Materials (ACM)**

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability and high tensile strength. Asbestos is commonly used as an acoustic insulator, in thermal insulation, fire proofing and in other building materials. Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the
amount of fibers that remain in the lungs. Fibers embedded in lung tissue over time may cause serious lung diseases including: asbestosis, lung cancer, or mesothelioma.

The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials be presumed to contain asbestos for purposes of this regulation. All thermal system insulation (TSI), surfacing material and asphalt/vinyl flooring that is present in a building constructed prior to 1980 are identified as “suspect asbestos-containing material” (SACM) if they have not already been appropriately tested. In addition, constructed materials, which contain SACMs were known to have been used in building construction until at least 1990.

No structures were observed on the Project site; therefore, an asbestos evaluation was not required. However, if the site is ever developed and/or utilized as a school, learning center and/or day care facility, asbestos testing will be required.

Radon Gas

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures and tends to accumulate in poorly ventilated basements. Long-term exposure to radon has been associated with lung cancer.

An evaluation of radon gas potential on the Project site was performed utilizing the research results available from the USEPA. The USEPA has designated three radon potential zones. Zone 1 is an area with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 PicoCuries per Liter (pCi/L). Zone 2 is an area with average predicted indoor radon concentration of 2.0-4.0 pCi/L. Zone 3 is an area with an average predicted indoor radon concentration in residential dwellings below 2.0 pCi/L.

The EPA has found homes with elevated levels of radon in all three zones and recommends site specific testing in order to determine radon levels at a specific location. Napa County is located in Zone 3 of the USEPA’s Radon Map (EPA-402-R-93-071) for the State of California. If the Project site is ever developed and/or utilized as a residential development, school, learning center and/or day care facility, radon testing will be required.

Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. While adults can suffer from excessive lead exposures, the groups most at risk are fetuses, infants and children under six. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as “Title X”, to protect families from exposure to lead from paint, dust and soil. Section 1018 of this law directed the Housing and Urban Development (HUD) and the USEPA to require the disclosure of known information on lead-based paint (LBP) and LBP hazards before the sale or lease of most housing built
before 1978. Sellers, landlords and their agents are responsible for providing this information to a buyer before sale or lease.

According to Section 1017 of Title X, “LBP hazard is any condition that causes exposure to lead from lead-contaminated dust, bare, lead-contaminated soil or LBP that is deteriorated or intact LBP present on accessible surfaces, friction surfaces or impact surfaces that would result in adverse human health effects.” Therefore, under Title X intact lead-based paint on most walls and ceilings is not considered a “hazard,” although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. LBP is defined as any paint, varnish, stain or other applied coating that has 1 mb/cm² (or 5,000 µg/g by weight) or more of lead.

No structures were observed on the Project site. As such, an LBP evaluation was not required. However, if the property is ever developed and/or utilized as a school, learning center, and/or day care facility, then LBP testing will be required.

**Mold Evaluation**

A limited visual inspection for the conspicuous presence of suspect mold growth was performed as part of the Phase I ESA. A class of fungi, molds has been found to cause a variety of health problems in humans, including allergic, toxicological and infectious responses. Molds are decomposers of organic materials and thrive in humid environments, producing reproductive spores just as plants produce seeds. Mold growth will often occur when excessive moisture or water accumulates indoors, particularly if the moisture remains undiscovered or unaddressed. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. Building materials including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth.

The Phase I ESA provided recommendations from EPA to prevent the growth of mold in buildings. Because there are no existing buildings on the Project site, the following is included for information purposes only.

- Fix leaky plumbing and leaks in the building envelope as soon as possible
- Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in the air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry) or dehumidify (if outdoor air is warm and humid)
- Keep heating, ventilation and air conditioning (HVAC) drip pans clean, flowing properly and unobstructed
- Vent moisture-generating appliances, such as dryers, to the outside where possible
- Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible
- Perform regular building/HVAC inspections and maintenance as scheduled
• Clean and dry wet or damp spots within 48 hours
• Do not let foundations stay wet. Provide drainage and slope the ground away from the foundation

**Vapor Migration Screening (VMS)**

NDDS conducted a Vapor Encroachment Screen and identified the Project site as a future concern. A copy of the Vapor Encroachment Screen report is included in Appendix to the Phase I ESA.

**Historical Use Information**

As noted, the property appears to have been historically developed with a farm during the 1940s but the property has remained undeveloped since at least 1958. Review of standard historical sources did not yield evidence that storage tanks or vessels used for the storage of hazardous materials or petroleum products were present on the adjoining properties.

   a) Years 1940 & 1947 - property generally appears to be developed with a residence and agricultural use in the southern portion
   b) Year 1958 - property generally appears to be undeveloped land
   c) Years 1968, 1972, 1982 - property generally appears to be undeveloped land
   d) Year 1993 - property generally appears to be undeveloped land
   e) Years 1998, 2005, 2006, 2009, 2010 - property generally appears to be undeveloped land
   f) Year 2012 - property generally appears to be undeveloped land

2. **Sanborn Fire Insurance Maps -** Sanborn Fire Insurance Maps were originally created for assessing fire insurance liability in urbanized areas throughout the United States. The maps include detailed records regarding town and building information in approximately 12,000 U.S. towns and cities from 1867 to 1970. From an environmental standpoint, the map collection is a useful aid in documenting historical property developments of environmental concern such as dry cleaning facilities, gas stations, manufacturing plants, etc. According to EDR, no Sanborn Maps of the Project site were available.

3. **City Directories -** A City Directory Abstract from EDR was reviewed for past names and businesses that were listed for the Project site and adjoining properties. There were no listings for years 1923, 1929, 1935, 1942, 1947, 1954, 1960, 1965, 1970, 1975, 1981 and 1990.

4. **Historical Topographic Maps -** The U.S. Geological Survey (USGS), Napa, California Quadrangle 7.5-minute series topographic maps were reviewed. The topographic
maps were published by the USGS in 1968, 1973 and 1980 and obtained through EDR. For each of the years noted, the site generally appears to be undeveloped land. The adjoining land also appears to be undeveloped.

5. Additional Historical Record Sources - No additional environmental record sources were reviewed by NDDS.

6. Prior Assessment Reports - No prior environmental reports were reviewed by NDDS.

Historical Use Information on Adjoining Properties

Review of the standard historical sources listed above resulted in the following summary of uses for the adjoining properties.

- North – Prior to its current use as commercial property, the property was undeveloped land.
- East – Historically undeveloped land and agricultural use
- South – Prior to its current use as commercial property, the property was undeveloped land.
- West – Prior to its current use as commercial property, the property was undeveloped land.

NDDS observed the following related to uses on adjacent properties during the vicinity reconnaissance.

- Storage Tanks – No evidence of ASTs and/or USTs on the adjoining/adjacent properties
- Transformers/PCGs – At least three pad-mounted electrical transformers were located on the adjoining/adjacent properties. Based on their locations, NDDS determined they are not a concern for the Project site.
- Petroleum Products/Hazardous Materials – Limited reconnaissance did not indicate the improper use, storage or handling of petroleum products and/or hazardous materials on adjoining/adjacent properties.

Additional Environmental Record Sources

NDDS requested information regarding the presence of activity and use limitations (AULs) from the agencies listed below. As defined by ASTM Standard E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs) are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.
1. County Recorder/Assessor - According to the Napa County Tax Assessor’s Office, no AULs are listed and/or recorded against the Project site.

2. Fire Officials - Records from the City of Napa Fire Marshal’s Office were requested for information pertaining to the presence of USTs, the use of hazardous materials and/or AULs at the Project site. Based on their review, no USTs and/or hazardous materials reports were on file.

3. Building Department - Records from the City of Napa Building/Planning Department were requested for information pertaining to the developmental history of the Project site and for the presence of documentation relative to USTs. Based on their review, no UST documents were on file and the Project site is listed as undeveloped land.

**Agency Contacts**

NDDS contacted the site manager, who confirmed that there were no known environmental issues related to the Project site. To the best of their knowledge, the contact person was not aware of any environmental liens associated with the site. Local government agencies contacted included:

- City of Napa Fire Marshal’s Office
- Napa Building/Zoning Department
- Napa County Tax Assessor’s Office

No hazardous materials or environmental issues on the Project site were identified by any of the local agencies contacted.

2. **Regional Fire Setting**

The City's General Plan notes that Napa is characterized by a narrow valley floor surrounded and intermingled with steep, hilly terrain. Certain areas are very susceptible to wildland fires in the City's hilly areas characterized by steep slopes, poor fire apparatus access, inadequate water pressure and highly flammable vegetation.

The City has adopted the California Fire Code firefighting regulations to protect life and property from wildland fires. Among the policies identified in the General Plan are provision of adequate access roads, on-site fire protection systems, signage, ignition resistant building materials and defensible space. The City's major fire hazard areas are depicted on Exhibit 5.7-1, Wildland Urban Interface (WUI) Fire Hazard Areas. As shown on the map, the Project site, which lies at the southeast boundary of the City, is removed by some distance from the nearest WUI and has low potential for impacts from wildfires. The Project site's proximity to fire hazard areas is shown on the exhibit.

The City's General Plan provides updated maps depicting the WUI and, as shown on the exhibit, the most recent update was 2009. Since that time, Napa County experienced outbreaks of several fires in the fall of 2017. Exhibit 5.7-2, 2017 Napa Fire Complex Status Map, depicts the locations of the fires as of October 13, 2017. As shown, the Project site was within close proximity to fire perimeters but was not an active burn area. State and local codes and regulations require compliance with measures to reduce fire hazards for new construction. The Project will be required to comply with all applicable building codes for fire-safe construction.
Exhibit 5.7-2  2017 Napa Fire Complex Status Map
3. Aircraft Hazards

The City's General Plan notes that the State Aeronautics Act requires that a County that has a public-use airport must establish an airport land use commission (ALUC) to protect public health, safety and welfare by ensuring the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. The ALUC is responsible for adopting an Airport Land Use Compatibility Plan to address these safety issues. The ALUC adopted the Napa County Airport Land Use Compatibility Plan (ALUCP) in 1991 and revised the ALUCP in 1999. The ALUC is authorized to review general plans, specific plans, and implementing ordinances to determine consistency with the ALUCP. Once consistency is determined, the ALUC only reviews for consistency such actions as general plan or specific plan amendments.

The General Plan identifies four principal land use impacts and compatibility considerations associated with airport activities.

- Noise - usually perceived as the most significant adverse impact of airport activity. This impact is further discussed in Section 5.10, Noise herein.
- Hazards to Flight - requiring the protection of navigable airspace by preventing physical obstructions and other land use characteristics that could affect flight safety.
- Safety on the Ground - limiting people's exposure to risks of injury or damage to property in the event of an aircraft accident.
- Overflights - evidenced by the annoyance expressed by people who live near airports but who are outside of the defined noise and safety zones.

The Project is located approximately 4 miles from Napa Valley Airport and is not located within the airport's flight plan area. The Project site is located within the Napa County Airport Land Use Compatibility Plan (ALUCP), as shown on Exhibit 5.7-3, ALUCP Compatibility Plan Map. The ALUCP divides the compatibility area into Zones A through E, with Zone A being the most restrictive in terms of building height and noise constraints and Zone E the least restrictive. The majority of the Project site is located within Zone E. A portion of the parking lot on the southwest side of the site is located in Zone D. A small portion of the hotel will be located in Zone C. Because a portion of the hotel is located within Zone C, the Project will be referred to the Airport Land Use Commission for a determination of consistency with the ALUCP. Regulations for each Zone are identified below.
Source: Napa County Airport Land Use Commission, Airport Land Use Compatibility Plan

Exhibit 5.7-3 ALUCP Compatibility Plan Map
ALUCP Zone C

Zone C Regulations include the following Use Review Criteria from the Napa Zoning Code:

17.34.050 ALUCP Zone C regulations

Within ALUCP Zone C, which is the extended approach/departure zone, most lower intensity nonresidential uses are acceptable. However, the following standards shall apply in addition to the standards of the principal zoning district.

C. Uses Not Normally Acceptable

   2. Hotels and motels;
   3. Health clubs;
   4. Restaurants or bars seating more than 80 persons;
   5. Multistory buildings;
   6. Theaters, assembly halls, and conference centers;
   7. New ponds.

D. Use Review Criteria. In determining whether proposed uses in subsection C have been appropriately designed, the decision-making body shall consider the following criteria:

   1. Density. Density of use averaged over the entire site (excluding streets) should not exceed 50 persons per acre in structures, or 75 persons in and out of structures; however, density on any one acre should not exceed twice the indicated number of people per acre.

   2. Clustering. Clustering of development within the density parameters is encouraged to protect and provide open land/safety areas for emergency landing (such as requiring building envelopes, contiguous parking and landscape areas, and larger setbacks form certain geographic features such as creeks, roads, etc.).

   3. Noise. Applicable noise reduction measures have been incorporated for noise sensitive uses (such as hotels, motels and offices) consistent with ALUCP and city General Plan standards.

   4. Location. Structures have been set back as far as possible from the extended centerline of the runway.
ALUCP Zone D

Zone D Regulations allow hotel use with the following Use Review Criteria from the Napa Zoning Code.

**17.34.040 ALUCP Zone D regulations**

Within ALUCP Zone D, most non-residential uses are normally acceptable. However, the following standards shall apply in addition to the standards of the principal zoning district:

...  

D. Use Review Criteria. In determining whether proposed uses in subsection C have been appropriately designed, the decision-making body shall consider the following criteria.

1. Density. Density of use averaged over the entire site (excluding streets) should not exceed 100 persons per acre in structures, or 150 persons in and out of structures.

2. Clustering. Clustering of development within the density parameters is encouraged to protect and provide open land/safety areas for emergency landing (such as requiring building envelopes, contiguous parking and landscape areas, and larger setbacks form certain geographic features such as creeks, roads, etc.).

3. Noise. Applicable noise reduction measures have been incorporated for noise sensitive uses (such as hotels, motels and offices) consistent with ALUCP and city General Plan standards.

**17.34.030 ALUCP Zone E regulations**

Within ALUCP Zone E most land uses are normally acceptable, however, the following standards shall apply in addition to the standards of the principal zoning district:

A. Over flight easements acceptable to the city in consultation with the airport proprietor shall be required as a condition of subdivision approval and/or discretionary permits for new construction, including expansions greater than 5,000 square feet in size. Such easements shall be prepared prior to issuance of a building permit and granted to the airport proprietor.

B. Prohibited Uses. Highly noise sensitive outdoor uses referenced in the ALUCP, such as meditative retreats.

C. Uses Not Normally Acceptable. The following uses raise concerns related to size, noise sensitivity or their propensity to attract birds that must be addressed if the use is to be approved. Such uses shall require use permits and shall be referred to the ALUCP for a compatibility determination prior to final approval.

1. Landfills;
2. New ponds greater than one-half acre in size;
3. Amphitheaters;
4. Residential Uses—All. Any proposed residential use shall consider the proximity of flight patterns, frequency of over flights, terrain conditions and type of aircraft in determining acceptable use locations.

D. General Design Requirements.

1. Lights, Glare, Electronic Interference. All uses and structures shall be designed so as to prevent hazard to flight that could occur as a result of smoke, glare, distracting lights, or electronic interference. All exterior lighting shall be directed downward or shielded to prevent glare to aircraft and meet any approved ALUC lighting guidelines. The Community Development Director may require the applicant to consult with Airport Land Use Commission (ALUC) staff, the airport manager or a qualified airport land use planning consultant regarding whether a use or structure would create such a hazard. If the use or structure cannot be designed to prevent such hazard, it may be denied.

2. Height. All uses and structures shall be designed to prevent hazard to flight that could occur as a result of very tall structures intruding into flight areas. Height limits shall be as in the underlying zoning district, or, if height limits are not specifically assigned by the underlying district, the height limit shall be 35 feet. Any project proposing heights over the applicable height limit shall require a use permit and be referred to the ALUC prior to final approval.

3. Lot Coverage. Lot coverage is governed by density and/or FAR limits assigned by the General Plan. If such limits are not identified for a particular site due to “Study Area” designations, the building lot coverage limit shall be 20%. Any project proposing a change in the General Plan FAR, density, or, for an unassigned site, building lot coverage over 20%, shall be referred to the ALUC prior to final approval.

Use Review Criteria

As identified above, the ALUC has established Use Review Criteria to determine whether a use included in subsection C of §17.34.050 (Zone C regulations) has been appropriately designed. As shown on Exhibit 5.7-4, ALUCP Zones, a majority of the Project lies within Zone E, and would not require ALUC referral. However, small areas on the southern portion of the site are located within Zones C and D. The portion of the Project site within Zone D is comprised of parking lot, drive aisles and landscaping. The portion of the proposed Project within Zone C is approximately 1.07 acres, and a density calculation is required because a portion of the hotel building is located within Zone C. The portion of the Project within Zone C consists of approximately 12,430 square feet and is made up of first floor lobby areas, 21 hotel rooms on floors 2 through 4, 40 surface parking spaces, and landscaping.
Density

ALUCP Zone D has an allowable density of 100 persons per acre in structures or 150 people inside and out of structures. The proposed Project does not contain structures or areas of outdoor congregation within Zone D. Therefore, a density calculation is not provided for Zone D.

ALUCP Zone C has a maximum density recommendation established at 50 persons per acre in structures and 75 persons in and out of structures. Site density for the Project has been analyzed using the parking ordinance to determine the maximum number of people utilizing each area of the hotel and amenities. This method of calculation is an accepted method of calculation for ALUC, per ALUCP Appendix D – Methods for Determining Concentrations of People.

ALUCP Appendix D – Methods for determining concentrations of people

ALUCP Appendix D recommends developing an assumption regarding the number of persons per The Uniform Building Code to calculate the number of persons on-site. Because the proposed Project is an 11.55-acre development of a hotel, a winery, and an office, and only a minimal portion of the Project site (1.07 acres) is located within Zone C, maximum occupancy of the portion of the hotel within Zone C (12,430 square feet) will be analyzed using the Uniform Building Code for density consistency.

Maximum Occupancy using the Uniform Building Code

As detailed above, the Uniform Building Code can be used as a standard for determining the maximum occupancy of certain uses. The ALUCP Appendix D includes Exhibit A, which specifies the number of square feet per occupant. Exhibit A contains an assumption for hotel and apartment uses, which is 200 square feet per occupant. The density is calculated by dividing the total floor area of a proposed use by the minimum square foot per occupant requirement listed in the table. The maximum occupancy can then be divided by the size of the parcel in acres to determine the persons per acre.

The ALUCP Appendix D provides guidance for incorporating occupancy levels into calculations for maximum density. The proposed hotel is anticipated to have an 80% occupancy rate. The maximum occupancy rate calculation is shown below:

\[
\text{Hotel within Zone C} - 1 \text{ person per 200 square feet} \\
\frac{12,430 \text{ sf (hotel area within Zone C)}}{\times 200 \text{ sf}} = 62.15 \text{ occupants maximum} \\
\frac{\times 1.07 \text{ acres (Project site)}}{58.08 \text{ occupants per acre}} \times 80\% \text{ occupancy} = 46.47 \text{ occupants per acre}
\]
Density Analysis for Hotel Portion within Zone C

Based on the Uniform Building Code maximum occupancy method for determining concentrations of people, the density of the proposed Project within Zone C is 46.5 persons per acre. The Project would be considered consistent with the ALUCP use review criteria for Zone C requiring that site density remain fewer than 50 persons per acre in structures. Additionally, the use review criteria requires that the concentration of people using outdoor space not exceed 75 persons per acre. There is no outdoor gathering space in Zone C; therefore, this calculation is not necessary.

The allowable density in Zone C of 50 persons per acre will not be exceeded, because the calculated site density is 46.5 persons per acre.

Clustering

The ALUCP Design Review Criteria recommends clustering. The shape of the Project site is roughly L-shaped, with the hotel building and winery facing Highway 221 to the east of the Project site and the office building within the parcel extending towards Napa Valley Corporate Drive to the west. The hotel is bordered by a parking lot and landscaping. The buildings are centered on the Project site and oriented outside of Zone C as much as possible with parking and extensive landscape on the perimeters.

Noise

The proposed Project is located within a small portion of Zones C and D, where airport noise is not an issue due primarily to the fact that the Project is not located within the immediate approach zone and its distance to the airport. The Noise Study (Appendix M) analyzed the proposed Project’s compliance with noise standards and determined that the Project is in compliance with the City’s noise standards and ALUC Noise Compatibility Guidelines, as discussed in Section 5.10, Noise. No noise reduction measures are proposed for the Project related to airport noise. The Project site is located outside the Napa County Airport Master Plan 55 dBA CNEL noise contour.

Location

The ALUCP recommends structures are set back as far as possible from the extended centerline of the runway. The centerline of the runway travels from the runway through the centers of Zone B and Zone C. As shown on Exhibit 5.7-4 (page 5.7-21), the Project lies Zones C, D and E.

In addition to density, clustering, noise, and centerline, the ALUCP Design Review Criteria establishes recommendations on building height limits in the airport compatibility zone by deferring to limits established by the zoning code. Height regulations for the proposed Project are set forth by Zoning Code §17.14.030. Development regulations for the Project site restrict building heights to 50 feet, with exception for development up to 60 feet with Planning Commission design review, and additional projections beyond the height limit via use permit.
The Project has been designed within the height limits established by the zoning code of 60 feet with Planning Commission Design Review. The ALUCP Design Review Criteria defers height limits to the zoning code. The proposed Project will remain consistent with the City's height restrictions and the airport compatibility overlay.

The proposed Project has been designed to incorporate all of the regulations from the ALUCP zone regulations. Use Review Requirements, such as a clustered orientation of buildings, ALUCP zone density requirements, and general design requirements will be analyzed and submitted to ALUC for consistency. While consistency is desirable, the governing body of a local jurisdiction may overrule the Airport Land Use Commission's determination by taking the following actions:

- Hold a public hearing to reconsider the proposed action
- Make a finding that the proposed action is consistent with the intent of the State Aeronautics Act
- The motion to override must be passed by a two-thirds vote

5.7.5 Mitigation Measures

No mitigation measures were presented in the Phase I ESA based on the conclusion that no hazardous materials are known or suspected on the Project site. In addition, Policy Resolution No. 27 containing City of Napa Standard Mitigation Measures, does not identify the requirement for standard mitigation measures for hazards or hazardous materials.

5.7.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state the Project would have a significant impact if it would:

a) Create a significant hazard to the public or environment through routine transport, use or disposal of hazardous materials,

b) Create a significant hazard through reasonably foreseeable upset and accident conditions,

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials,

d) Be located on a site which is included on a list of hazardous materials sites

e) For a project located within an airport land use plan or within two miles of a public airport or public use airport result in a safety hazard for people residing or working in the project area,

f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area,

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

h) Expose people or structures to a significant risk or loss, injury or death involving wildland fires.

The Phase I ESA did not recommend additional environmental studies for the site based on the findings that no known or suspected on-site conditions warrant regulatory involvement. No actions requiring environmental soil sampling, soil remediation, groundwater sampling
and/or groundwater remediation are required. No on-site RECs, off-site RECs, CRECs or HRECs with the potential to adversely impact the Project site were identified during the assessment. In addition, no de minimis environmental conditions were identified in connection with the Project site, no off-site RECs were identified in the vapor migration screening and no other environmental issues of concern were identified.

Two nearby developments (NOVA Group, Inc. and Napa Pipe) that are listed as CERCLIS-equivalent facilities were assessed. The Phase I ESA concluded that neither facility is a concern to the Project due to their down gradient locations, the suburban nature of the surrounding area and the fact that the responsible party is identified. Therefore, based on the conclusions in the Phase I ESA assessment, NDDS recommends no further investigations of the Project site at this time.

The Phase I analysis responds to CEQA Guidelines, Appendix G Checklist as follows:

The proposed Project will not create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials.

The proposed Project will not create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The proposed Project will not emit hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

The site is not located on list of hazardous materials sites compiled pursuant to California Government Code §65962.5 and, therefore, would not create a significant hazard to the public or the environment.

The Project is located within an airport land use plan as the Napa Valley Airport is approximately 4 miles south of the Project. However, the Project is not located within the airport’s flight plan and will not create a safety hazard for people working or residing in the Project area. The Project site is located outside of the 55 CNEL and is consistent with the required density limitations for development within Zone C of the ALUCP. The Project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. There will be no exposure of people or structures to a significant risk or loss, injury or death involving wildland fires as the Project site is in an urbanized area and not within the City’s Wildland Urban Interface Fire Hazard Areas as depicted in the City of Napa General Plan.

As noted, NDDS recommended, based on the conclusions in the Phase I ESA, that no further investigations of the Project site were necessary at this time.

### 5.7.7 Cumulative Impacts

The proposed Project, when combined with other projects in the vicinity, will not result in significant cumulative impacts. Individually, all hazards and hazards materials impacts due to Project implementation are less than significant as no hazardous materials were observed on the site and none will be generated by any uses associated with Project development. The site
is not within a Wildland/Urban Interface for fire hazard risks and the Project has been designed to incorporate all regulations from the ALUCP zone regulations. The Phase I ESA did not recommend mitigation measures because no known or suspected hazards exist on the Project site, and no uses will be conducted on the site that will include hazardous materials. The City’s Policy Resolution No. 27 did not include any recommended standard mitigation measures in the area of hazards and hazardous materials. Therefore, the proposed Project would not result in cumulatively considerable impacts in the area of hazards and hazardous materials.

5.7.8 **Unavoidable Adverse Impacts**

The proposed development of the Trinitas Project, will not result in an unavoidable adverse impact to the public or the environment through the transport or use of hazardous materials, emit hazardous emissions into the environment, or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Adherence to the City’s Building and Fire Code regulations will ensure the Project will not result in an unavoidable adverse impact to existing or future development in the Project vicinity. All impacts due to Project implementation will be less than significant.
Chapter 5. – Environmental Setting, Impacts, and Mitigation Measures

5.8 – Hydrology and Water Quality

5.8 Hydrology and Water Quality

This section analyzes the drainage and on-site hydrological conditions, as well as whether the proposed Project would violate any water quality standards or waste discharge requirements, deplete groundwater supplies, or interfere with groundwater recharge, result in substantial erosion or siltation on-site or off-site, or provide substantial additional sources of polluted runoff. Information related to water supply and distribution is discussed in Section 5.15, Utilities and Service Systems.

The following information and analysis is based on the Preliminary Storm Water Control Plan, dated May 2017 and revised December 2017 (Appendix K) and the Preliminary Drainage and Detention Study dated March 2017 prepared by Fuscoe Engineering (Appendix L).

5.8.1 Existing Conditions

The development is an irregular “L” shape, due to multiple parcels. The site generally drains east to west with grades ranging from elevation 32 (at the corner of State Highway 221 and Napa Valley Corporate Way) to elevation 14 (Napa Valley Corporate Drive), as shown on Exhibit 5.8-1, Existing Drainage Configuration. The slope off Highway 221 varies from 10% to 4:1, then flattens to about 2% across the site, dropping off to 12 feet in elevation. The existing underground storm system within Napa Valley Corporate Drive collects storm water and directs it to South Creek (at the west side of Napa Valley Corporate Drive, past Napa Valley Corporate Way) and eventually into Napa River Marsh.

The intersection of Napa Valley Corporate Way with Highway 221 is one of the main entrances into the Napa Valley Commons corporate park, and is located at the southeast corner boundary of the Project site. This corner consists of a large grassy area, a curved rocked wall and pillars, and is backed by a grove of large trees. The ground slopes from behind the trees and into the site at an approximate 3:1 slope with an elevation 32 to 23.

An existing grassy berm runs along the south property line adjacent to Napa Valley Corporate Way. The berm is planted with mature trees and is approximately 3 feet above the roadway, and slopes back towards the site at an approximate 5:1 slope creating a 4-foot elevation difference.

The west side of the Project site located adjacent to the existing development includes a 3:1 slope from the site at elevation 21 down to the shared driveway at elevation 18. There are three Heritage Oak trees along the easterly edge of the shared driveway. Two of these trees are located very close to the back of curb and are supported by a tiered rock wall.

A Geotechnical Investigation Report prepared for Midstate Construction, by RGH Consultants, dated July 13, 2015 states that subsurface exploration indicated that the Project site is underlain with approximately 5 feet of clayey sand fill. The fill soils were described with variable amounts of gravel and occasional cobbles and boulders. The fill soils exhibit low to moderate plasticity and low expansion potential. Bedrock extends from below the surface materials to the maximum depths explored (8.5 feet). The test pits reached refusal at depths from a few inches to about 3.5 feet. Groundwater was not encountered during testing.
Exhibit 5.8-1  Existing Drainage Configuration

Source: Appendix 3, Exhibit C-2; Preliminary Drainage and Detention Study; Fuscoe Engineering; March 2017 (Appendix L to this EIR)
5.8.2 Regulatory Setting

The Clean Water Act\(^1\) is the principal federal statute governing water quality. The goal of the Clean Water Act is to protect the physical, chemical, and biological integrity of the waters of the United States. The Clean Water Act requires the state to adopt water quality standards for water bodies and have those standards approved by the Environmental Protection Agency (EPA). Water quality standards consist of a designated use or uses for a particular water body along with water quality criteria based on those uses\(^2\). Designations applied to water bodies describe the appropriate uses of that water body, such as contact recreation, warm water wildlife propagation and municipal or drinking water uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediments and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use.

Discharges of pollutants into waters of the United States are not allowed, except in accordance with the permitting program of the Clean Water Act, the National Pollution Discharge Elimination System (NPDES). Authority to implement and administer the NPDES program in California has been delegated by EPA to the state and regional water quality control boards. NPDES permits have been issued that apply to storm water discharges from large municipal storm sewer systems, specific industrial activities and large construction activities. The City of Napa is required by the Federal Clean Water Act to obtain a permit to discharge storm water. This General Permit (Order No. 2013-001 DWQ effective July 1, 2013) requires the City of Napa to:

- Develop and implement a Storm Water Management Plan (SWMP) that describes Best Management Practices (BMPs), measurable goals, timetables for implementation, and to implement the current Phase II Municipal Separate Storm Sewer System (MS4) permit requirements.

Division 7 of the California Water Code is the basic water quality control law for California. This law is titled the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The Porter-Cologne Act establishes a regulatory program to protect water quality and to protect beneficial uses of the state waters.

The Porter-Cologne Act Section 13000 provides that:

- The quality of all waters of the state shall be protected for the use and enjoyment by the people of the state; and
- Activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality that is reasonable, considering all demands being made or to be made and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

The Porter-Cologne Act establishes the State Board and the regional boards as the principal state agencies responsible for control of water quality. The Act required the Regional Water

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\(^1\) 1 U.S. Code, Title 33, §§1251, et seq. and 2 Code of Federal Regulations, Title 40, §131.3(i)
\(^2\) Code of Federal Regulations, Title 40, §131.3(i)
Quality Control Boards to initiate development of comprehensive regional Water Quality Plan.

The Napa Countywide Stormwater Pollution Prevention Program (NCSPPP) is the principal policy, guidance and reporting document for the Napa County NPDES Stormwater Program and is designed to achieve compliance with Basin Plan standards through Best Management Practices (BMPs). BMPs are procedures designed to minimize the release of pollutants. Relative to the proposed Project, the NCSPPP describes programs that will serve to:

- Prevent storm water pollution
- Protect and enhance water quality in creeks and wetlands
- Preserve beneficial uses of local waterways
- Comply with State and Federal regulations

5.8.3 Thresholds of Significance

For purposes of this DEIR, the thresholds of significance for evaluating project impacts are based on suggested criteria from the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines) and policies of the City of Napa. The Project would result in a significant impact if it would:

a) Violate any water quality standards or waste discharge requirements;

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-site or off-site;

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

f) Otherwise substantially degrade water quality;

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami or mudflow.
5.8.4 Project Impacts Prior to Mitigation

The Storm Water Control Plan identifies potential storm water pollutants, hydrologic conditions of concern, and best management practices (BMPs) to reduce impacts from Project implementation. Potential impacts due to Project implementation are discussed below.

1. Constraints and Opportunities for Storm Water Control

The site has several constraints that limit the installation and sizes of Low Impact Design (LID) storm water treatment measures. The following is a list of constraints:

a. Existing soil exhibits very low permeability; therefore, the Project will not be able to support infiltration. The Project will need to rely on LID designs that incorporate subdrain piped drainage systems. In addition, excavations may prove difficult and costly due to the presence of shallow bedrock.

b. Grade differentials near the shared driveway and the Heritage Oak trees restrict the installation of storm water treatment facilities in the adjoining landscape strips (which are at the low end of the site where treatment facilities are generally sited). Grade differentials also require the use of retaining walls and limits nearby landscape areas to accept runoff without velocity/erosion concerns.

c. High intensity land use limits the areas available for storm water treatment and control. This land use is accompanied with heavy pedestrian use. Safety concerns dictate that any at-grade treatment areas are carefully located outside of these high use areas.

d. Fixed grades are present on-site, and any development will require that the existing grades area matched.

The site has several opportunities for storm water control and treatment, detailed on Exhibit 5.8-2, Storm Water Treatment Plan and discussed below.

a. Due to differences in elevation a hydraulic head is needed to allow for flow into and throughout the treatment/control areas. The grade change also provides the opportunity for runoff to be collected in conventional inlets and piping to downslope biofiltration facilities.

b. The proposed separated sidewalks along Napa Valley Corporate Drive and Napa Valley Corporate Way provide an opportunity for the landscape strip to act as a treatment for the new sidewalk.

c. The proposed Project includes design elements such as artificial turf that are considered self-treating permeable pavement and can accept limited hardscape runoff.

d. The Project incorporates landscaped areas adjacent to walkways and other hard surfaces with less than a 2:1 ratio to allow hardscape drainage into the adjacent landscaped areas. This would be considered a self-treating area that would be piped directly offsite.
Chapter 5. –Environmental Setting, Impacts, and Mitigation Measures

5.8 – Hydrology and Water Quality

Exhibit 5.8-2  Storm Water Treatment Plan

Source: Attachment 4, Preliminary Storm Water Control Plan; Fusco Engineering; May 22, 2017 (Appendix K to this EIR)
Low Impact Development Design Strategies

A. Optimization of Site Layout

A.1. Limitation of development envelope: Due to the project resulting in a densely developed site with limited space, steep slopes and geotechnical limitations, any storm water runoff management will be achieved through the use of bioretention facilities with subdrains: Flow-Through Planter Boxes, In-Ground Bioretention Areas, Silva Cells, and Permeable Pavement. Some minor areas such as a portion of steep driveway slopes will not be treated.

A.2. Preservation of natural drainage features: The natural drainage pattern will be maintained – from east to west. The project will use the landscaped and open space areas where practical to incorporate into storm water treatment areas.

A.3. Setbacks from creeks, wetlands, and riparian habitats: There are no creeks or riparian habitat adjacent to or within the site. The project will potentially impact 0.06 acres of seasonal wetland which cannot be avoided.

A.4. Minimization of imperviousness: Pervious/landscaped areas and permeable pavements are included wherever practical.

A.5. Use of drainage as a design element: The project concept relies on the project establishing a series of level areas stepped across the project. Treatment areas are incorporated as a design element wherever possible. This includes the use of permeable and self-treating areas as described in Items B and C, below.

B. Use of Permeable Pavements and Self-Treating Areas: The artificial turf is designed to transmit rainfall through the surface and is a self-treating area. The landscaped area will also act as self-treating or self-retaining.

C. Dispersal of Runoff to Pervious (self-retaining) Areas: The design of the site treatment focuses on the dispersal of storm runoff from impervious to pervious areas wherever practical, without exceeding a 2:1 ratio. If no nearby pervious area is available, the runoff from impervious areas will be collected and drain directly into the bioretention treatment areas.

D. Storm Water Control Measures: This project will utilize bioretention/LID BMPs to treat storm water runoff from impervious areas. Plant materials shall conform to the BASMAA Appendix F Bioretention Facility Plant Matrix.

2. Water Quality Management

The following site activities have the potential to pollute:

- Landscape maintenance, i.e. use of pesticides and fertilizers.
- Cleaning surfaces that drain into interior floor drains.
- Use and cleaning of refuse areas.
- Testing of the fire sprinkler system.
- Discharges from roof drains, condensate and/or boiler lines, and rooftop equipment.
- Sweeping and cleaning of sidewalks, plazas, and other exposed impervious surfaces.
Methods of construction and materials used can generate pollutants including products such as solvents, paints, finishing residues, and cleaners. Protocols will be implemented to prevent and/or reduce the discharge of pollutants to storm water by using soil erosion controls, enclosing or covering building material storage areas, using good housekeeping practices, using safer alternative products, and training employees. These protocols will be outlined in the project Storm Water Pollution Prevention Plan (SWPPP) and implemented by the proposed Project.

3. Storm Water Facility Maintenance

Responsibility for operations and maintenance will lie with the developer/owner until this responsibility is formally transferred to a subsequent owner.

Summary of Maintenance Requirements for Each Storm Water Treatment Facility

Bioretention facilities remove pollutants primarily through filtering runoff slowly through an active layer of soil. Routine maintenance is needed to ensure that flow is unobstructed, that erosion is prevented, and that soils are held together by plant roots and are biologically active. Typical maintenance consists of the following:

- Examine downspouts from rooftops or sheet flow from paving to ensure that discharge is unimpeded. Remove any debris and repair any damaged pipes. Check splash blocks or rocks and repair, replace, or replenish as necessary.
- Examine the overflow pipe/catch basin to make sure that it can safely convey excess flows to a storm drain. Repair or replace any damaged or disconnected piping.
- Check that the soil is at the appropriate depth to allow a reservoir above the soil surface and is sufficient to effectively filter storm water. Remove any accumulations of sediment, litter, and debris. Till or replace soil as necessary. Confirm that soil is not clogging and that the planter will drain within 3 to 4 hours after a storm event.
- Determine whether the vegetation is dense and healthy. Replace dead plants. Prune or remove any overgrown plants or shrubs that may interfere with planter operation.
- Clean up fallen leaves or debris and replenish mulch. Remove any nuisance or invasive vegetation by manual methods and soil amendment. Problem areas can be treated with vinegar-based products or non-selective herbicides.
- Add mulch as needed to maintain a 2” minimum layer (while still maintaining the soil depth. The top of mulch layer shall be below the facility overflow elevation.
- Remove graffiti and replace storm drain appurtenances, as needed.
- Check irrigation to confirm adequate but not excessive.
- No fertilizer to bioretention facilities and no synthetic fertilizers.

The Project proposes the use of permeable pavements to allow water to permeate the surface layer and pass into a porous base course and bedding materials and are
underlain by a perforated pipe and storm water system. The two main concerns associated with permeable pavement are settling of paving after construction and ongoing care to avoid clogging of the pavement by weeds or sediment.

Typical maintenance consists of the following:

- Inspect paving to check that water drains away after a heavy rain. Ponding indicates possible clogging in the drainage system. Inspect cleanouts, overflow inlets, and clean piping as needed.
- If paving settles, remove top surface and re-level bedding material. Replace top surface.
- Sweep surface and openings with wet vacuum sweeper to prevent clogging from sediment.
- Maintain planted areas adjacent to surface, immediately clean any soil deposited on pavement.

4. **On-Site Storm Water Detention and Connection to Existing Infrastructure**

The original storm system within the Napa Valley Corporate Park was designed for a commercial runoff coefficient and a 10-year storm event. Current city design standards require the proposed on-site piping system to convey the 25-year storm event while not impacting the existing infrastructure. Therefore, to meet the current city criteria, the proposed on-site storm system will include an underground storage vault. This vault will be designed to detain the differential volume between the 25- and 10-year events and employ an outfall that will constrict the discharge to match the 10-year storm, thereby matching the maximum flow of the existing infrastructure piping within Napa Valley Corporate Drive. Preliminary calculations provided by Fuscoe Engineering show the vault to be 11,700 cubic feet in size and utilizing a 15-inch discharge pipe.

The proposed storm water and detention system will convey storm runoff north and west through the Project site, with a new connection to the existing underground storm drain piping in Napa Valley Corporate Drive along the west frontage of the Project, as shown on Exhibit 5.8-3, Proposed Drainage Configuration.

This proposed connection will discharge storm waters at less than or equal to the original 10-year event for the Project. The storm flows will be discharged at one point of connection in Napa Valley Corporate Drive rather than being distributed through several connection points in Napa Valley Corporate Drive. This point of connection occurs at a smaller diameter pipe located upstream and adjacent to the Project. To accommodate the rerouted flows, the proposed design will require upsizing of a portion of the existing infrastructure in Napa Valley Corporate Drive.
Chapter 5. – Environmental Setting, Impacts, and Mitigation Measures

5.8 – Hydrology and Water Quality

Draft Environmental Impact Report

January 2018 Trinitas Mixed-Use Project

Exhibit 5.8-3 Proposed Drainage Configuration
Detention Calculation Results Summary

<table>
<thead>
<tr>
<th>Method</th>
<th>TR-20 Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm Type</td>
<td>Type 1A per City of Napa Standard Specifications, July 2008, page 44</td>
</tr>
<tr>
<td>NOAA 24-Hour Rainfall</td>
<td>10-year storm = 4.63”</td>
</tr>
<tr>
<td></td>
<td>25-year storm = 5.63”</td>
</tr>
<tr>
<td>Soil Group</td>
<td>C</td>
</tr>
<tr>
<td>Curve Number</td>
<td>94 for Commercial Development in Soil Group C</td>
</tr>
<tr>
<td>Time of Concentration</td>
<td>( Tc = T(\text{initial}) + T(\text{overland}) + T(\text{time in pipe}) = 18.6 \text{ mins} )</td>
</tr>
<tr>
<td>Runoff Detention Volume Needed</td>
<td>11,700 CF (@ 3’ depth) and 15” outlet</td>
</tr>
<tr>
<td>Proposed Project Runoff Flow Rates: cfs (cubic feet per second)</td>
<td>10-year storm ( Q = 11.6 \text{ cfs} )</td>
</tr>
<tr>
<td></td>
<td>25-year storm with detention ( Q = 11.6 \text{ cfs} = 11.6 \text{ cfs} ): OK</td>
</tr>
</tbody>
</table>

5. WQMP BMPs

The proposed Project will comply with Best Management Practices as provided by the Storm Water Quality Control Plan. Table 5.8-1 below describes the potential source of runoff pollutants, and permanent source control BMPs and operational control BMPs.

Table 5.8-1 Source Control Measures

<table>
<thead>
<tr>
<th>Potential Source of Runoff Pollutants</th>
<th>Permanent Source Control BMPs</th>
<th>Operational Source Control BMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site storm drain inlets</td>
<td>Mark all inlets with the words “No Dumping! Flows to River”</td>
<td>• Maintain and periodically repaint or replace inlet markings.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provide storm water pollution prevention information to new site owners, lessees, or operators.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inspect, repair, and clean inlets to maintain integrity of the system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”</td>
</tr>
<tr>
<td>Interior floor drains in kitchens and bathrooms</td>
<td>Interior floor drains will be plumbed to the sanitary sewer.</td>
<td>Inspect and maintain drains to prevent blockages and overflows.</td>
</tr>
<tr>
<td>Elevator shaft sump pumps</td>
<td>Sump water shall be held in a container and hauled away offsite.</td>
<td>Inspect water level in container to ensure overflows are avoided.</td>
</tr>
<tr>
<td>Need for future indoor and structural pest control</td>
<td>All building vents will be constructed so as to discourage and/or eliminate the access of pests.</td>
<td>• Provide Integrated Pest Management information to owners, lessees, and operators.</td>
</tr>
<tr>
<td>Potential Source of Runoff Pollutants</td>
<td>Permanent Source Control BMPs</td>
<td>Operational Source Control BMPs</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
</tr>
</tbody>
</table>
| Pools, Spas, Decorative Fountains     | Provide regular cleaning, consistent, adequate chlorine levels and well-maintained water filtration and circulation systems. | • Per agency requirements will not be plumbed to discharge into storm or sewer system.  
• Control algae with chlorine or similar.  
• For Discharges: Dechlorinate water with a neutralizing chemical |
| Food Service                         | Provide floor drains, floor sink. | • Drains to be connected to a grease interceptor before discharging to sanitary sewer. |
| Landscape/Outdoor Pesticide Use      | • Final Landscape Plans will accomplish all of the following:  
• Preserve existing native trees, shrubs, and ground cover to the maximum extent practical.  
• Landscape will be designed to minimize irrigation and runoff, promote surface infiltration where appropriate, and minimize the use of fertilizers and pesticides that can contribute to storm water pollution.  
• Where landscape areas are used to retain or detain storm water, the plants shall be tolerant of saturated soil conditions.  
• The use of pest-resistant plants (especially adjacent to hardscape) will be considered.  
• Plant selection will be made with consideration to site soils, slopes, climate, sun, wind, rain, land use, air movement, and plant interactions. | • Provide Integrated Pest Management information to owners, lessees, and operators.  
• Maintain landscaping using minimum or no pesticides.  
• Use non-toxic chemicals for maintenance when possible. |
| Refuse Areas                         | • Signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.  
• Refuse area will provide clearly marked collection areas for recycling as well as refuse. | • Maintenance crews will be responsible for the entire site. Their standard duties will include: inspect the receptacles regularly, repair or replace leaky receptacles, keep receptacles covered, post “no hazardous materials” signs, inspect and pick up litter daily and clean up spills immediately. |
| Fire Sprinkler Test Water            | The fire sprinkler test water will drain to landscape when feasible otherwise into a floor sink with a ¼” lip from the finished floor, then into the sanitary sewer. A restriction device will be utilized to avoid overwhelming of the downstream sewer system. | The capacity of the lateral will be calculated and sized accordingly. |
| Miscellaneous Drain or Wash Water:  | • Condensate lines shall be plumbed to drain outside the building into a nearby landscape area  
• Boiler drain lines  
• Rooftop equipment |  
• Condensate lines shall be plumbed to drain outside the building into a nearby landscape area  
• All boiler drain lines shall discharge to the sanitary sewer. The boiler system shall be approved by Napa Sanitation District and meet the agency BMPs.  
• |
### Potential Source of Runoff Pollutants

<table>
<thead>
<tr>
<th>Potential Source of Runoff Pollutants</th>
<th>Permanent Source Control BMPs</th>
<th>Operational Source Control BMPs</th>
</tr>
</thead>
</table>
| Plazas, sidewalks, and exposed parking lots. | • Rooftop equipment with the potential to produce pollutants shall be roofed and/or have secondary containment.  
• No roofing, gutters, or trim will be made of copper or other unprotected metals that may leach into runoff. | • Plazas, sidewalks and exposed parking areas will be swept regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system and direct water into nearby landscape areas. To avoid unsafe runoff and potential contamination, cleaning agents and degreasers shall not be used. |

### 6. Winery Wastewater

It is anticipated that the winery will produce approximately 200,000 gallons of industrial wastewater per year, ranging from approximately 0 to 500 gallons per day to 3,500 to 5,000 gallons per day with the greatest amounts of wastewater produced during high crush season. The winery industrial wastewater will be held in a subterranean tank beneath the winery and transferred through an underground piping system to an on-site wastewater treatment area located immediately across the internal drive aisle from the winery, as shown on Exhibit 5.8-4, Winery Wastewater Treatment Area. The wastewater treatment area will be approximately 2,200 to 2,800 square feet in size and includes the wastewater treatment system and three cylindrical water storage tanks. The wastewater treatment system and water storage tanks will be installed as above ground components. Each cylindrical water tank will be capable of holding up to 10,000 to 15,000 gallons of purified water.

The wastewater treatment area will be located next to the neighbor’s relocated trash enclosure at the western boundary of the Project site and shielded from view through the use of fencing and landscaping. The proposed wastewater treatment equipment will be screened from view by the neighboring office buildings through the planting of African Sumac and California Sycamore trees along the outside perimeter of the wastewater treatment area. The wastewater treatment area will be accessed through a gate to ensure that the area remains secure.

The industrial wastewater treatment process includes a filtration process where solid and liquid elements of the wastewater will be separated. The solids will be dewatered and disposed of with normal trash, and remaining water will be filtered to a pure state through a reverse osmosis system. The resultant pure water will be stored in tanks in the wastewater treatment area and dispersed through the Project’s landscape irrigation system, which will be directly connected to the pure water storage tanks. The proposed winery will not connect into the sewer system or use a hauling system, because industrial wastewater water produced by the winery will be treated on-site. All domestic wastewater flows will be discharged into the Napa Sanitation District pipeline for treatment.
Chapter 5. – Environmental Setting, Impacts, and Mitigation Measures
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5.8 – Hydrology and Water Quality

Exhibit 5.8-4  Winery Wastewater Treatment Area

Source: WATG
5.8.5 Mitigation Measures

1. Standard Mitigation Measures

Standard mitigation measures herein are per Policy Resolution No. 27.

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM H/WQ-1</td>
<td>To ensure adequate drainage control, the Developer of any project that introduces new impervious surfaces (roof, driveways, patios) that will change the rate of absorption of drainage or surface run-off shall submit a drainage and grading plan designed in accordance with Policy Resolution No. 17 and the City of Napa Public Works Department Standard Specifications to the Public Works Department for its approval.</td>
</tr>
<tr>
<td>MM H/WQ-2</td>
<td>For any construction activity that results in the disturbance of 5 acres or greater total land area, or that is part of a larger common plan of development that disturbs 5 acres or greater total land area, Developer shall file a Notice of Intent with the California Regional Water Quality Control Board (SWRCB) prior to any grading or construction activity. In the event construction activity for the Project occurs after the SWRCB has changed its General Permit for construction activity to cover disturbance(s) of 1 acre or more, this measure shall apply to any construction activity for this Project which results in the disturbance of 1 acre or greater total land area, or is part of a larger common plan of development that disturbs 1 acre or greater total land area.</td>
</tr>
<tr>
<td>MM H/WQ-3</td>
<td>The Developer shall ensure that no construction materials (e.g., cleaning fresh concrete from equipment) are conveyed into the storm drain system. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.</td>
</tr>
<tr>
<td>MM H/WQ-4</td>
<td>All materials that could cause water pollution (e.g., motor oil, fuels, paints) shall be stored and used in a manner that will not cause any pollution. All discarded material and any accidental spills shall be removed and disposed of at an approved disposal site.</td>
</tr>
<tr>
<td>MM H/WQ-5</td>
<td>All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.</td>
</tr>
<tr>
<td>MM H/WQ-6</td>
<td>Developer shall meet the requirements of discharging to a public storm drainage system as required to ensure compliance by the City with all state and federal laws and regulations related to storm water as stipulated in the Clean Water Act. Developer shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit in effect prior to completion of Project construction for storm water discharges from the municipal storm water system operated by the City of Napa. Developer shall</td>
</tr>
</tbody>
</table>
comply with the Storm Water Pollution Mitigation Plan (SWPMP) submitted by Developer as part of its application as (modified and) approved by the Director of Public Works.

**MM H/WQ-7** Developer shall mark all new storm drain inlets with permanent markings, which state "No Dumping-Flows to River." This work shall be shown on improvement plans.

**MM H/WQ-8** Developer shall record a plan for long-term private maintenance acceptable to the Director of Public Works and the City Attorney for any structural storm water pollution removal devices or treatment control BMP incorporated as part of the Project. The plan shall comply with City and SWRCB requirements including, but not limited to, a detailed description of responsible parties, inspections, maintenance procedures for the detention system, including monitoring and documentation of annual report to the Public Works Department and procedures for enforcement. Appropriate easements or other arrangements satisfactory to the Public Works Director and City Attorney necessary or convenient to ensure the feasibility of the scheme and fulfillment of maintenance responsibilities shall be secured and recorded prior to approval of the final/parcel map or issuance of a building permit, whichever comes first.

2. **Special Mitigation Measures**

   **MM H/WQ-9** Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance under California’s General Permit for Storm Water Discharges Associated with Construction Activity. The Project Applicant shall prepare and submit to the City a Storm Water Pollution Prevention Plan that describes erosion and sediment control BMPs and BMPs that will be used during the construction of the Project.

   **MM H/WQ-10** Prior to issuance of building permits, the City of Napa shall ensure the building plans demonstrate that properly designed and sized LID features have been incorporated into the Project.

3. **Conditions of Approval**

   In accordance with Section 4.36.140 of the Napa Municipal Code, the Applicant/Owner shall be responsible for payment of a Storm Water System Service Fee for inspection and maintenance services.

5.8.6 **Level of Significance after Mitigation**

The Project Applicant will be responsible for operation and maintenance of storm water treatment facilities. Such responsibility would be transferred to any subsequent owner.

Thresholds of significance identified in the CEQA Guidelines, Appendix G, and policies of the City of Napa state that a project would have a significant impact if it would:
a) Violate any water quality standards or waste discharge requirements;
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-site or off-site;
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
f) Otherwise substantially degrade water quality;
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami or mudflow.

The Storm Water Control Plan includes maintenance required for each storm water facility to ensure that flows are unobstructed, that erosion is prevented, and that clogging of permeable pavements is avoided. Such maintenance measures will ensure that all storm water facilities provide adequate protection from storm water runoff pollutants, and impacts will be less than significant.

As a part of the Project, an underground storage vault will be constructed for the purpose of detaining the differential volume between the 25-year and 10-year storm events. The storage vault will be design with an outfall that will constrict discharge to match the 10-year storm, thereby matching the infrastructure piping in Napa Valley Corporate Drive which has a 10-year storm capacity.

The Storm Water and Drainage Control Assessment analysis responds to CEQA Guidelines, Appendix G Checklist as follows.

With implementation of the mitigation measures identified herein, the Project, as proposed, will not violate any water quality standards or waste discharge requirements, substantially alter the existing drainage pattern of the site including the course of a stream or river, or increase the rate or amount of surface runoff resulting in flooding on-site or off-site.

The Project will not contribute runoff that would exceed the capacity of storm water drainage systems or otherwise substantially degrade water quality. The Project site is not in a 100-
year flood hazard area and will not place housing or other structures within a flood hazard area or impede or redirect flood flows.

The Project is not in the immediate vicinity of a levee or a dam and, therefore, will not expose people or structures to injury or death due to the failure of a dam or a levee. Due to the location of the Project site, there is no risk of inundation by seiche, tsunami, or mudflow. Therefore, upon implementation of the proposed mitigation, the Project impact on Hydrology and Water Quality will be reduced to a level of insignificance.

5.8.7 Cumulative Impacts

The proposed Project drainage system, as designed, will not generate an increase in storm water runoff or decrease water quality beyond the existing condition. Cumulative development in the Project area could result in alterations to the drainage pattern and flow rates in the Project vicinity. Impacts will be mitigated by construction of Project-specific drainage improvements consistent with the City of Napa. Storm drain improvements for the proposed Project will be designed to provide projected levels required by City of Napa and the NPDES county-wide permit. The development is designed to implement Low Impact Development that mimics the pre-development existing flows, volumes, and water quality prior to discharge from the Project site.

The Project's individual runoff contribution, when combined with other area projects, would not be considerable. The proposed Project, when considered with other existing or foreseeable projects, will not result in cumulatively considerable impacts in the area of Hydrology and Water Quality.

5.8.8 Unavoidable Adverse Impacts

The proposed Project will not have any unavoidable adverse impacts.
5.9 Land Use and Planning

This section analyzes the potential land use and planning impacts associated with the proposed Project. Information and analysis in this section are based on goals and policies in the City of Napa General Plan and Zoning Code.

5.9.1 Existing Conditions

1. Regional Setting
The Project site is located within the southern portion of the City of Napa within Napa Valley Commons corporate park, approximately 4 miles south of downtown Napa. The Napa County Airport and Airport Industrial Park are approximately 4 miles south of the Project site. The Project site is within the Napa County Airport Land Use Compatibility Plan (ALUCP) area. Immediately to the east is a winery surrounded by open space. The Napa Pipe development is located to the west with the Napa River beyond.

2. On-Site Land Uses
The proposed Project site consists of previously graded vacant land sparsely covered by shrubs and non-native grass. Multiple trees exist on the eastern and southern perimeter of the site. The site is frequently mowed for fire control. There are currently no on-site uses, as the property is undeveloped with no structures on the site.

3. Surrounding Land Uses
The Project site is located at the southern boundary of the City of Napa, near the junction of State Route 29 (SR 29) and State Route 221 (SR 221) within the Napa Valley Commons corporate park. The Meritage Resort and Meritage Commons are located approximately 0.2 mile to the south within the corporate park, with the Grape crusher look-out point located immediately beyond.

The immediate surrounding area is largely built-out with low-rise office and industrial development. The Kaiser Data Center is located northerly of the site across a vacant parcel. Vineyards are located easterly of the site across SR 221. The Napa Pipe redevelopment project is located westerly of the site within the County of Napa (County) and the City's sphere of influence. The Napa Pipe project is a mixed-use development with residential and commercial uses. Other land uses in the area include small wineries, tech companies, and County offices.

5.9.2 Regulatory Setting

1. City of Napa General Plan
The City of Napa General Plan Envision 2020 (General Plan) document was adopted December 1, 1998. The General Plan formalizes a long-term vision for the physical evolution of Napa and outlines policies, standards, and programs to guide day-to-day decisions concerning Napa's development through the year 2020.
The City's General Plan designation for the Project site is Corporate Park (CP), as shown on Exhibit 5.9-1, General Plan Map, City of Napa. The CP designation provides for uses such as manufacturing, warehousing, office, and public and quasi-public uses. Hotel, winery, and office uses are also permitted in the CP designation. The General Plan regulates Floor Area Ratio (FAR) with a maximum FAR for the proposed Project of 0.40.

2. City of Napa Zoning Code

The City of Napa Zoning Code (adopted in September 1992) was prepared in accordance with the City's General Plan. The Zoning Code incorporates principles of contemporary planning practices and only approves uses that, by their nature or location in a district, would not adversely impact nearby uses. Uses that could adversely impact nearby uses, unless designed, situated, or operated in a particular manner, shall be permitted only as “conditional” uses subject to a discretionary use permit. Procedures are included in the zoning code for the review and approval of large scale, integrated mixed use or other innovative projects.

The Project site is zoned Industrial Park (IP-A and IP-B) within the City’s zoning designations. The IP zoning district allows hotel and winery uses by condition and office uses by right. The Project will require approval of a Conditional Use Permit pursuant to Zoning Code §17.14.020 for a hotel in the IP-A zoning district and a winery in the IP zoning district. The City of Napa Zoning Map is included as Exhibit 5.9-2.

Zoning Code §17.54.040 sets forth parking ratios for development. The proposed Project will provide 441 total on-site parking spaces where 444 parking spaces are required by the Zoning Code. A Planned Development Overlay will be required to allow shared parking in order to be consistent with the Zoning Code requirements as well as a building height increase for the winery and office buildings as further described below.

The maximum height of structures within the IP-A and IP-B districts as established by Zoning Code §17.14.030 is 40 feet (60 feet with design review) and 30 feet, respectively. Setbacks as identified in §1.14.030 for the IP-A and IP-B districts are 50/35 ft. respectively along Highway 221, 35 feet along Napa Valley Corporate Way and 35 feet for Napa Valley Corporate Drive.

5.9.3 Thresholds of Significance

For purposes of this DEIR, the thresholds of significance for evaluation of Project impacts are based on suggested criteria from the California Environmental Quality Act Environmental Checklist found in Appendix G of the CEQA Guidelines. The Project would result in a significant impact if it would:

a) Physically divide an established community
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
c) Conflict with an applicable habitat conservation plan or natural community conservation plan.
Exhibit 5.9-1  General Plan Map, City of Napa
Exhibit 5.9-2  Zoning Map, City of Napa
5.9.4 Project Impacts Prior to Mitigation

Implementation of the proposed Project will not alter existing on-site land use designations or development limits. The Project site is designated Corporate Park in the City General Plan and proposes the development of a hotel, a winery, and an office building. The Project will require approval of a Planned Development Overlay for shared parking and an increase in height allowances for the winery and office building. The Project as proposed is consistent with the City Zoning Code designation of Industrial Park with the approval of a conditional use permit for a hotel in the IP-A zoning district and a winery in the IP zoning district.

Following is a consistency analysis related to regulatory document compliance.

1. Consistency with the City of Napa General Plan

The Project site comprises three parcels totaling 11.55 acres. The Project is proposed as a part of The Meritage Resort and Meritage Commons, which are under common ownership and located on Bordeaux Way between Napa Valley Corporate Way and Napa Valley Corporate Drive. The consistency analysis relates to pertinent Elements of the City of Napa General Plan.

Land Use Element

The City of Napa General Plan Land Use Element prescribes the pattern of land use in Napa and sets out the standards for future development and redevelopment. The Land Use Plan sets policies on where and how land should be developed, and standards for land use, development, and environmental protection in Napa. The City is divided into 12 planning areas, with the proposed Project located within Planning Area 11 – River East. The River East Planning Area is located at the southern tip of the City, primarily extending west of SR 221 to the Napa River. Napa Valley Community College and Kennedy Park (the City’s largest park) can be found in this Planning Area. The proposed Project is located within Napa Valley Commons corporate park at the southern end of the River East Planning Area. The following table describes the proposed Project’s consistency with the City’s General Plan Commercial Development Policies.

Table 5.9-1 Napa City General Plan Land Use Element Consistency

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall seek to improve the character and viability of commercial areas and allow for a range of goods and services convenient to Napa residents through planning and zoning incentives.</td>
<td>The proposed Project offers a range of uses to the general public, including a dual branded hotel, winery, and office building. The mixed-use nature of the proposed Project is consistent with the City’s General Plan policy, as proposed uses are available to Napa residents.</td>
</tr>
<tr>
<td>When new development is proposed or when an opportunity arises due to use changes within an existing strip area, the City shall encourage shared parking and access (reducing curb cuts), shared design features, shared signing, consistent landscape treatments across frontages, and other integrating features.</td>
<td>The proposed Project’s curb cuts have been minimized to one curb cut on Napa Valley Corporate Drive. An existing curb cut on Napa Valley Corporate Way will be utilized as well. The Project will have shared parking through approval of a Planned Development Overlay. Shared signage will be permitted through approval of a sign program. Landscaping proposed for the Project includes native mature trees, shrubs and grasses, consistent with the adjoining property to the south. A vacant lot adjoins the property to the north. The proposed Project is</td>
</tr>
</tbody>
</table>
5.9 – Land Use and Planning

The proposed Project is located approximately 800 feet from the VINE bus stop on Napa Valley Corporate Drive. In addition, the Project anticipates utilizing the existing The Meritage Resort shuttle service to provide alternative transportation for hotel guests to downtown Napa. Additional shuttle service will be included to accommodate the new development.

The proposed Project includes a dual-branded hotel, a winery, and an office building located at the corner of Napa Valley Corporate Drive and Napa Valley Corporate Way within the Napa Valley Commons corporate park in south Napa. The site is located adjacent to SR 221, a major state highway. The proposed Project is consistent with this General Plan policy, as it will not adversely affect existing residential, office, or neighborhood commercial developments.

The proposed Project includes 441 on-site parking spaces. A majority of parking is proposed to be located away from Napa Valley Corporate Way and Napa Valley Corporate Drive which are slow speed surface streets that would experience the greatest visual impact. Approximately 40 parking spaces will be located adjacent to Napa Valley Corporate Way and Napa Valley Corporate Drive; however, the frontage along these roadways will be heavily landscaped and include a setback of 35 feet along Napa Valley Corporate Drive and 50 feet along Napa Valley Corporate Way, which are consistent with Zoning Code setback requirements. The proposed Project is consistent with this City General Plan policy, as parking along frontages and views of parking along frontages have been minimized.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall require major new commercial projects to be designed to support mass transit and alternative modes of transportation.</td>
<td>The proposed Project is located approximately 800 feet from the VINE bus stop on Napa Valley Corporate Drive. In addition, the Project anticipates utilizing the existing The Meritage Resort shuttle service to provide alternative transportation for hotel guests to downtown Napa. Additional shuttle service will be included to accommodate the new development.</td>
</tr>
<tr>
<td>Free-standing or clustered tourist commercial uses (e.g., entertainment, commercial recreation, lodging, fuel) shall be located in areas where traffic patterns are oriented to major arterial streets and highways and/or where expansion or development will not adversely affect existing residential, office, or neighborhood commercial developments.</td>
<td>The proposed Project includes a dual-branded hotel, a winery, and an office building located at the corner of Napa Valley Corporate Drive and Napa Valley Corporate Way within the Napa Valley Commons corporate park in south Napa. The site is located adjacent to SR 221, a major state highway. The proposed Project is consistent with this General Plan policy, as it will not adversely affect existing residential, office, or neighborhood commercial developments.</td>
</tr>
<tr>
<td>The City shall encourage automobile-oriented uses to locate parking in areas less visible from the street (e.g., reverse frontage commercial centers).</td>
<td>The proposed Project includes 441 on-site parking spaces. A majority of parking is proposed to be located away from Napa Valley Corporate Way and Napa Valley Corporate Drive which are slow speed surface streets that would experience the greatest visual impact. Approximately 40 parking spaces will be located adjacent to Napa Valley Corporate Way and Napa Valley Corporate Drive; however, the frontage along these roadways will be heavily landscaped and include a setback of 35 feet along Napa Valley Corporate Drive and 50 feet along Napa Valley Corporate Way, which are consistent with Zoning Code setback requirements. The proposed Project is consistent with this City General Plan policy, as parking along frontages and views of parking along frontages have been minimized.</td>
</tr>
</tbody>
</table>

**Transportation Element**

The Transportation Element of the Napa City General Plan contains Goals and Policies that focus on access and mobility needs for new development. The General Plan major transportation objectives include developing a transportation infrastructure that provides for an acceptable traffic flow and provides access to all destinations; creates a citywide transportation system that allows users to choose from a variety of safe transportation options including an adequate system of streets, transit, pedestrian, and bicycle facilities; and minimizes the negative effects of additional automobile traffic and other transportation. Section 5.13, Transportation/Traffic, of this DEIR provides further discussion and analysis of project consistency with applicable City transportation policies. The following table describes the proposed Project's consistency with the City's General Plan Policies related to traffic and transportation.
Table 5.9-2  Napa City General Plan Transportation Element Circulation Plan Consistency

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’ Sidewalk/Landscape Strip: City standards generally provide for a 10’ sidewalk/landscape strip on each side of the street. The standard designates minimum 4’ wide sidewalks separated by landscaping. Variations may be approved by the Public Works Director depending on site conditions and expected needs.</td>
<td>The proposed Project does not include new street construction. Sidewalk improvements are proposed along Napa Valley Corporate Drive and Napa Valley Corporate Way consistent with City of Napa General Plan Transportation Element Circulation Plan. The Project proposes generous amounts of landscaping through the use of native mature trees, shrubs and grasses within the street frontage setbacks. Planned landscaping is depicted on Exhibit 4-48, Tree Plan.</td>
</tr>
<tr>
<td>The City shall assess fees on new development sufficient to cover the fair share portion of that development’s impacts on the local and regional transportation system.</td>
<td>The proposed Project will participate in fair share contributions for roadway impacts. Section 5.13, Transportation/Traffic of this DEIR further examines anticipated traffic impacts that will result from the implementation of the proposed Project.</td>
</tr>
<tr>
<td>The City shall require that new development construct improvements identified in the Capital Improvement Plan (CIP) as needed to serve the development.</td>
<td>The proposed Project will participate in construction of improvements identified in the CIP based on fair share contributions. Section 5.13, Transportation/Traffic of this DEIR further analyzes anticipated traffic impacts that will result from the implementation of the proposed Project.</td>
</tr>
<tr>
<td>The City shall ensure that traffic levels of service (LOS) will not exceed midrange LOS D at all signalized intersections on arterial and collector streets[.]</td>
<td>The proposed Project Transportation Impact Study was prepared to evaluate traffic impacts that would result from Project implementation. Current LOS and future LOS, including impacts from the proposed Project, are fully analyzed in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>The City shall ensure that all new development and redevelopment will meet adopted service levels (LOS) for transportation facilities unless findings are made that achieving other specific public goals found in this General Plan outweigh this requirement.</td>
<td>The proposed Project Transportation Impact Study was prepared to evaluate traffic impacts that would result from Project implementation. Current LOS and future LOS, including impacts from the proposed Project, are analyzed in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>The City shall ensure that streets are designed with attractive landscape amenities and street trees wherever possible.</td>
<td>The proposed Project is designed with extensive landscaping within the property as well as along street frontages, as shown on Exhibit 4-48, Tree Plan. A more detailed description of the proposed landscaping for the Project is included in Section 5.1, Aesthetics.</td>
</tr>
<tr>
<td>The City shall define adequate access to a private commercial and/or industrial Project to include egress through the property, pullout areas, handicapped accessible shelters and/or benches at passenger loading areas, signs, poles, and high grade pads for bus parking as necessary.</td>
<td>The proposed Project would provide adequate access, as defined by the City, through the provision of ingress/egress to and through the property, pullout areas, handicapped accessible shelters and/or benches at passenger loading areas, signs, poles, and high grade pads for bus parking as necessary. Transportation access is analyzed in this DEIR in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>The City shall encourage developers to include public transit support and promotion of other alternatives to single occupancy vehicles (SOV) in commercial development projects. Support may include provision of discount bus passes to employees, bicycle facilities, transit information displays, and on-site transit facilities (turnouts or berthing space, shelters, and access).</td>
<td>The proposed Project will offer a free shuttle to downtown Napa for hotel guests as an alternative to single occupancy vehicles. Additional shuttles will be added to accommodate the proposed Project. Shuttle operations are further discussed in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>Develop strategies and work with private landowners/business to provide parking spaces for bicycle parking at strategic locations.</td>
<td>On-site bike racks will be provided at the hotel, office and winery. Bike storage will be provided at the hotel and office buildings. Short-term bike racks are for day use only and the covered and lockable bike storage areas are intended for longer storage needs.</td>
</tr>
</tbody>
</table>
Natural Resources Element

The Natural Resources Element of the Napa City General Plan contains Goals and Policies that focus on plant, wildlife, and fish habitat, rare and endangered species, and public awareness for the protection of natural resources, water quality, and air quality. The General Plan major natural resources objectives include developing and maintaining high quality plant and wildlife habitats surrounding the City; protecting important plant and wildlife habitats incorporated into developed areas within the rural/urban limits (RUL); high quality air and water resources; and supporting open space areas in and around the City in coordination with the protection and enhancement of natural resources, plant and wildlife habitats. Section 5.3, Biological Resources, of this DEIR provides further discussion and analysis of project consistency with applicable City natural resources policies. Consistency with the City’s General Plan policies is detailed in the following table.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall require appropriate pedestrian access in all new developments.</td>
<td>The proposed Project is designed with pedestrian paths for travel between the separate uses on the Project site. A limited number of sidewalks and crosswalks exist in the immediate area for pedestrians to access nearby transit stops, residential uses and commercial uses. Pedestrian access is further discussed in Section 5.13, Transportation/Traffic.</td>
</tr>
</tbody>
</table>

### Table 5.9-3  Napa City General Plan Resources Element Consistency

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Resources Policies</strong></td>
<td></td>
</tr>
<tr>
<td>The City shall encourage the planting of native plant species in natural habitats.</td>
<td>The proposed Project includes the retention of three valley oak trees and one coast live oak tree on-site and the planting of approximately 400 trees, as shown on Exhibit 4-48, Tree Plan.</td>
</tr>
<tr>
<td>During development review, the City shall endeavor to identify and protect significant species and groves or clusters of trees on project sites.</td>
<td>The proposed Project will adhere to the City’s tree ordinance. An arborist report has been prepared which identified Coast Live Oak, Valley Oak trees and other clusters of trees. Project compliance with the City’s tree ordinance is further analyzed in Section 5.3, Biological Resources.</td>
</tr>
<tr>
<td>The City shall pursue appropriate new management practices for reducing the impact of pollution from urban activities. See Storm Drainage section of Chapter 4, Community Services.</td>
<td>The proposed Project will comply with the City best management practices for reducing the impact of pollution from urban activities. A Water Quality Management Plan has been prepared for the Project and further analysis of storm water facilities can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall provide for the use of permeable or semi-permeable materials for parking lots and other off-street paved areas</td>
<td>Project design includes the use of artificial turf and semi-permeable pavements as further analyzed in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall develop guidelines and regulations to encourage new development to protect and enhance on-site habitat and incorporate it into the Project. The City will allow the creation of off-site habitat on public or private land as an alternative if it is demonstrated to be infeasible to incorporate significant habitat protection into plans.</td>
<td>The proposed Project is designed consistent with the City’s tree ordinance for the retention of trees including 3 Valley Oak trees, 1 Coast Live Oak and shrubs and bushes along Napa Valley Corporate Way and SR 221. An arborist report was prepared for the proposed Project and further analysis can be found in Section 5.3, Biological Resources.</td>
</tr>
</tbody>
</table>
### Policy Analysis

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall continue to require implementation of sensitive construction practices that minimize erosion and sedimentation, protect native and other important trees, restrict riparian encroachment, and maintain unobstructed drainageways.</td>
<td>The proposed Project includes implementation of best management practices for construction, including the protection of three valley oak trees and one coast live oak tree. Additional information related to on-site tree protection is included in Section 5.3, Biological Resources. A Water Quality Management plan was prepared for the Project and is discussed further in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall continue to refer development proposals in sensitive areas to state and federal wildlife agencies for review and comment.</td>
<td>The proposed Project implementation includes notification to California Fish and Wildlife in reference to the presence of Valley and Coast Live Oaks found on-site. Further analysis can be found in Section 5.3, Biological Resources.</td>
</tr>
<tr>
<td>The City shall encourage the use of mass transit, bicycle facilities, and pedestrian walkways in order to decrease use of private vehicles and thereby reduce emissions from mobile sources.</td>
<td>The proposed Project is a mixed-use project and it is anticipated there will be crossover between hotel guests and the winery. The Vine bus stop is located just north of the intersection of Napa Valley Corporate Drive and Napa Valley Corporate Way, allowing employees and office building tenants convenient public transportation to work. The proposed Project will also offer a free shuttle to downtown Napa for hotel guests. A detailed description of the Project’s proposed circulation plan is included in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>The City shall promote energy conservation/energy efficiency improvement programs, which reduce energy demand from power-generating facilities which contribute to background levels of regional air emissions</td>
<td>The proposed Project includes measures for reducing energy demand from power generating facilities which contribute to background levels of regional air emissions. Energy efficiency measures are further analyzed in Section 5.6, Greenhouse Gas Emissions.</td>
</tr>
<tr>
<td>The City shall, during discretionary review, require that development proposals comply with federal and state air quality standards, or make findings that the Project has overriding benefits to the community that outweigh nonattainment of the standards.</td>
<td>The proposed Project is subject to discretionary review. An air quality and greenhouse gas emissions report was prepared to analyze Project compliance with federal and state standards. In the event that the proposed Project does not comply with federal and state standards and thresholds, the City will be required to adopt a statement of overriding considerations. Further discussion and analysis can be found in Section 5.1, Aesthetics and Section 5.6, Greenhouse Gas Emissions.</td>
</tr>
</tbody>
</table>

### City of Napa Community Services Element

The Community Services Element of the Napa City General Plan contains Goals and Policies that focus on responsive police services, responsive fire services, proactive fire services, emergency medical services, schools, water supply, wastewater, storm drainage, and solid waste collection and disposal. The General Plan major community services objectives include a full-service city providing a high level of basic services; a community services system responsive to a broad spectrum of the population; and a multi-generational educational system that promotes individual self-esteem. Section 5.12, Public Services and Section 5.8, Hydrology and Water Quality, of this DEIR provide further discussion and analysis of Project consistency with applicable City community services and water. Consistency with the City’s General Plan policies is detailed in the following table.
Table 5.9-4  Napa City General Plan Community Service Element Consistency

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall ensure through the development review process that adequate public facilities and services are available to serve new development.</td>
<td>The proposed Project approval includes analysis of existing services to determine if additional emergency services are required. The review process includes coordination with emergency service staff to ensure that the proposed Project will be properly served.</td>
</tr>
<tr>
<td>The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits.</td>
<td>The proposed Project will be required to pay a fair share contribution fee towards provision of emergency services if necessary. The fee will be determined by the City based on ratios and amounts found in the zoning code based on building square footage. Discussion and analysis regarding public services can be found in Section 5.12, Public Services.</td>
</tr>
<tr>
<td>The City shall provide for adequate emergency vehicle access and public egress in new development.</td>
<td>The proposed Project is designed with emergency access in consultation with the City traffic engineer and the fire department. Discussion and analysis regarding emergency access can be found in Section 5.13, Transportation/Traffic.</td>
</tr>
<tr>
<td>The City shall continue to require built-in fire protection using automatic fire sprinklers, Class A roofing, fire-resistant building materials, and similar measures.</td>
<td>The proposed Project will use Class A roofing, fire resistant building materials, and similar measures. Discussion and analysis regarding fire hazards and protection measures can be found in Section 5.7, Hazards and Hazardous Materials. Section 5.12, Public Services discusses the requirement for coordination and payment of fees for additional fire protection facilities.</td>
</tr>
<tr>
<td>The City shall continue to implement water conservation programs that show promise of saving significant amounts of water at a reasonable cost.</td>
<td>The proposed Project is designed to use reclaimed water for on-site landscaping. Discussion and analysis regarding water conservation measures can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall promote reduced wastewater system demand through efficient water use by: a. Requiring water-conserving design and equipment in new construction b. Encouraging retrofitting with water-conserving devices</td>
<td>The proposed Project has been designed with water conservation measures in mind through the incorporation of high efficiency water fixtures and the use of native and drought tolerant plants where feasible. Discussion and analysis regarding water conservation measures can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall continue to collect a Storm Water System Service Fee for needed storm drainage improvements and maintenance.</td>
<td>The proposed Project will pay a fair share contribution fee towards Storm Water System Services. The fee will be determined by the City based on provisions in the zoning code and based on building use square footage. Discussion and analysis regarding storm water pollution prevention can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall develop storm water management programs to reduce water borne pollution discharges to the maximum extent practicable.</td>
<td>The proposed Project will be required to include a storm water pollution prevention plan in coordination with the City building department and engineer. Discussion and analysis regarding storm water pollution prevention can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
<tr>
<td>The City shall require all new development to implement feasible best management practices (BMP) in the design of storm water systems.</td>
<td>The proposed Project will be required to prepare and adhere to Best Management Practices in coordination with the City. Discussion and analysis regarding storm water pollution prevention can be found in Section 5.8, Hydrology and Water Quality.</td>
</tr>
</tbody>
</table>

**Health and Safety Element**

The Health and Safety Element of the Napa City General Plan contains Goals and Policies that focus on seismic hazards, soil erosion and landslide, flooding, dam failure, fire hazards, aircraft hazards, hazardous materials, emergency preparedness and response, and noise. The General Plan major objectives for health and safety protect...
Napa residents, workers, and visitors from natural and manmade hazards; reduce the potential for flood–related hazards; and ensure safe levels of noise exposure.

Section 5.7, Hazards and Hazardous Materials and Section 5.5, Geology and Soils, of this DEIR provides further discussion and analysis of Project consistency with applicable City community safety. Consistency with the City’s General Plan policies is detailed in the following table.

### Napa City General Plan Health and Safety Element Consistency

<table>
<thead>
<tr>
<th>Policy</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The City shall require that all new buildings be designed and constructed to resist stresses produced by earthquakes. To this end, the City shall require all new buildings to conform to the structural requirements of the most recently adopted edition of the Uniform Building Code.</td>
<td>The proposed Project has been designed to conform to the structural requirements of the 2016 Uniform Building Code. Discussion and analysis regarding the building design to withstand earthquakes can be found in Section 5.5, Geology and Soils.</td>
</tr>
<tr>
<td>The City shall require soils and geologic studies for proposed development with large client populations (such as schools and convalescent centers) within areas subject to very strong, violent, or very violent ground shaking, as indicated in the ABAG Shaking Intensity Map. Such studies should determine the actual extent of the seismic hazards, optimum location for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location. Mitigation measures shall be incorporated as conditions of any project approval.</td>
<td>The proposed Project has been analyzed in a geology and soils report. Discussion and analysis regarding the findings of the geology and soils report, including recommendations and mitigation measures, can be found in Section 5.5, Geology and Soils.</td>
</tr>
<tr>
<td>The City shall amend the Zoning Ordinance to provide implementation regulations consistent with criteria in the ALUCP, and shall apply such regulations to properties within the planning area boundary of the ALUCP.</td>
<td>The proposed Project is located within the ALUCP and is required to be referred to ALUC for a consistency determination. Discussion and analysis regarding the City’s zoning ordinance requirement for referrals to ALUC can be found in Section 5.7, Hazards and Hazardous Materials.</td>
</tr>
<tr>
<td>The City shall use CEQA and the development review processes to ensure that new development does not exceed City standards.</td>
<td>The proposed Project is subject to CEQA analysis as evidenced in the technical information and details provided in this DEIR. Discussion and analysis regarding the development consistency with City’s zoning ordinance is included in this section of the DEIR under Consistency with Napa Zoning Code.</td>
</tr>
</tbody>
</table>

### City of Napa Zoning Code

The proposed Project is the development of 11.55 acres of vacant land for hotel, winery, and office use. The Project development includes a total of 211,649 square feet, consisting of a 155,557-square-foot hotel, a 29,878-square-foot office building, and a 26,214-square-foot winery.

A Planned Development Overlay Zoning designation (Municipal Code, Title 17, §17.42) is required to address over-height architectural features related to the winery and office buildings and to allow for shared parking between the project components. Section 17.42.030A – Land use and property development regulations – states:
Permitted Variations

The Planned Development overlay district provides for variations to the underlying principal district regulations and standards, excluding density and floor area ratio ranges (which are established by the General Plan). Development regulation variations may include, but are not limited to: setbacks, yards, height limitations, street standards, parking and loading, landscaping, open space, and lot area. The Planned Development Overlay may also shift uses in the underlying principal zoning district between conditional and permitted use categories.

The proposed height for the hotel building is a maximum of approximately 57 feet, which is allowed with Planning Commission approval (Municipal Code §17.14.030). However, architectural features on the winery and office building would extend to 38 feet and 32 feet, respectively, when 30 feet is allowed without a Planned Development Overlay. The Planning Commission and City Council are required to make findings per Municipal Code §17.42.050 – Findings required for a Planned Development Overlay approval. The Zoning Code requirement for parking is 444 spaces. The proposed Project provides 441 on-site spaces. The application of a PD Overlay will allow shared use of the parking spaces between the hotel/office/winery components. As noted in Municipal Code §17.42, the Planned Development Overlay includes variations in parking to the underlying principal district regulations and standards. The following table depicts the required spaces and the proposed spaces based on Project components.

### Vehicle Parking Summary

<table>
<thead>
<tr>
<th>Component</th>
<th>Required Spaces</th>
<th>Proposed Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel (1 space per room)</td>
<td>253</td>
<td>250</td>
</tr>
<tr>
<td>Staff (1 space per every 2 employees)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>264</td>
</tr>
<tr>
<td>Winery (1 space per 500 square feet)</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Admin/sales (1 space per 350 square feet)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Office (1 space per 200 square feet)</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>441</td>
</tr>
<tr>
<td>Shortfall</td>
<td>--</td>
<td>3</td>
</tr>
</tbody>
</table>

Municipal Code §17.54.080 – Parking requirements for shared parking and off-site parking – encourages shared and off-site parking to meet minimum standards. The section states as follows:

17.54.080 B. Shared. Shared parking solutions are encouraged. Required parking minimums may be reduced with a use permit provided that the shared parking spaces are:

1. Located in a common parking lot or off-site convenient to the use(s) requiring the parking; and
The parking will be secured for the uses(s) requiring the parking by ownership and/or agreements sufficient to guarantee the long-term use of the site for such parking; and

3. The applicant is able to show through a parking analysis that peak demand for spaces from all uses will be met.

4. In no instance shall the total parking required be less than would be required for any one of the independent uses.

The Project proposes shared parking located in a common parking lot convenient to each Project component. All parking will be within the boundaries of the Project and be located throughout the site to ensure adjacent parking for each use. No street parking is available. Peak demand uses will be met due to the nature of the Project components and their typical day and hour usage. In addition, because fluctuations in hotel occupancy will occur, adequate parking will be available to serve all guests, employees, and visitors. Peak periods for hotel use will normally be evenings and weekends, when office and winery employees are minimally present.

As noted, the Project is under the ownership of one entity. However, the reciprocal parking proposal will require that the three-space deficit be memorialized with an agreement that will ensure that even if property components are sold, adequate parking will continue to be available on-site. This requirement has been included as mitigation herein. Therefore, with the approval of a Planned Development Overlay, the proposed heights for the office building and winery will be consistent with the City’s regulations and shared parking will meet the requirements identified in Municipal Code §17.54.080.

Floor Area Ratio (FAR)

The FAR is proposed to be averaged across the three hotels in the Napa Valley Commons corporate park that are owned and operated by the applicant, consistent with Zoning Code §17.52.120.C.1 and 2, which provide for the combination and averaging of projects that encompass several buildings on several lots. The section states:

C. Floor Area Ratios (FARs)

1. Definition. The General Plan establishes floor area ratios as the measure for nonresidential intensity in all parts of the city. The floor area ratio is a computation determined by dividing the total gross building floor area (square feet) by the land area of the lot. In cases where a project site encompasses several buildings on several lots, the floor area ratio may be combined and averaged over the entire project site.

2. Calculation. To calculate the maximum floor area ratio, multiply the General Plan FAR by the lot square footage. The total gross floor area (square feet) of all of the building shall not exceed this amount.
Floor Area Ratio (FAR) Calculation Example:
General Plan FAR limit = 0.40
Lot size: 20,000 square feet
\[0.40 \times 20,000 = 8,000 \text{ maximum building size}\]

As shown above, Zoning Code §17.52.120 C discusses the combination and averaging of FAR for projects that encompass several buildings on several lots but does not specify whether the lots must be contiguous.

Using this approach, the Trinitas project component FAR would be computed in conjunction with The Meritage Resort (TMR) and Meritage Commons (MC), which are all located in close proximity and are all under one ownership/operation. TMR and MC are collectively referred to as “Meritage” below. TMR, which is located on a 20.63-acre lot, expanded its operations in 2016 by incorporating a 9.3-acre lot located across the street for the construction of MC. The table below is a summary of square footage and FAR for Meritage approved under the most recent discretionary review process PA 15-0071. The approved intensity includes a 16,833-square-foot as-yet-unbuilt ballroom at Meritage Commons.

<table>
<thead>
<tr>
<th>Acreage</th>
<th>Max Development (FAR 0.4)</th>
<th>Existing/Approved Intensity</th>
<th>Remaining Intensity Under Allowable FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meritage (TMR and MC) PA 15-0071</td>
<td>29.93</td>
<td>521,500 sf</td>
<td>477,667 sf*</td>
</tr>
</tbody>
</table>

*Addition of 15,300 sf for ballroom expansion approved by PA 15-0071

The Project proposes a total of 212,100 square feet for the hotel, the winery, and the office building. The Project overage can be attributed to floor area added in response to an upgrade in fire prevention construction and materials used in the buildings. The decision to upgrade fire prevention was made after the Project was designed, and implementing the upgrade meant adjusting the position of walls which resulted in an increase in floor area. Additional increases were a result of input from Marriott, which resulted in modest increases to certain hotel components. The Project would exceed the maximum floor area of 201,246 square feet established by the General Plan FAR by approximately 10,403 square feet. The following table depicts the Project development area including allowable development and proposed development square footage.

<table>
<thead>
<tr>
<th>Project Development Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tract</td>
</tr>
<tr>
<td>Tract 1: Hotel</td>
</tr>
<tr>
<td>Tract 2: Winery</td>
</tr>
<tr>
<td>Tract 3: Office</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

\(^1\) Exceeds allowable FAR
\(^2\) Proposed FAR exceeds allowable FAR (0.4)
Through several prior planning applications, the City has previously approved Meritage for 477,667 square feet of the 521,500 square feet allowed by the 0.4 FAR, providing a surplus of 43,833 square feet. Through §17.52.120 Trinitas and Meritage are permitted to have site acreage, development area, and the resultant FAR averaged across all sites. This results in a deduction of 10,403 square feet from the remaining intensity of 43,833 square feet. The averaging across Meritage and Trinitas sites may be permitted under Zoning Code §17.52.120 and is shown in the following table.

<table>
<thead>
<tr>
<th>Acreage</th>
<th>Max Development (FAR 0.4)</th>
<th>Development Area</th>
<th>Intensity Remaining after FAR Averaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meritage/Trinitas combined project</td>
<td>41.48</td>
<td>722,660 sf</td>
<td>689,316 sf</td>
</tr>
</tbody>
</table>

The proposed hotels, winery, and office building are intended to function as an extension of the existing hotels that are under common ownership. The FAR calculations set forth in §17.52.120 allow for the averaging of FAR across “several buildings on several lots,” which in this instance, includes properties that are non-contiguous but are designed with the intent that they will function as close to one property as practically possible. Mitigation herein requires recordation of a covenant, or other satisfactory device, to restrict the allowable square footage to ensure that the total remaining intensity for Meritage is not exceeded. By utilizing the provisions of Zoning Code §17.52.120 an increase in FAR of 0.022 via a General Plan Amendment or other legislative act would not be required – rather the FAR would be averaged across the sites and an appropriate recordation would be made on the properties to ensure the overall available intensity could not be exceeded.

The table below depicts the acreage and development area totals for each component which were used to calculate the FAR based on the General Plan allowances. As shown, the individual FAR for the Trinitas Mixed Use project is 0.42 which exceeds the General Plan allowance. However, the resulting combined average FAR is 0.38.

<table>
<thead>
<tr>
<th>Component</th>
<th>Acreage</th>
<th>Development Area</th>
<th>FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Meritage Resort</td>
<td>20.63</td>
<td>317,367 sf</td>
<td>0.35</td>
</tr>
<tr>
<td>Meritage Commons</td>
<td>9.3</td>
<td>160,300 sf</td>
<td>0.40</td>
</tr>
<tr>
<td>Trinitas Mixed-Use Project</td>
<td>11.55</td>
<td>211,649 sf</td>
<td>0.42</td>
</tr>
<tr>
<td>Meritage/Trinitas Combined</td>
<td>41.48</td>
<td>689,316 sf</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Without averaging the FAR, the proposed Project would be overbuilt by 10,403 square feet. Utilizing the combined average allowed in the City’s Zoning Code as detailed above, the resulting FAR for Meritage and Trinitas combined is 0.38. However, Mitigation Measure LU-4 is included herein to ensure that no overbuilding will occur and the square footage limits will remain consistent with the combined average on each of the parcels.
Project setbacks are regulated by Municipal Code §17.14.030 – Industrial Districts – Property development standards. Lot 1 (containing the hotel building) is within the IP-A district, which requires a minimum setback of 50 feet from Highway 221 and 35 feet from Napa Valley Corporate Way. Lot 2 (containing the winery building and a portion of the parking lot along Highway 221) is within the IP-B zoning district, which requires a minimum setback of 35 feet from Highway 221. Lot 3 (containing the office building) is within the IP-B zoning district, which requires a minimum setback of 35 feet from Napa Valley Corporate Drive. The following table depicts the Zoning Code regulations for setbacks and the Project’s proposed setbacks.

<table>
<thead>
<tr>
<th></th>
<th>Zoning Code (IP-A/IP-B)</th>
<th>Lot 1 (IP-A)</th>
<th>Lot 2 (IP-B)</th>
<th>Lot 3 (IP-B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 221</td>
<td>50 ft./35 ft.</td>
<td>50 ft.</td>
<td>45 ft.</td>
<td>---</td>
</tr>
<tr>
<td>Napa Valley Corporate Way</td>
<td>35 ft./35 ft.</td>
<td>50 ft.*</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Napa Valley Corporate Drive</td>
<td>35 ft./35 ft.</td>
<td>---</td>
<td>---</td>
<td>35 ft.</td>
</tr>
</tbody>
</table>

*Requirement of existing landscape easement

As shown in the table, the Project will be consistent with setback requirements.

The proposed Project is also subject to the City’s Design Review Permit process, consistent with Zoning Code §17.62.

5.9.5 Mitigation Measures

1. Standard Mitigation Measures

The following City Standard Mitigation Measures will be implemented per Policy Resolution No. 27.

| MM LU-1 | Developer shall comply with all requirements of federal, state and local laws and regulations applicable to Project construction and issuance of building permits. |
| MM LU-2 | Developer shall comply with the monitoring/reporting checklists for development pursuant to the City of Napa Resolution 96-153 regarding CEQA implementation procedures for both standard and Project specific mitigation measures. |
| MM LU-3 | Developer shall notify all employees and agents of the mitigation measures and conditions applicable to the Project and shall ensure compliance with such measures and conditions. Developer shall also notify all assigns and transferees of the same. |
2. Special Mitigation Measures

The following special Mitigation Measures are included related to compliance with FAR and parking requirements.

| MM LU-4 | Prior to issuance of building permits, the Project Applicant shall provide evidence to the City of a deed restriction identifying the combined square footage for The Meritage Resort, Meritage Commons, and the Trinitas Mixed Use Project and the resultant averaging of FAR as permitted to maintain consistency with the General Plan FAR allowance. The deed restriction shall restrict the “donor” parcels (The Meritage Resort and Meritage Commons) to a maximum of 689,316 square feet consistent with the combined average in order to prevent overbuilding of square footage on those parcels. |
| MM LU-5 | Prior to issuance of building permits, the Project Applicant shall memorialize a shared parking agreement per a Planned Development Overlay to allow a total of 441 shared parking spaces for use between the hotel and winery. The shared parking agreement shall provide three parking spaces for evening use of the hotel. The shared parking agreement shall be in full force and effect throughout the life of the project and will be binding upon any future owners of the property. |

5.9.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that a project would result in a significant impact if it would:

a) Physically divide an established community
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

c) Conflict with an applicable habitat conservation plan or natural community conservation plan.

a) The Project is located within the Napa Valley Commons corporate park and is consistent with existing development. Therefore, implementation of the Project will not physically divide an established community.

b) A Planned Development Overlay is required for the increase in height for the winery and office buildings. The IP-B zoning district permits a 30-foot height for wineries and office buildings. The winery has a proposed roof height of 28 feet with architectural features extending to 38 feet. The office building has a roof height of 24 feet with architectural features extending to 32 feet. Application of a Planned Development Overlay will result in an approved over-height allowance for the winery and office. The Project location in a substantially built-out corporate park will not impact surrounding development or create an environmental impact due to the additional height allowances.
The mixed-use nature of the Project results in a higher demand for parking on
weekends and evenings when the hotel and winery components are in greater use, and
a lower demand in parking for the office component, when fewer employees are at
work. The Project, as proposed, provides 441 on-site parking spaces. If each Project
component was parked individually, the City’s Zoning Code would require a total of
444 parking spaces. The difference between the Zoning Code requirement and the total
proposed can be accommodated due to the varied peak use days and times for the
hotel, office and winery. Mitigation has been included herein to memorialize the
proposed joint use of the 441 parking spaces between the owners/operators of the
Project. No significant impacts will occur with approval of a Planned Development
Overlay to allow the shared parking on the Project site.

The IP-A zoning district requires the issuance of a Conditional Use Permit for a hotel
use. A Conditional Use Permit is also required for a winery use in the IP zoning District.
The proposed Project includes the requirement for a Conditional Use Permit to ensure
consistency with the City's Zoning Code regulations.

The City’s General Plan establishes a floor area ratio (FAR) of 0.4 for the Corporate Park
land use designation. The proposed Project results in a 0.42 FAR, which exceeds the
established maximum. However, as also noted above, the General Plan and Zoning Code
provide consideration for the combination and averaging of FAR for projects that
encompass several buildings on several lots. The Meritage Resort, Meritage Commons,
and the Trinitas Mixed-Use Project are all under the same ownership within the Napa
Valley Commons and the averaging of the three components results in a 0.38 FAR as
detailed herein.

The Project site is located on vacant land within a largely developed corporate park
and would not divide an established community. The Project will be a part of an
existing development and within the boundaries of the established corporate park. As
detailed above, the proposed Project is consistent with the goals and policies of the
City's General Plan and regulations set forth in the zoning code, and would not conflict
with any applicable land use plan, policy, or regulation of an agency with jurisdiction
over the Project. The Project is consistent with the General Plan designation of
Corporate Park (CP) and the Zoning designation of Industrial Park (IP-A and IP-B).
Proposed uses will be consistent with those designations. The IP zoning district allows
hotel and winery uses by condition and office uses by right. A Conditional Use Permit is
included in the Project approval.

c) The Project site is not located within a habitat conservation plan area and would not
conflict with any applicable habitat conservation plan or natural community
conservation plan. Biological surveys of the Project site identified areas of potential
impact and mitigation was provided to reduce any biological impacts to a less than
significant level. Detailed analysis is provided herein in Section 5.3, Biological
Resources.
5.9.7 Cumulative Impacts

No cumulative impacts are anticipated to occur. Build-out of the Napa Valley Commons corporate park was considered in the City's General Plan based on the established development parameters. The Project will not induce growth beyond what was envisioned by the City's General Plan. Cumulative land use impacts are individually mitigated on a project-by-project basis and no mitigation is required for the proposed Project due to cumulative impacts. As demonstrated above, the proposed Project is consistent with the City's General Plan policies, the Zoning Code and other relevant local and regional planning documents; therefore, the Project would not result in a cumulatively considerable impact related to Land Use and Planning.

5.9.8 Unavoidable Adverse Impacts

No unavoidable adverse impacts to Land Use are associated with the proposed Project.
5.10 Noise

This section analyzes the potential noise and vibration impacts associated with the proposed Project. Information in this section is based on the Trinitas Mixed-Use Project Noise and Vibration Assessment (Noise Assessment) prepared by Illingworth & Rodkin, Inc. dated August 22, 2017. The Noise Assessment analyzes the potential impact on the surrounding land uses and considers construction noise, traffic noise and other on-site activity noise impacts. The Noise Assessment is included in its entirety herein as Appendix M.

5.10.1 Existing Conditions

The Project site is approximately 11.55 acres, located in Napa Valley Commons corporate park and is currently vacant and covered with grasses and limited trees. The site is surrounded by commercial/industrial development with Highway 221 along the easterly boundary of the site. Exterior noise levels are consistent with the commercial/industrial nature of the area. The Noise Assessment has shown that the ambient noise levels at the Project site are generally at or above the “normally acceptable” threshold levels as further detailed herein. Background information related to noise is discussed below including the methodology for assessing impacts.

1. Noise Criteria Background

Noise is often defined as an unwanted sound, and it is known to have adverse effects on people because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a tenfold increase in acoustic energy, while 20 decibels is 100 times more intense. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms in the Noise Assessment are defined in Table 5.10-1 below.
### Table 5.10-1 Definition of Acoustical Terms Used in this Report

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decibel, dB</td>
<td>A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.</td>
</tr>
<tr>
<td>Sound Pressure Level</td>
<td>Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.</td>
</tr>
<tr>
<td>Frequency, Hz</td>
<td>The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.</td>
</tr>
<tr>
<td>A-Weighted Sound Level, dBA</td>
<td>The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.</td>
</tr>
<tr>
<td>Equivalent Noise Level, Leq</td>
<td>The average A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>Lmax, Lmin</td>
<td>The maximum and minimum A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>L01, L10, L50, L90</td>
<td>The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.</td>
</tr>
<tr>
<td>Day/Night Noise Level, Ln or DNL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 p.m. and 7:00 a.m.</td>
</tr>
<tr>
<td>Community Noise Equivalent Level, CNEL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels measured in the night between 10:00 p.m. and 7:00 a.m.</td>
</tr>
<tr>
<td>Ambient Noise Level</td>
<td>The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.</td>
</tr>
<tr>
<td>Intrusive</td>
<td>That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.</td>
</tr>
</tbody>
</table>

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998

The most common method in California for characterizing sound is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 5.10-2 below. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. This energy-equivalent sound/noise descriptor is called $L_{eq}$. 
Table 5.10-2  Typical Noise Levels in the Environment

<table>
<thead>
<tr>
<th>Common Outdoor Activities</th>
<th>Noise Level (dBA)</th>
<th>Common Indoor Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet fly-over at 1,000 feet</td>
<td>110 dBA</td>
<td>Rock band</td>
</tr>
<tr>
<td>Gas lawn mower at 3 feet</td>
<td>100 dBA</td>
<td></td>
</tr>
<tr>
<td>Diesel truck at 50 feet at 50 mph</td>
<td>90 dBA</td>
<td>Food blender at 3 feet</td>
</tr>
<tr>
<td>Noisy urban area, daytime</td>
<td>80 dBA</td>
<td>Garbage disposal at 3 feet</td>
</tr>
<tr>
<td>Gas lawn mower, 100 feet</td>
<td>70 dBA</td>
<td>Vacuum cleaner at 10 feet</td>
</tr>
<tr>
<td>Commercial area</td>
<td></td>
<td>Normal speech at 3 feet</td>
</tr>
<tr>
<td>Heavy traffic at 300 feet</td>
<td>60 dBA</td>
<td>Large business office</td>
</tr>
<tr>
<td>Quiet urban daytime</td>
<td>50 dBA</td>
<td>Dishwasher in next room</td>
</tr>
<tr>
<td>Quiet urban nighttime</td>
<td>40 dBA</td>
<td>Theater, large conference room</td>
</tr>
<tr>
<td>Quiet suburban nighttime</td>
<td>30 dBA</td>
<td>Library</td>
</tr>
<tr>
<td>Quiet rural nighttime</td>
<td>20 dBA</td>
<td>Bedroom at night, concert hall (background)</td>
</tr>
<tr>
<td></td>
<td>10 dBA</td>
<td>Broadcast/recording studio</td>
</tr>
<tr>
<td></td>
<td>0 dBA</td>
<td></td>
</tr>
</tbody>
</table>

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013

Based on known health effects on humans, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. The two predominant noise scales developed to account for this observation are the Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL) described as follows:

- LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the “energy” average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1 one hour, which can also be referred to as the Hourly Noise Level (HNL). This is the energy sum of all events and background noise levels that occur during that time period.

- CNEL is the predominant rating scale in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. The evening time period (7:00 p.m. to 10:00 p.m.) penalizes noises by 5 dBA, while nighttime (10:00 p.m. to 7:00 a.m.) noises are penalized by 10 dBA. The
daytime noise levels are combined with the weighted levels and averaged to obtain a CNEL value. Counties and cities adopt noise levels based on CNEL.

- L(%) is a statistical method of describing noise, which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time. For example, since 15 minutes is 25% of 1 hour, L(25) is the noise level that is equal to or exceeded for 15 minutes in a 1-hour period. Most daytime county, state, and city noise ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. Therefore, the ordinance states that no noise level should exceed 55 dBA for more than 50% of a given period. The Day/Night Average Sound Level (L_{dn}) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this period are grouped into the daytime period.

In response to the identified adverse effects, criteria have been established to help protect the public health and safety and prevent disruption of certain activities. The criteria is based on known impacts such as hearing loss, speech interference, sleep interference, physiological responses, and annoyance and described as follows:

- **Hearing Loss** - More commonly associated with occupational noise exposures in heavy industry or very noisy work environments rather than residential communities.

- **Speech Interference** - One of the primary concerns related to environmental noise analysis. Normal conversational speech is in the range of 60 to 65 dBA and noise louder than this level may interfere with speech. Thresholds for speech interference indoors are about 45 dBA if the noise is steady, and above 55 dBA if the noise is fluctuating. Outdoor thresholds are about 15 dBA higher.

- **Sleep Interference** - Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Interior residential standards for multi-family dwellings are set by the state at 45 dBA \(_{dn}\). Sleep and speech interference is possible when exterior noise levels are about 57 to 62 dBA \(_{L_{dn}}\) with open windows and 65-70 dBA \(_{L_{dn}}\) if the windows are closed. There is a major concern due to traffic noise. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way.

- **Physiological Responses** - These are measurable effects of noise on people such as changes in pulse rate and blood pressure. While such effects can be induced and observed, the extent is not known to which these responses cause harm or are a sign of harm.

- **Annoyance** - This is the most difficult of all noise responses to describe. Annoyance is very individual and can vary widely from person to person. What is tolerable to one person is unbearable to another of equal hearing capability. Attitude surveys
are used for measuring the annoyance felt for noises intruding into homes or affecting outdoor activity areas. The surveys identified the causes for annoyance as interference with speech, radio and television, house vibrations, and interference with sleep and rest. People appear to respond more adversely to aircraft noise. When the $L_{eq}$ is 60 dBA, approximately 30% to 35% of the population is believed to be highly annoyed.

2. **Noise Assessment Metrics**

Numerous noise metrics have been developed for describing noise impacts and attempt to quantify noise levels with respect to community response. Most of the metrics use the A-weighted noise level to quantify noise impact on humans. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The perceived noise volume relative to human sensitivity is known as the A-weighted decibel (dBA) and is subjective to the hearer. A-weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Sound pressures can be measured in units called microPascals. More commonly, sound pressure levels are described in logarithmic units of ratios of actual sound pressures called bels. A bel is subdivided into 10 decibels (dB) to provide a finer resolution. Sound or noise can vary in intensity by over one million times within the range of human hearing. However, as noted, the human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from 500 to 2,000 cycles per second are factored more heavily into the A-weighting process.

Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if an automobile produces a sound pressure level of 70 dB when passing an observer, two automobiles passing together would produce a sound pressure level of 73 dB rather than 140 dB. Conversely, reducing the traffic volume by half would result in a 3 dB reduction in the noise level.

Noise metrics can be divided into two categories: single event and cumulative. Single event metrics describe the noise levels from an individual event such as an aircraft fly-over. Cumulative metrics average the total noise over a specific time period, which is typically 1 or 24 hours for community noise problems.

Community noise can be measured using several rating scales. The scales account for:

- the parameters of noise that have been shown to contribute to the effects of noise on man
- the variety of noises found in the environment
- the variations in noise levels that occur as a person moves through the environment
- the variations associated with the time of day

Sound levels decrease due to distance from the source as a result of wave divergence, atmospheric absorption, and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound.
power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations in noise levels. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, temperature, and humidity also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels.

3. **Fundamentals of Groundborne Vibration**

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The Noise Assessment used a PPV descriptor with units of mm/sec or in/sec to evaluate construction generated vibration for building damage and human complaints. Table 5.10-3 displays the reactions of people and effects on buildings of vibration.

**Table 5.10-3  Reactions of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels**

<table>
<thead>
<tr>
<th>Velocity Level PPV (in/sec)</th>
<th>Human Reaction</th>
<th>Effect on Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01</td>
<td>Barely perceptible</td>
<td>No effect</td>
</tr>
<tr>
<td>0.04</td>
<td>Distinctly perceptible</td>
<td>Vibration unlikely to cause damage of any type to any structure</td>
</tr>
<tr>
<td>0.08</td>
<td>Distinctly perceptible to strongly perceptible</td>
<td>Recommended upper level of the vibration to which ruins and ancient monuments should be subjected</td>
</tr>
<tr>
<td>0.1</td>
<td>Strongly perceptible</td>
<td>Virtually no risk of damage to normal buildings</td>
</tr>
<tr>
<td>0.3</td>
<td>Strongly perceptible to severe</td>
<td>Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings</td>
</tr>
<tr>
<td>0.5</td>
<td>Severe - Vibrations considered unpleasant</td>
<td>Threshold at which there is a risk of damage to newer residential structures</td>
</tr>
</tbody>
</table>

*Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013*

The Noise Assessment notes that levels shown in Table 5.10-3 should be interpreted with care, because vibration may be annoying at much lower levels than those shown depending on the level of activity or the sensitivity of the individual. Low level vibrations frequently cause irritating secondary vibration such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

During construction, the use of pile-driving and vibratory compaction equipment typically generates the highest construction-related groundborne vibration levels. Because of the impulsive nature of such activities, the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches per second PPV. Human perception to vibration varies with the individual and is a function of...
physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

5.10.2 Regulatory Setting

1. **2016 California Green Building Standards Code (Cal Green Code)**

   The State of California establishes exterior sound transmission control standards for new non-residential buildings exposed to exterior noise levels greater than 65 dBA L_{dn}/CNEL as set forth in the 2016 Cal Green Code (§5.507.4.1 and §5.507.4.2). The following sections are relevant to the proposed Project.
   
   - **5.507.4.1** - Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall meet a composite Sound Transmission Class (STC) rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the building falls within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, as determined by the local general plan noise element.
   
   - **5.507.4.2** - Performance method. For buildings located, as defined by Section 5.507.4.1, wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level of 50 dBA in occupied areas during any hour of operation.

   The performance method, which establishes the acceptable interior noise level, is the method typically used when applying these standards.

2. **City of Napa General Plan**

   The City of Napa’s Health and Safety Element of the General Plan sets forth Goal HS-9, “... to protect Napa’s residents, workers and visitors from the deleterious effects of noise.” The following policies are applicable to the proposed Project.

   1. Policy HS-9.1: The City shall require new development to meet the exterior noise level standards set out in Table 8-1 (not shown). For residential areas, these exterior noise guidelines apply to backyards; exceptions may be allowed for front yards where overriding design concerns are identified.

   2. Policy HS-9.2: The City shall use CEQA and the development review process to ensure that new development does not exceed City standards.
3. Policy HS-9.6: The City shall use the development and building permit review processes to site new construction in ways that reduce noise levels.

4. Policy HS-9.9: When feasible and appropriate, the City shall limit construction activities to that portion of the day when the number of persons occupying a potential noise impact area is lowest.

5. Policy HS-9-10: The City shall encourage new development to maintain the ambient sound environment as much as possible. The City shall require new transportation-related noise sources that cause the ambient sound levels to exceed the compatibility standards in Table 8-1 to incorporate conditions or design modifications to reduce the potential increase in the noise environment.

6. Policy HS-9.11: The City shall regulate construction in a manner that allows for efficient construction mobilization and activities, while also protecting noise sensitive land uses.

7. Policy HS-9.13: The City shall require new residential projects to provide for an interior CNEL of 45 dB or less due to exterior noise sources. To accomplish this, the City shall review all residential and other noise sensitive land uses within the 60 dB contours defined in the Table 8-2 and Figure 8-11 (not shown) to ensure that adequate noise attenuation has been incorporated into the design of the project, or that other measures are implemented to protect future sensitive receptors.

8. Policy HS-9.14: The City shall encourage new development to identify alternatives to the use of sound walls to attenuate noise impacts. Appropriate techniques include site planning such as incorporating setbacks, revisions to the architectural layout such as changing building orientation to provide noise attenuation for portions of outdoor yards, and construction modifications. In the event that sound walls are the only practicable alternative, such walls should be designed to be as visually pleasing as possible, incorporating landscaping, variations in color and patterns and/or changes to texture or building materials.

3. **City of Napa Municipal Code**

   Section 17.52.310 of the Napa Municipal Code establishes the City's noise standards:

   A. Public Address Systems. Noise control regulations related to outdoor public address/amplification (PA) systems, except for PA systems associated with an approved discretionary permit, are regulated in accordance with Section 8.08.010 of the Napa Municipal Code, or, in city parks, in accordance with Chapter 12.40.

   B. Commercial Activity. Noise related to commercial activity is regulated per Section 8-08.020 of the Municipal Code.

   C. Construction Activity. Noise related to construction activities is regulated per Section 8.08.025 of the Municipal Code.
E. Development Projects. Development projects shall address noise standards and policies in the General Plan as follows:

1. Proposed residential projects and other noise sensitive land uses (such as but not limited to schools and residential care facilities) within 60 dB CNEL contours of highways, arterials and some collectors listed in the General Plan Table 8-2 shall prepare a noise analysis as part of the project’s CEQA review to identify how 60 dB CNEL noise standards will be met and incorporate needed noise attenuation measures.

2. Proposed non-residential projects that in the opinion of the Community Development Director could generate noise that would, at the boundary of adjacent residential district properties, increase ambient noise levels by five dB CNEL or more, or in excess of 60 dB CNEL, shall prepare a noise analysis as part of the project’s CEQA review to identify anticipated noise levels and recommend noise attenuation measures to maintain ambient levels and to keep levels below 60 dB CNEL. Such measures shall be incorporated into the project approval.

3. Non-residential projects adjacent to residential districts shall locate or design potential noise generation areas, such as, but not limited to, truck parking and loading docks, garbage collection areas, to minimize impacts on adjacent sensitive uses to the extent feasible.

Section 8.08.010 - Outdoor sound systems - Permit required - of the City's Municipal Code addresses permit requirements for outdoor sound systems:

It is unlawful for any person to operate a loudspeaker, public address system or sound amplification system if such loudspeaker, public address system or sound amplification system can be heard outside any building, save and except as follows:

A. If said loudspeaker, public address system or sound amplification system is to be operated from an automobile between the hours of 9:00 a.m. and 9:00 p.m., a permit to so operate or play the same must first be obtained from the City Manager as hereinafter stated;

B. If said loudspeaker, public address system or sound amplification system is to be operated other than from an automobile at any time of the day or night, such operation must first be approved by the City Manager.

C. If said loudspeaker, public address system or sound amplification system is to be operated in connection with the playing of a musical instrument for fewer than three days in one year period, such operation must first be approved by the City Manager;

D. If said loudspeaker, public address system or sound amplification system is to be used in connection with a parade or filming operation for which a permit has been obtained, this section shall not be applicable;

E. If said loudspeaker, public address system or sound amplification system is used in connection with a use for which a permit has been obtained pursuant to Title 17 of this code, this section shall not be applicable.
Section 8.08.020 of the City’s Municipal Code regulates noise from commercial activity. The applicable portion of the section states:

A. Between the hours of 9:00 p.m. and 7:00 a.m., no commercial activity shall be conducted upon any privately owned real property within the city, which activity creates noise which can be heard at the property line of any parcel of real property within the city which bears an RP, residential/professional office district, or more restrictive zoning designation, as provided in Title 17 of this code unless a permit shall first have been secured from the City Manager pursuant to Section 2.08.050 of this code. The City Manager shall grant such permit if it reasonably appears that: (1) the activity is otherwise permitted under this code; and (2) the benefit to be derived by the applicant from conducting such activity at the time and place specified in the application outweighs the detriment to be suffered by the neighborhood, by neighboring residents and by the city generally. The collection of garbage and trash pursuant to Chapter 5.60 of this code is expressly exempt from the provisions of this section.

Section 8.08.025 of the Municipal Code regulates noise from construction activity. The applicable portion of this section states that any person engaged in construction activity ... shall limit said construction activity as follows:

A. Construction activities throughout the entire duration of the Project shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday. There will be no start up of machines nor equipment prior to 8:00 a.m., Monday through Friday; no delivery of materials nor equipment prior to 7:30 a.m. nor past 5:00 p.m., Monday through Friday; no cleaning of machines nor equipment past 6:00 p.m., Monday through Friday; no servicing of equipment past 6:45 p.m., Monday through Friday; and construction on weekends or legal holidays shall be limited to the hours of 8:00 a.m. to 4:00 p.m., unless a permit shall first have been secured from the City Manager, or designee, pursuant to section 8.08.050 of this code.

B. All muffler systems on construction equipment shall be properly maintained.

C. All construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding.

D. All construction and grading equipment shall be shut down when not actively in use.

F. As a separate, distinct, and cumulative remedy established for a violation of this section, the Police and/or the Code Enforcement Officer may issue a stop work order for violation of this section. Such order shall become effective immediately upon posting of the notice. After service of the stop work order, no person shall perform any act with respect to the subject property in violation of any of the terms of the stop work order, except such actions the city determines are reasonably necessary to render the subject property safe and/or secure until the violation has been corrected.
4. **Napa County Airport Master Plan**

The Napa County Airport Master Plan dated January 2008 was reviewed to establish existing aircraft noise levels at the Project site and to determine whether the Project lies within the Noise contours of the airport. Exhibit 5.10-1, Napa County Airport Noise Contours, depicts the 55 dBA, 60 dBA and 65 dBA noise contours in relation to the location of the Project.

5.10.3 **Thresholds of Significance**

The State of California and the City of Napa have established regulatory criteria for the assessment of noise impacts. The California Environmental Quality Act (CEQA) Guidelines, Appendix G, has been used to assess the potential significance of impacts pursuant to local General Plan policies, municipal code standards or the applicable standards of other agencies.

As noted in the Noise Assessment, there are no state laws directly applicable to the assessment of noise associated with new projects. Appendix G of the CEQA Guidelines states that the proposed Project would have a potentially significant impact with respect to noise if the Project will result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of persons residing or working in the project area to excessive noise levels.

f) For a project within the vicinity of a private airstrip, exposure of persons residing or working in the project area to excessive noise levels.
Chapter 5. – Environmental Setting, Impacts, and Mitigation Measures

5.10 – Noise

Draft Environmental Impact Report

Exhibit 5.10-1  Napa County Airport Noise Contours

Source: Napa County, 2004
Note: American Canyon boundaries are shown as of that date (pre-2005)
Impacts may be significant if they create a substantial permanent or temporary increase in noise. The term "substantial" is not quantified in the CEQA Guidelines. Typically, project-generated noise level increases of +3 dBA L_{dn}/CNEL or greater would be considered significant where exterior noise levels would exceed the normally acceptable noise level standard (60 dBA for residential land uses). Where noise levels would remain at or below the normally acceptable noise level standard with the Project, noise level increases of 5 dBA or greater would be considered significant. In addition to the CEQA Guidelines impact criteria, the Noise Assessment identified the following specific significance criteria:

- A significant impact would be identified if traffic generated by the Project would substantially increase noise levels at sensitive receptors in the vicinity. A substantial increase would occur if: a) noise level increases are 5 dBA C_{NEL} or greater, with a future noise level of less than 60 dBA C_{NEL}, or b) the noise level increase is 3 dBA C_{NEL} or greater, with a future noise level of 60 dBA C_{NEL} or greater.
- A significant noise impact would be identified if construction-related noise would temporarily increase ambient noise levels at sensitive receptors. Hourly average noise levels exceeding 70 dBA L_{eq} and the ambient noise environment by at least 5 dBA L_{eq} at industrial land uses in the Project vicinity in the Project vicinity for a period exceeding one year would be considered significant.
- Groundborne vibration levels exceeding 0.5 in/sec PPV would have the potential to result in cosmetic damage to existing industrial buildings that are structurally sound and designed to modern engineering standards.

### 5.10.4 Project Impacts Prior to Mitigation

Noise impacts are generally divided into short-term (temporary) and long term. Temporary impacts are associated with noise generated by construction activities. Long-term impacts are divided into impacts on surrounding land uses generated by the proposed Project and impacts that occur at the Project site. Off-site impacts from on-site activities are measured against the City's standards as they relate to both short-term construction and long-term operation.

The City of Napa General Plan establishes acceptable exterior and interior noise level thresholds used in the siting of new noise-sensitive land uses. For transient lodging, such as the Project hotels, exterior noise levels up to 65 dBA C_{NEL} are considered “normally acceptable.” The City also requires that new residential projects provide for an interior noise level of 45 dBA C_{NEL} or less due to exterior noise sources.

For office buildings, the City of Napa considers exterior noise levels up to 70 dBA C_{NEL} “normally acceptable.” Noise levels up to 75 dBA C_{NEL} are “normally acceptable” for wineries (industrial, manufacturing, utilities and agriculture land uses category). The City of Napa does not establish acceptable interior noise levels for office or industrial land uses, but the State requires that noise levels within new non-residential buildings be maintained at 50 dBA L_{eq} (1 hour) or less during hours of operation when exterior noise levels exceed 65 dBA L_{dn}/CNEL.
The baseline levels for the proposed Project were established using the existing noise levels in the vicinity of the Project site. A noise monitoring survey was performed to quantify and characterize ambient noise levels at the site and in the Project vicinity between Tuesday, March 28, 2017 and Thursday, March 30, 2017. Industrial land uses bound the site to the north, west and south. The Hillside Christian Church is the nearest noise-sensitive receptor and is located approximately 750 feet to the east, opposite SR 221. The noise environment at the Project site and in the immediate vicinity is primarily from vehicular traffic along SR 221, local traffic on Napa Valley Corporate Way and Napa Valley Corporate Drive, and aircraft operations related to the Napa County Airport located south of the Project site.

The monitoring survey included one long-term noise measurement (LT-1) and five short-term measurements (ST-1 through ST-5) as shown on Exhibit 5.10-2, Noise Measurement Locations. As detailed below, analysis has shown the existing exterior noise levels at the Project site exceed the “normally acceptable” standards for the proposed hotel uses, generally due to existing traffic along SR 221.

LT-1 was located near the southeast corner of the Project site approximately 115 feet from the centerline of SR 221. The short-term measurement locations are as follows:

- **ST-1**  Napa County South Campus, 175 feet west of the centerline of Napa Valley Corporate Drive
- **ST-2**  SW Corner of Project site, 135 feet north of the centerline of Napa Valley Corporate Way
- **ST-3**  Proposed hotel pool area, 250 feet west of the centerline of SR 221
- **ST-4**  Proposed winery function area, 540 feet east of the centerline of Napa Valley Corporate Drive
- **ST-5**  Proposed office, 180 feet east of the centerline of Napa Valley Corporate Drive

Hourly average noise levels at the LT-1 site ranged from 65 to 67 dBA L_{eq} during the day and from 56 to 66 dBA L_{eq} at night. The community noise equivalent level (CNEL) on Wednesday, March 29, 2017 was 70 dBA CNEL. The daily trend in noise levels at LT-1 is shown on the following Exhibit 5.10-3, Noise Levels at Noise Measurement Site LT-1.
Source: Figure 1, Illingworth & Rodkin, Inc., August 2, 2017 (Appendix M to this EIR)

**Exhibit 5.10-2 Noise Measurement Locations**
Exhibit 5.10-3  Noise Levels at Noise Measurement Site LT-1

Source: Figure 2, Noise and Vibration Assessment, Illingworth & Rodkin, Inc., August 2, 2017 (Appendix M to this EIR)
Short-term noise measurements ST-1 through ST-5 were conducted on Thursday, March 30, 2017 to document noise levels throughout the Project site and nearby industrial land uses. Aircraft produced maximum instantaneous noise levels ranging from approximately 67 to 73 dBA $L_{\text{max}}$ throughout the Project area. At Site ST-3, trucks along SR 221 produced maximum instantaneous noise levels ranging from 68 to 71 dBA. Automobiles produced maximum instantaneous noise levels ranging from 56 to 58 dBA. As noted, ambient noise sources primarily included local and distant vehicular traffic punctuated by intermittent aircraft overflights. The results of the short-term measurements are detailed in Table 5.10-4 below.

<table>
<thead>
<tr>
<th>Noise Measurement Location</th>
<th>$L_{\text{max}}$</th>
<th>$L_{(1)}$</th>
<th>$L_{(10)}$</th>
<th>$L_{(50)}$</th>
<th>$L_{(90)}$</th>
<th>$L_{\text{min}}$</th>
<th>$L_{\text{eq}}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST-1: Napa County South Campus, 175 feet west of the centerline of Napa Valley Corporate Drive (3/30/2017, 10:10 a.m. - 10:20 p.m.)</td>
<td>68</td>
<td>64</td>
<td>54</td>
<td>48</td>
<td>46</td>
<td>45</td>
<td>53</td>
</tr>
<tr>
<td>ST-2: Southwest corner of Project Site, 135 feet north of the centerline of Napa Valley Corporate Way (3/30/2017, 10:40 a.m. - 10:50 a.m.)</td>
<td>61</td>
<td>60</td>
<td>57</td>
<td>54</td>
<td>50</td>
<td>47</td>
<td>55</td>
</tr>
<tr>
<td>ST-3: Proposed Hotel pool area, 250 feet west of the centerline of SR 221 (3/30/2017, 11:00 a.m. - 11:10 a.m.)</td>
<td>72</td>
<td>65</td>
<td>61</td>
<td>56</td>
<td>51</td>
<td>49</td>
<td>58</td>
</tr>
<tr>
<td>ST-4: Proposed Winery function area, 540 feet east of the centerline of Napa Valley Corporate Drive (3/30/2017, 11:20 a.m. - 11:30 a.m.)</td>
<td>72</td>
<td>69</td>
<td>60</td>
<td>56</td>
<td>51</td>
<td>48</td>
<td>58</td>
</tr>
<tr>
<td>ST-5: Proposed Office, 180 feet east of the centerline of Napa Valley Corporate Drive (3/30/2017, 11:40 a.m. - 11:50 a.m.)</td>
<td>73</td>
<td>72</td>
<td>61</td>
<td>54</td>
<td>50</td>
<td>48</td>
<td>59</td>
</tr>
</tbody>
</table>

The Napa County Airport Master Plan noise contours indicate that the Project is located more than a mile outside the airport’s 55 dBA CNEL noise contour. Aircraft flying over the Project site produce maximum instantaneous noise levels ranging from approximately 67 to 73 dBA $L_{\text{max}}$. The measured data confirmed that aircraft noise at the Project site is substantially below 55 dBA CNEL and noise from individual aircraft events is clearly audible but not excessive.

2. Short-Term Construction Noise Impacts

Construction

Project construction is anticipated to commence in the fall of 2017 and continue for approximately 19 months. Demolition, site preparation, grading and trenching would occur over approximately three months. Paving would last approximately one month at the end of the Project construction. These phases would generate the highest levels of noise. Building construction architectural coating phases would last approximately 15 months.

Construction noise represents a short-term impact on ambient noise levels. High levels of noise can be generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators. Construction activities would include site preparation including trenching for utilities/services, grading and
foundation work, paving, new building framing and finishing. The noise decreases with distance and intervening structures and terrain.

Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day, the construction occurs in areas immediately adjoining noise-sensitive land uses or when construction lasts over extended periods of time. Construction activities for individual projects are typically carried out in stages. A different mix of equipment would operate during each stage and noise levels would vary based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at a distance of 50 feet are shown in Table 5.10-5 and Table 5.10-6. Table 5.10-5 shows the average noise level ranges, by construction phase, and Table 5.10-6 shows the maximum noise level ranges for different construction equipment.

### Table 5.10-5 Typical Ranges of Construction Noise Levels at 50 Feet, $L_{eq}$ (dBA)

<table>
<thead>
<tr>
<th></th>
<th>Domestic Housing</th>
<th>Office Building, Hotel, Hospital, School, Public Works</th>
<th>Industrial Parking Garage, Religious Amusement &amp; Recreations, Store, Service Station</th>
<th>Public Works Roads &amp; Highways, Sewers, and Trenches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Ground Clearing</td>
<td>83</td>
<td>83</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>Excavation</td>
<td>88</td>
<td>75</td>
<td>89</td>
<td>79</td>
</tr>
<tr>
<td>Foundations</td>
<td>81</td>
<td>81</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Erection</td>
<td>81</td>
<td>65</td>
<td>87</td>
<td>75</td>
</tr>
<tr>
<td>Finishing</td>
<td>88</td>
<td>72</td>
<td>89</td>
<td>75</td>
</tr>
</tbody>
</table>

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.


### Table 5.10-6 Construction Equipment 50-foot Noise Emission Limits

<table>
<thead>
<tr>
<th>Equipment Category</th>
<th>$L_{max}$ Level (dBA)</th>
<th>Impact/Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arc Welder</td>
<td>73</td>
<td>Continuous</td>
</tr>
<tr>
<td>Auger Drill Rig</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Backhoe</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Bar Bender</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Boring Jack Power Unit</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Chain Saw</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Compressor$^3$</td>
<td>70</td>
<td>Continuous</td>
</tr>
<tr>
<td>Compressor (other)</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Concrete Mixer</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Concrete Pump</td>
<td>82</td>
<td>Continuous</td>
</tr>
<tr>
<td>Concrete Saw</td>
<td>90</td>
<td>Continuous</td>
</tr>
<tr>
<td>Concrete Vibrator</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Crane</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Dozer</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Excavator</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Front End Loader</td>
<td>80</td>
<td>Continuous</td>
</tr>
<tr>
<td>Generator</td>
<td>82</td>
<td>Continuous</td>
</tr>
<tr>
<td>Generator (25 KVA or less)</td>
<td>70</td>
<td>Continuous</td>
</tr>
<tr>
<td>Gradall</td>
<td>85</td>
<td>Continuous</td>
</tr>
<tr>
<td>Grader</td>
<td>85</td>
<td>Continuous</td>
</tr>
</tbody>
</table>
### Equipment Category | $L_{\text{max}}$ Level (dBA) | Impact/Continuous
--- | --- | ---
Grinder Saw | 85 | Continuous
Horizontal Boring Hydro Jack | 80 | Continuous
Hydra Break Ram | 90 | Impact
Impact Pile Driver | 105 | Impact
Insitu Soil Sampling Rig | 84 | Continuous
Jackhammer | 85 | Impact
Mounted Impact Hammer (hoe ram) | 90 | Impact
Paver | 85 | Continuous
Pneumatic Tools | 85 | Continuous
Pumps | 77 | Continuous
Rock Drill | 85 | Continuous
Scraper | 85 | Continuous
Slurry Trenching Machine | 82 | Continuous
Soil Mix Drill Rig | 80 | Continuous
Street Sweeper | 80 | Continuous
Tractor | 84 | Continuous
Truck (dump, delivery) | 84 | Continuous
Vacuum Excavator Truck (vac-truck) | 85 | Continuous
Vibratory Compactor | 80 | Continuous
Vibratory Pile Driver | 95 | Continuous
All other equipment with engines larger than 5 HP | 85 | Continuous

Notes:
1. Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.
2. Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.
3. Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.


As shown, hourly average noise levels due to construction activities would range from about 75 to 89 dBA $L_{\text{eq}}$ at a distance of 50 feet. Maximum instantaneous noise levels typically range from about 80 to 90 dBA $L_{\text{max}}$ at a distance of 50 feet. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor.

Assuming that all construction activities for the proposed Project are conducted in accordance with Section 8.08.025 of the Napa Municipal Code, noise generated by construction activities would not be in excess of the established standards. The standards require the following:

- All construction activities to be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday.
- Equipment start up cannot occur before 8:00 a.m.
- No delivery of materials or equipment can occur prior to 7:30 a.m. or past 5:00 p.m.
- No cleaning of machines or equipment can occur past 6:00 p.m.
- No servicing of equipment can occur past 6:45 p.m.
- Construction on weekends or legal holidays is limited to the hours of 8:00 a.m. to 4:00 p.m. unless a permit is secured from the City Manager.
Compliance with the City's Municipal Code Section 8.08.025 will be required as mitigation herein.

**Vibration Impacts**

Vibration impacts due to construction activities may be perceptible when heavy equipment or impact tools are used. Construction activities such as drilling, use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (e.g., tracked vehicles, compactors) may generate substantial vibration in the immediate vicinity. The proposed Project is not expected to require pile driving, which can cause excessive vibration.

The California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. All existing buildings in the immediate vicinity of the Project site were designed to modern engineering standards and, therefore, groundborne vibration levels exceeding 0.5 in/sec PPV would have the potential to result in a significant vibration impact. Table 5.10-7 depicts typical vibration levels that could be anticipated at a reference distance of 25 feet, 30 feet and 55 feet. These distances represent the locations of the nearest off-site industrial buildings from the Project property line.

**Table 5.10-7  Vibration Source Levels for Construction Equipment**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>PPV at 25 ft. (inches per second)</th>
<th>PPV at 30 ft. (inches per second)</th>
<th>PPV at 55 ft. (inches per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pile Driver (Impact)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper range typical</td>
<td>1.158</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>typical</td>
<td>0.644</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Pile Driver (Sonic)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper range typical</td>
<td>0.734</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>typical</td>
<td>0.170</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Clam shovel drop</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>0.202</td>
<td>0.165</td>
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<tr>
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<td>0.008</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>in rock</td>
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<tr>
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<td>0.089</td>
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<td>0.003</td>
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</table>


The nearest industrial buildings to the Project site are approximately 30 feet from the proposed hotel location. At this distance, vibration levels from activities having the highest potential for vibration (e.g. vibratory roller) would be up to 0.172 in/sec PPV, which would be below the 0.5 in/sec PPV threshold. Other industrial buildings near the site are located
approximately 55 feet from the office location. At a distance of 55 feet, vibration levels could be expected to reach up to 0.088 in/sec PPV, which is also below the 0.5 in/sec PPV threshold.

While Project construction is not expected to cause damage to nearby industrial buildings, vibration levels may be perceptible at times. However, due to the intermittent and short duration of such construction activities, impacts are not considered significant. Mitigation measures included herein will result in a less than significant impact due to vibration levels.

3. **Long-Term (Operational) Noise Impacts**

The proposed Project consists of three components - a dual-brand hotel, a winery and an office building. Each component will produce operational impacts related to noise. In addition, the Noise Assessment considered the noise impact from the additional traffic generated by the Project. The Noise Assessment identified that existing ambient noise conditions at the proposed hotel, winery, and office locations resulted in a 70 dBA CNEL during daytime hours, mainly due to existing traffic. The following analysis of the individual components is based on consistency with the City’s General Plan thresholds and includes the Project-generated traffic.

**Hotel**

The hotel component proposes a common outdoor use area that includes a pool, spa, cabanas, barbeque area and seating area with fire pit. The center of the pool would be set back approximately 265 feet from the centerline of SR 221. Future exterior noise levels due to traffic are calculated to reach 68 dBA CNEL at the center of the outdoor use area, exceeding the City’s “normally acceptable” exterior noise level limit of 65 dBA CNEL by 3 dBA.

Exterior noise levels at the facade of the hotel facing Napa Valley Corporate Way and SR 221 are calculated to range from 65 to 69 dBA CNEL. Building design and construction materials and methods will impact the interior noise levels. Standard hotel construction with windows and doors closed provides approximately 20 to 25 dBA of interior noise reduction. In addition, the inclusion of adequate forced air mechanical ventilation can reduce interior noise levels to acceptable levels with windows closed. Where noise levels exceed 65 dBA CNEL, forced-air mechanical ventilation systems and sound-rated construction methods are normally required. The proposed Project interior noise levels are anticipated to range from 45 to 49 dBA CNEL with windows and doors closed. This would exceed the City’s 45 dBA CNEL threshold for interior noise by up to 4 dBA CNEL.

**Winery**

The winery component of the Project includes an outdoor event lawn approximately 480 feet from the centerline of SR 221. Future exterior noise levels at the event lawn are calculated to range from 60 to 64 dBA CNEL, assuming partial shielding due to the intervening winery and hotel buildings. Future exterior noise levels at the outdoor event lawn would not exceed the City of Napa’s “normally acceptable” exterior noise level
level limit of 75 dBA CNEL. The 5,500-square-foot lawn area will be used for small events and wine tastings for approximately 150 people. However, events that include amplified music or public address system equipment could result in an exceedance of outdoor noise thresholds. The City’s Municipal Code requires a conditional use permit to ensure all amplified music and public address systems are operated consistent with the applicable Municipal Code provisions. The Project will comply with the City’s Municipal Code related to noise.

Office

Exterior noise levels at the office building location would range from 60 dBA CNEL at the easternmost façade to 68 dBA CNEL at the westernmost façade adjacent to Napa Valley Corporate Drive. Future exterior noise levels would not exceed the City’s “normally acceptable” exterior noise level limit of 70 dBA CNEL. However, the proposed office building would be exposed to exterior noise levels exceeding 65 dBA CNEL, triggering the mandatory exterior sound transmission controls as established by the CALGreen Building Code.

The noise level goal for inside offices varies depending on the type of office space. The CalGreen Code requires interior noise levels to be maintained at 50 dBA $L_{eq}$ (1 hour) or less during hours of operation. Standard office construction normally provides 30 dBA of noise reduction in interior spaces. Assuming standard office construction methods, predicted interior noise levels would be about 38 dBA $L_{eq}$ which would meet the 50 dBA noise limit established in CALGreen Code §5.507.4.2. Interior noise levels would be compatible with the proposed use and below the CALGreen Code interior noise limit.

For consistency with the General Plan, the Noise Assessment recommended Conditions of Approval for the hotel component of the Project. The Conditions of Approval are included herein in Section 5.10.5, Mitigation Measures.

Operational Noise at Industrial Land Uses

Neither the City of Napa General Plan nor the City of Napa Municipal Code regulates noise from industrial operations on other industrial operations. The Napa General Plan establishes 75 dBA CNEL as the “normally acceptable” noise exposure level with siting new industrial land uses. Assuming 24-hour per day operations, mechanical equipment producing hourly average noise levels of 68 dBA $L_{eq}$ would result in a noise level of 75 dBA CNEL. Therefore, to not exceed the threshold, mechanical equipment should not produce noise levels exceeding 68 dBA $L_{eq}$ at adjoining industrial property lines.

Mechanical equipment (heating, ventilation and air conditioning systems) will be included in the Project and would likely be installed on the rooftops of the hotel and office buildings, shielded by roof screens or parapets. The winery would likely include similar equipment as well as other mechanical equipment located within the winery back-of-house area used during the winemaking process (e.g., chillers, condensing units, compressors) As shown on the site plan, a winery water treatment area southwest of the building is immediately adjacent to existing industrial land uses. While specific information regarding the number, type and size of the mechanical units
was not available at the time the Noise Assessment was prepared, typical noise levels produced by similar mechanical equipment would range from approximately 50 to 65 dBA $L_{eq}$ at a distance of 50 feet. Assuming 24-hour per day operations, mechanical equipment could produce noise levels ranging from approximately 57 to 72 dBA CNEL at 50 feet. There is a potential that mechanical equipment noise levels would exceed the 75 dBA CNEL “normally acceptable” threshold given the proximity of the winery back-of-house area and winery water treatment area. This is a potentially significant impact.

Seasonal crushing and bottling operations at the winery would also produce operational noise from the operation of presses, hoppers, de-stemmers, separators, crushers, air compressors, forklifts, conveyors, etc. Average noise levels from the crush are typically constant on an hourly basis. Noise levels from individual specific pieces of equipment are generally around 50 dBA $L_{eq}$ at 50 feet. However, the composite crush activities at a winery typically generate noise levels of about 67 dBA $L_{eq}$ at a distance of 50 feet from center of operations. During the crush, discrete maximum noise events such as truck circulation or the setting of empty bins may reach 70 to 80 dBA at 50 feet from the center of operations.

While bottling operations would be constant on an hourly basis, and occur only a few weeks during the year, it is anticipated bottling operations could produce $L_{eq}$ sound levels of 67 dBA at 50 feet in an open air, non-acoustically shielded environment. Seasonal crushing and bottling operations could produce a noise level of 66 dBA CNEL at a distance of 50 feet, which is below the 75 dBA CNEL “normally acceptable” noise threshold, resulting in a less than significant impact.

**Operational Noise at Noise-Sensitive Land Uses**

Section 8.08.020 of the Napa Municipal Code regulates noise from commercial activity. Operational noise levels for mechanical equipment associated with the winery are calculated to be 36 dBA $L_{eq}$ or less at the nearest existing sensitive receptor located approximately 1,400 feet from the winery back-of-house area. The projected noise levels are less than the ambient noise levels due to traffic noise in the Project vicinity.

The Napa Pipe Project, located over 1,100 feet from the winery back-of-house area and partially shielded by intervening buildings, would be exposed to projected operational levels of 38 dBA $L_{eq}$ or less. Mechanical equipment associated with the Project is not anticipated to produce noise levels that would be audible above ambient conditions day or night; therefore, the impact at the nearest sensitive receptors would be less than significant.

Seasonal operations due to crushing or bottling operations would produce noise levels of about 38 to 40 dBA $L_{eq}$ at the nearest sensitive receptors. The noise levels would be less than the ambient noise levels attributable to traffic noise sources in the Project vicinity. Seasonal winery operational noise levels are not anticipated to produce noise levels that would be audible above ambient conditions at the nearest sensitive receptors, resulting in a less than significant impact.
The event lawn area south of the winery building will potentially be used for promotional events, corporate events and weddings. The Noise Assessment considered that the highest noise levels attributable to such events would likely result from amplified music played outdoors. Such events would be anticipated to produce noise levels of approximately 72 dBA Leq at a distance of 50 feet assuming free-field conditions. Operational noise associated with such events is calculated to be 43 dBA Leq or less at the nearest existing sensitive receptors located approximately 1,400 feet from the event lawn. Noise levels at the Napa Pipe project are calculated to be 45 dBA Leq. Noise levels may be audible at existing or proposed noise-sensitive receptors, conflicting with provisions of Section 8.08.020 of the Napa Municipal Code and impacts are, therefore, potentially significant.

Noise from sound amplification systems or public address systems are regulated by City Municipal Code Section 8.08.010 - Outdoor sound systems. It is reasonable to assume that a public address system or amplified music will be operated from time to time on the event lawn. However, such operation will be required to comply with the Project’s use permit conditions in compliance with Section 8.08.010. Mitigation Measure N-4 is included herein to ensure compliance resulting in a less than significant impact.

4. **Traffic Noise**

Long-term off-site impacts from traffic noise are measured against two criteria. A substantial increase would occur if: a) the noise level increase is 5 dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or b) the noise level increase is 3 dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater. In community noise assessment, changes in noise levels greater than 3 dB are often identified as significant while changes less than 1 dB are generally not discernible to local residents. It should be noted that there is no scientific evidence to support the use of 3 dB as the significance threshold. Community noise exposures occur over a long-time period and changes in noise levels occur over years. Therefore, the level at which changes in ambient community noise levels become discernible is likely to be some value greater than 1 dB and 3 dB appears to be appropriate for most people. For reference, traffic volumes would have to double for noise levels to increase by 3 dBA CNEL and triple for noise levels to increase by 5 dBA CNEL.

Traffic noise from SR 221 dominates the noise environment in the immediate vicinity. Kimley Horn traffic consultants provided a Traffic Impact Study which analyzed peak hour traffic volumes for 16 intersections in the Project and greater Napa area. The Traffic Study in its entirety can be found as Appendix O in this DEIR and the traffic analysis is included as Section 5.13 of this DEIR.

The Noise Assessment analysis examines noise impacts from the proposed Project on surrounding land uses and the compatibility of the proposed Project with the noise environment. Increased traffic resulting from the Project will increase traffic noise levels along the roadways in the vicinity of the Project site. However, a comparison of the Existing and Existing Plus Project traffic data shows that the Project would increase traffic noise levels by 0 dBA along SR 221, and by 0 to 1 dBA along Napa Valley Corporate Drive and Napa Valley
Corporate Way. Project-generated traffic noise level increases would be less than 1 dBA along all other roadways serving the site.

An increase in peak-hour traffic volumes would correlate to an increase in the CNEL noise level. Therefore, traffic noise level increases along the roadways serving the Project site would be less than 1 dBA CNEL and less than the 3 dBA CNEL significance threshold. Therefore, the proposed Project would not cause a substantial permanent increase in noise levels due to traffic and the impact is less than significant.

5. Aircraft Noise

As noted, the Project site is not within the Napa County Airport Master Plan 55 dBA CNEL noise contour as shown on Exhibit 5.10-1, Napa County Airport Noise Contours (page 5.10-12). While aircraft flyovers occur at the Project site, and noise from individual aircraft events is clearly audible, the noise levels are not excessive. Therefore, aircraft noise impacts are insignificant.

5.10.5 Mitigation Measures

1. Standard Mitigation Measures

None required. The City of Napa Policy Resolution 27 does not include mitigation measures in the area of Noise.

2. Special Mitigation Measures

The following Special Mitigation Measures are provided herein based on the recommendations in the Noise Assessment as detailed above.

- **MM N-1** During the construction phase, the Project Applicant shall ensure that all construction activities shall comply with all requirements in Section 8.08.025 of the Napa Municipal Code, including limiting hours of construction to 7:00 a.m. to 7:00 p.m. Monday through Friday on weekdays and 8:00 a.m. to 4:00 p.m. on weekends or legal holidays unless a permit shall first have been secured from the City Manager.

- **MM N-2** Prior to issuance of building permits, Project Applicant shall ensure that mechanical equipment associated with the winery component of the Project shall be selected and designed to reduce impacts on surrounding uses to meet the City’s General Plan noise level thresholds for industrial land uses. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the noise performance standard. Noise reduction measures could include but are not limited to, selection of equipment that emits low noise levels and installation of noise barriers such as enclosures to block the line of sight between the noise source and the nearest receptors.
Prior to commencement of construction activities, Project Applicant shall notify adjacent building occupants of scheduled construction activities and schedule such activities during hours with the least potential to affect nearby occupants to the extent feasible.

During special events, the Project Applicant shall ensure all public address or sound amplification systems are operated consistent with the provisions of Sections 17.52.310 and Section 8.08.010 of the Municipal Code including the conditions of the Project use permit.

3. **Best Management Practices**

   In addition to the recommended special mitigation measures, the Noise Assessment included the following best management practices to ensure further reduction in noise impacts specifically due to construction:

   **BMP-4** Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

   **BMP-5** Unnecessary idling of internal combustion engines should be prohibited.

   **BMP-6** Utilize “quiet” air compressors and other “quiet” equipment where technology exists.

   **BMP-7** Notify all adjacent businesses, residences and other noise-sensitive land uses of the construction schedule and provide a written schedule of “noisy” construction activities.

   **BMP-8** Temporary plywood noise barriers or noise control blanket barriers should be erected if scheduling conflicts occur related to timing of construction activities to minimize impacts from noisy construction.

   **BMP-9** Identify a contact name/number for a coordinator who would be responsible for responding to any complaints about construction noise. The coordinator will investigate the complaint and require that reasonable measures be implemented to correct the problem. The name/number should be posted at the construction site.

4. **Conditions of Approval**

   For consistency with the General Plan, the following Conditions of Approval are recommended in the Noise Analysis related to the hotel component of the Project. These Conditions of Approval are not mitigation but rather address the environment into which the Project will be constructed. Hourly average existing noise levels at the southeast corner of the Project site range from 65 to 67 dBA during the day. The Project’s contribution to traffic noise along the roadways serving the Project site will be less than 1 dBA, less than the 3 dBA increase threshold. However, the recommendations below will reduce the existing and future
exterior noise impacts at the proposed hotel to the City's “normally acceptable” levels and ensure consistency with the City's General Plan policies.

COA-1 A minimum 6-foot noise barrier shall be constructed to shield the hotel’s outdoor use area. A 6-foot noise barrier would provide at least 5 dBA of noise reduction and would maintain exterior noise levels below the City of Napa’s “normally acceptable” exterior noise level limit of 65 dBA CNEL.

COA-2 A qualified acoustical engineer shall prepare a detailed analysis of interior noise levels resulting from all exterior sources during the design phase of the Project. The study will review the final site plan, building elevations and floor plans prior to construction and recommend building treatments to reduce interior noise levels to 45 dBA CNEL or lower. Treatments could include, but are not limited to, sound-rated windows and doors, acoustical caulking, protected ventilation openings, etc. The specific determination of what noise insulation treatments are necessary shall be conducted on a unit-by-unit basis during final design of the Project. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City, along with the building plans and approved design, prior to issuance of a building permit.

COA-3 Provide sound rated windows to maintain interior noise levels at acceptable levels. Preliminary calculations show that sound-rated windows with minimum STC ratings of 26 to 30 would be satisfactory for rooms adjoining Napa Valley Corporate Way and SR 221 to achieve acceptable interior noise levels.

COA-4 Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for all hotel rooms so that windows can be kept closed to control noise.

5.10.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that a project would have a significant impact if it would:

a) Expose persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance,

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels,

c) A substantial permanent increase in ambient noise levels,

d) A substantial temporary or periodic increase in ambient noise levels,

e) Exposure of persons residing or working in the project area located within an airport land use plan or within two miles of a public airport,

f) Exposure of persons residing or working in the project area to excessive noise levels within the vicinity of a private airstrip.

1. Short-Term Construction Impacts

Analysis shows that short-term construction activities could generate noise levels above the City’s thresholds. Mitigation Measure MM N-1 will ensure that the Project is consistent with
the City’s Municipal Code Section 8.08.025 which regulates when day and time of day construction activities are permitted. Therefore, Project construction will not result in exposure of persons to or generation of noise levels in excess of standards established in the City General Plan or Municipal Code or applicable standards of other agencies. Construction related vibration impacts have been determined to be perceptible, but below the 0.5 inches per second PPV threshold. A temporary increase in ambient noise levels will result from Project construction; however, adherence to City’s noise impact standards is required by Mitigation Measures MM N-1 to reduce impacts.

2. Long-Term Operational Impacts

Analysis in the Noise Assessment shows that the Project will not result in significant long-term off-site traffic noise impacts and no mitigation is required. A review of the traffic analysis data shows that the Project traffic volumes would result in an increase of less than 1 dBA CNEL, less than the 3 dBA CNEL significance threshold.

The Noise Assessment analyzed individual components of the Project in terms of noise impacts. The hotel component could experience exterior noise levels up to 68 dBA CNEL. A Condition of Approval requiring construction of a noise barrier along the hotel’s outdoor use area would reduce noise levels below the City’s “normally acceptable” limit of 65 dBA CNEL.

The Assessment noted that with application of standard hotel construction materials and methods, the interior noise levels can be reduced by approximately 20 to 25 dBA. The Noise Assessment provided Conditions of Approval related to noise attenuation to ensure consistency with the City’s General Plan thresholds. Application of the Conditions of Approval will result in a less than significant impact to the interior noise levels of the hotel component. Implementation of the Mitigation Measures provided herein will reduce impacts due to short-term construction equipment noise and long-term operational and traffic noise to less than significant.

In response to the CEQA Guidelines Appendix G Checklist, analysis has shown:

a) The proposed Project will not expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code with application of the Mitigation Measures included herein.

b) The proposed Project will not expose persons to excessive vibration levels exceeding the established threshold levels and the impact is less than significant.

c) Traffic generated by the proposed Project will be less than the 1 dBA CNEL and less than the 3 dBA CNEL significance threshold. The Project will not cause a substantial permanent noise level increase at noise-sensitive receptor locations and the impact is, therefore, less than significant due to traffic noise.

d) Construction noise levels could result in periodic increases in noise that exceed significance thresholds. However, compliance with the City’s regulations for construction activity hours and days of operation will ensure that the impact is less than significant. There will be no permanent increase in noise levels in the vicinity that exceed established thresholds either due to traffic or Project component operations.

e) The Project site is located outside the Napa County Airport Master Plan 55 dBA CNEL noise contour. Hotel guests and office/winery employees will not be exposed to
excessive noise levels due to aircraft operations. The Project is not located in the vicinity of a private airstrip.

The proposed Project will not result in short-term or long-term noise impacts that cannot be reduced to less than significant levels through implementation of the Mitigation Measures, conditions of approval and best management practices identified herein.

5.10.7 Cumulative Impacts

Cumulative proposed projects within the vicinity of the proposed Project include the Napa Pipe project and the Meritage Commons development which, like the proposed Project, is located in the Napa Valley Commons corporate park. Both projects have been analyzed for environmental impacts and mitigation measures were adopted to reduce impacts individually and cumulatively. Construction noise from the three projects, which will not occur concurrently, is regulated by the City’s Municipal Code and is exempt during specific days and times. With mitigation, the Meritage Commons project and the Napa Pipe project operational noise impacts are less than significant.

With respect to traffic, a significant cumulative impact would occur if two criteria are met: 1) if the cumulative traffic noise level increase at noise-sensitive receptors was 3 dBA CNEL or greater where noise levels would exceed 60 dBA CNEL, or if the cumulative traffic noise level increase at noise-sensitive receptors was 5 dBA CNEL where noise levels would remain below 60 dBA CNEL; and 2) if the project would make a “cumulatively considerable” contribution to the overall traffic noise increase. A “cumulatively considerable” contribution would be defined as an increase of 1 dBA CNEL or more attributable solely to the proposed project.

Cumulative traffic noise level increases were calculated by comparing the Cumulative traffic volumes and the Cumulative Plus Project volumes to Existing traffic volumes. The Hillside Christian Church is the nearest noise-sensitive receptor site to the east, opposite SR 221. A traffic noise increase of 3 dBA CNEL or greater was calculated under both Cumulative scenarios (year 2035 with and without the project) along SR 221, both north and south of Napa Valley Corporate Way. However, these noise increases were calculated with and without the proposed Project, with a maximum project contribution of 0.1 dBA to the Cumulative Plus Project (year 2035 existing noise plus Project) noise level increase. Therefore, the Project would not make a cumulatively considerable contribution to increased noise levels anticipated under cumulative conditions, and the impact is less-than-significant.

Therefore, with mitigation, the Project’s individual contribution when combined with other area projects would not be considerable. The proposed Project would not result in a cumulative impact.

5.10.8 Unavoidable Adverse Impacts

Implementation of the Mitigation Measures, conditions of approval and best management practices included herein will reduce all significant impacts due to noise to a level of less than significant. The Project will not result in an unavoidable significant noise impact.
5.11 Population and Housing

This section analyzes the impacts related to the availability of housing associated with employees of the proposed Project. The proposed Project does not include new housing but has the potential to generate between 238 and 329 worker-households as stated in the Review of Housing Impacts from The Trinitas Project in Napa report (Housing Report) prepared by Economic & Planning Systems, Inc. (EPS) dated September 12, 2017. The Housing Report is included as Appendix N to this DEIR.

5.11.1 Existing Conditions

The Project is located in a corporate park that includes hotel, office, and industrial uses. Housing is not permitted within the Industrial Park District zoning designation, and there is no housing in Napa Valley Corporate Park. Uses permitted are limited to manufacturing, warehousing, office, and public and quasi-public uses, including hotels. The City of Napa is the largest city and the county seat of Napa County, California. It is the principal city of the Napa County Metropolitan Statistical Area, with a population of 80,011 as of the 2010 census. It is the second-largest city in California’s Wine Country, after Santa Rosa. Today's workforce is mostly white collar and the economy is increasingly based on tourism and grape and wine production, most likely due in large part to the nearly 400 wineries in the County of Napa.

5.11.2 Regulatory Setting

1. California Government Code §65584

The California Government Code requires all cities and counties to meet their respective fair share of the region's housing needs. The following table depicts the City of Napa allocation.

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<th>RHNA</th>
<th>Very Low Income</th>
<th>Low Income</th>
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<td>10</td>
<td>21</td>
<td>57</td>
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<td>201</td>
<td>116</td>
<td>151</td>
<td>424</td>
<td>892</td>
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*The City of Napa and the County of Napa have entered into two separate transfer agreements for the transfer of 57 housing units from the County to the City.

Source: Associate of Bay Area Governments, 2013, City of Napa, 2014.

2. City of Napa General Plan

The City's General Plan and Housing Element include goals and policies related to population, housing, and employment. The current Housing Element was adopted in March 2015 and includes a policy (H1.9) promoting a housing and jobs balance when considering non-residential development proposals.
3. **City of Napa Zoning Code**

Chapter 15.94 of the City Zoning Code requires the payment of Affordable Housing Impact Fees. The section states:

15.94.030 Residential and nonresidential development—Adoption of affordable housing impact fee by implementing resolution.

The City Council hereby establishes affordable housing impact fees for residential and nonresidential development, which shall be set and updated in accordance with this chapter and by implementing resolution. Such fees shall not exceed the estimated reasonable cost of mitigating the impact of residential and nonresidential development on the need for affordable housing within the city. The fees shall be established based on the methodology adopted by the City Council in the implementing resolutions and shall apply to and be calculated according to the residential and nonresidential land use categories identified in the implementing resolutions. The City Council may periodically review the affordable housing impact fees for residential and nonresidential development and adjust the fees by implementing resolution.

5.11.3 **Thresholds of Significance**

For purposes of this DEIR, the thresholds of significance for evaluation of Project impacts are based upon suggested criteria from the California Environmental Quality Act (CEQA) Environmental Checklist in Appendix G of the CEQA Guidelines. The Project would have a significant impact if it would:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere;

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.11.4 **Project Impacts Prior to Mitigation**

At the time of the 2010 U.S. Census, it was reported that Napa had 30,149 housing units, of which approximately 57% were owner-occupied and 43% were occupied by renters. The homeowner vacancy rate was 2.3% and the rental vacancy rate was 5.7%. The population at that time was 76,915. More recent statistics show that the 2017 population is 80,366 and housing has been added at the rate of approximately 200 units per year since year 2000. The average household size in the area is approximately three persons per household.

City statistics state that average income per household is $66,339. As of 2015, the average house/condo value was $543,500 and the median gross rent was $1,533.

The City provides regulatory guidance for housing and growth estimates through the goals and policies contained in the City’s General Plan Housing Element. In addition, State law requires that cities adopt plans and policies to address their share of housing need. The “fair
The "share" allocation concept seeks to ensure that each jurisdiction accepts responsibility for the housing needs, assuring availability of a variety and choice of housing accommodations for all income categories.

Napa’s job market offers a diverse mix of professions and pay levels, contributing to high housing costs. Local workers compete with retirees, who may have built up substantial equity in their prior homes, for a limited housing supply. Therefore, it may be difficult for new lower wage workers to find suitable housing in the City without assistance designed to bring the cost of housing down to an affordable range.

Table 5.11-2 presents the income categories and corresponding maximum income thresholds for three-person households.

### Table 5.11-2 Napa County Income Category Definitions (2017)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Maximum Percentage of County Median</th>
<th>Maximum Income Threshold 3-person household</th>
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<td>Very Low Income*</td>
<td>50%</td>
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<td>Low Income</td>
<td>80%</td>
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<td>Median Income</td>
<td>100%</td>
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<td>120%</td>
<td>$100,560</td>
</tr>
<tr>
<td>Above Moderate Income</td>
<td>&gt;120%</td>
<td>&gt;$100,560</td>
</tr>
</tbody>
</table>

The "Very Low Income" category also captures a combination of extremely low (0% to 30% of median incomes) and very low income (31% to 50% of median incomes) in Napa County.

Sources: California HCD; EPS.

### 1. Employment Categories

Based on the components that will be developed as part of the proposed Project, the following employment categories were utilized in the Housing Report. While most employment categories are discretely associated with a particular type of building, others may be interchangeable as tenants may shift between building types (e.g., wine sales services locating in office space or winery facilities). The Housing Report analysis bases the employment projections on North American Industry Classification System (NAICS) codes considered the most typical tenants for each land use category. The Project applicant has estimated actual employment numbers of 190 persons for the hotel, winery and office as detailed herein.

### Table 5.11-3 Employment Category Descriptions

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Description and Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>Employers engaged in business activity with limited direct access from the general public; businesses focused on professional and financial services. Examples include finance, insurance, real estate, law, engineering, and science and technology.</td>
</tr>
<tr>
<td>Wine wholesalers</td>
<td>Employers primarily engage in the merchant wholesale distribution of beer, ale, wine, and/or distilled alcoholic beverages. Examples include wine and distilled spirits merchant wholesalers, ethyl alcohol merchant wholesalers, and liquor merchant wholesalers.</td>
</tr>
<tr>
<td>Lodging</td>
<td>Lodging or short-term accommodations for travelers, vacationers, and others and comprises establishments primarily engaged in providing short-term lodging in facilities known as hotels, motor hotels, resort hotels, and motels.</td>
</tr>
</tbody>
</table>
2. **Occupational Category and Wage Distribution**

EPS used U. S. Bureau of Labor Statistics (BLS) National Industry-Specific Occupational Employment and Wage Estimates for 2016 – the most recent year available – to estimate the wages earned by employees in industry sectors related to the employment categories. This includes wage data at the national and Metropolitan Statistical Area (MSA) levels. Wage data for the MSA are provided for occupations for all industries in aggregate, while national-level data are provided by industry sector (e.g., “management” workers in retail industries versus in healthcare services). EPS calculated wage adjustment factors to account for regional wage disparities. Table 5.11-4 below shows that Napa’s regional wages exceed national averages across nearly all occupation categories. These adjustment factors were applied to the nationwide income level data by industry sector to estimate the wages for the MSA.

### Table 5.11-4  Adjustment Factors for Converting National Wages to Napa MSA Wages

<table>
<thead>
<tr>
<th>Occupation Category (All Industries)</th>
<th>US Average Wage</th>
<th>Napa MSA Average Wage</th>
<th>Napa MSA as % of US Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>$118,020</td>
<td>$123,060</td>
<td>104.3%</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>$75,070</td>
<td>$86,160</td>
<td>114.8%</td>
</tr>
<tr>
<td>Computer and Mathematical Science</td>
<td>$87,880</td>
<td>$84,820</td>
<td>96.5%</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>$84,300</td>
<td>$88,150</td>
<td>104.6%</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>$72,930</td>
<td>$90,370</td>
<td>123.9%</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>$47,200</td>
<td>$60,080</td>
<td>127.3%</td>
</tr>
<tr>
<td>Legal Occupations</td>
<td>$105,980</td>
<td>$104,660</td>
<td>98.8%</td>
</tr>
<tr>
<td>Education, Training and Library</td>
<td>$54,520</td>
<td>$58,990</td>
<td>108.2%</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>$58,390</td>
<td>$62,470</td>
<td>107.0%</td>
</tr>
<tr>
<td>Healthcare Practitioner and Technical</td>
<td>$79,160</td>
<td>$107,670</td>
<td>136.0%</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>$30,470</td>
<td>$38,140</td>
<td>125.2%</td>
</tr>
<tr>
<td>Protective Services</td>
<td>$45,810</td>
<td>$56,180</td>
<td>122.6%</td>
</tr>
<tr>
<td>Food Preparation and Serving</td>
<td>$23,850</td>
<td>$31,020</td>
<td>130.1%</td>
</tr>
<tr>
<td>Buildings and Grounds Cleaning and Maintenance</td>
<td>$28,010</td>
<td>$30,260</td>
<td>108.0%</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>$26,510</td>
<td>$30,940</td>
<td>116.7%</td>
</tr>
<tr>
<td>Sales and Related Occupations</td>
<td>$40,560</td>
<td>$42,770</td>
<td>105.4%</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>$37,260</td>
<td>$41,970</td>
<td>112.6%</td>
</tr>
<tr>
<td>Farming, Fishing and Forestry</td>
<td>$27,810</td>
<td>$31,820</td>
<td>114.4%</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>$48,900</td>
<td>$61,910</td>
<td>126.6%</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>$46,690</td>
<td>$52,580</td>
<td>112.6%</td>
</tr>
<tr>
<td>Production</td>
<td>$37,190</td>
<td>$42,580</td>
<td>114.5%</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>$36,070</td>
<td>$34,260</td>
<td>95.0%</td>
</tr>
</tbody>
</table>

Sources: BLS National Industry-Specific Occupational Employment and Wage Estimates, May 2016

BLS nationwide data regarding industries and occupation categories was used to estimate the proportion of occupations likely to be represented under each employment category. For example, EPS evaluated the occupation categories for the lodging industry to determine the proportional distribution of occupations for the employment category “Lodging.” NAICS sector 721 (Accommodation) shows that nationwide 4.3% of the jobs in the lodging industry are taken by managers, while 28.1% are in the category of buildings and grounds cleaning and maintenance. Appendix A to the Housing Report (Appendix N herein) shows the occupational distribution for all designated employment categories.

The Census Bureau’s American Community Survey shows the average number of workers per working household in the City is 1.43, which was used to multiply the wages of each
occupation. The resulting figure represents the annual household wage assuming workers form households with those of similar earning potential. Table 5.11-5 below illustrates an example of this calculation which also identifies selected assumptions and their sources.

Table 5.11-5 Illustration of Employees' Household Income Calculation

<table>
<thead>
<tr>
<th>Item</th>
<th>Source</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Category</td>
<td>City of Napa and EPS</td>
<td>Hotel</td>
</tr>
<tr>
<td>Industry</td>
<td>Bureau of Labor Statistics (BLS)</td>
<td>Accommodation (NAICS 721)</td>
</tr>
<tr>
<td>Occupation Category</td>
<td>BLS</td>
<td>Office and Administrative Support</td>
</tr>
<tr>
<td>Nationwide Average Income for Occupation</td>
<td>BLS</td>
<td>$27,710</td>
</tr>
<tr>
<td>Regional Wage Adjustment Factor for Occupation</td>
<td>BLS and EPS</td>
<td>112.6%</td>
</tr>
<tr>
<td>Average Wage Estimate for the Napa MSA</td>
<td>BLS and EPS</td>
<td>$31,213</td>
</tr>
<tr>
<td>Workers per Household</td>
<td>ACS 2015 Est.</td>
<td>1.43</td>
</tr>
<tr>
<td>Income Category for 3-person Family</td>
<td>Workers per HH Multiplied by Avg. Annual Wage</td>
<td>$44,488</td>
</tr>
<tr>
<td></td>
<td>CA HCD</td>
<td>Low Income (Up to 60% County AMI)</td>
</tr>
</tbody>
</table>

Sources: CAA Planning; BLS; American Community Survey; HCD; and EPS.

3. Employment Densities

The Housing Report notes that varying levels of employment requirements are associated with commercial operations. For example, winery facilities and other food production industries may tend to have fewer employees in a given amount of space than an office tenant in the same size building. The “employment density” for each employment category is generally determined by the number of building square feet anticipated for a certain number of employees. To calculate the “high end” of the employment range, EPS used the same employment densities that are included in the City’s 2011 affordable housing nexus study. These figures represent the maximum number of employees that might be expected from the Project. To calculate the “low end,” EPS made adjustments that reflect specific attributes of the Project. For example, the Initial Study/NOP stated that the winery was anticipated to employ a maximum of 20 employees at peak season. Also, the hotel component is anticipated to use laundry facilities and staff located off-site, and no typical full-service restaurant or major conference facilities are proposed. EPS adjusted the number of housekeeping staff and food/beverage staff downward, compared to broader industry trends. Table 5.11-6 below shows the demographic and employment density assumptions as identified herein.

Table 5.11-6 Demographic and Employment Density Assumptions

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Description and Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Assumptions(^1)</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>28,878 square feet</td>
</tr>
<tr>
<td>Wine wholesalers</td>
<td>26,214 square feet</td>
</tr>
<tr>
<td>Lodging</td>
<td>155,557 square feet</td>
</tr>
<tr>
<td>Demographic Assumptions</td>
<td></td>
</tr>
<tr>
<td>Workers per household with workers</td>
<td>1.43 persons</td>
</tr>
<tr>
<td>Persons per household with workers</td>
<td>3.63 persons</td>
</tr>
<tr>
<td>Persons per family</td>
<td>3.24 persons</td>
</tr>
<tr>
<td>Employment Density Assumptions(^2)</td>
<td></td>
</tr>
<tr>
<td>Office(^3)</td>
<td>300-400 square feet per employee</td>
</tr>
<tr>
<td>Wine wholesalers(^4)</td>
<td>750-1,311 square feet per employee</td>
</tr>
<tr>
<td>Lodging</td>
<td>450-617 square feet per employee</td>
</tr>
</tbody>
</table>
4. **Distribution of Workers by Land Use Type**

The distribution of workers by occupation by each land use category are found in Tables A-1 through A-3 in Appendix A of the Housing Report (Appendix N herein). Corresponding wages were adjusted to reflect Napa MSA averages by occupation and then multiplied by a factor of 1.43 workers per household, resulting in respective estimates for household income by occupation by land use category.

After identifying income ranges for each occupation and employment category, EPS summed the percentages of occupations by income bracket. Table 5.11-7 below presents the proportions of anticipated household income brackets by employment category. A range from the high end, representing household distribution using unadjusted national occupation distributions, to the low end, representing household distribution adjusted for the specific characteristics of the Project is depicted. EPS noted that the income distribution of worker households changes for Lodging between the high end and low end estimates due to the adjustments of Food Preparation and Serving and Building and Grounds Cleaning/Maintenance jobs in Lodging for the low end estimate.

<table>
<thead>
<tr>
<th>Income Category</th>
<th>VLI</th>
<th>LI</th>
<th>Median</th>
<th>Moderate</th>
<th>Above Mod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unadjusted Rates (High End)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>0.8%</td>
<td>33.6%</td>
<td>13.1%</td>
<td>14.5%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Wine wholesalers</td>
<td>0.0%</td>
<td>54.1%</td>
<td>1.4%</td>
<td>31.9%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Lodging</td>
<td>29.4%</td>
<td>63.5%</td>
<td>1.0%</td>
<td>1.7%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Adjusted Rates (Low End)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>0.8%</td>
<td>33.6%</td>
<td>13.1%</td>
<td>14.5%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Wine wholesalers</td>
<td>0.0%</td>
<td>54.1%</td>
<td>1.4%</td>
<td>31.9%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Lodging²</td>
<td>39.2%</td>
<td>51.3%</td>
<td>1.3%</td>
<td>2.3%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

1. Designation of household income is based on a 3-person household and 1.43 workers per household, based on American Community Survey and Census data.
2. Excludes all Food Preparation and Serving jobs

Source: BLS; HCD; ACS; Economic & Planning Systems

The analysis in the table estimates all new workers were generated as a result of the proposed Project. It should be noted that, in reality, only a portion of Napa’s workers reside in the City. Many workers commute from other areas for a variety of reasons, including the relative cost of housing among different communities. However, EPS has written the Housing Report with the understanding that the City would like to consider findings in the context of policy implications. As such, if every jurisdiction were to adopt a policy that it would only
fund housing for the fraction of its locally generated workers that chose to live within the City, in aggregate the region’s affordable housing demand would be grossly under-represented and under-funded.

5. Household Formation

EPS estimated the number of households the projected employees would represent using data from the BLS that indicates young workers (age 16-19) represent only about 1.9 percent of the overall workforce. However, the majority of those workers are in the service (retail, leisure and hospitality) industries where they represent 12.5% of the overall industry employment. EPS assumed that these workers would not form their own households and that, on average, new households formed in response to growing employment opportunities would have 1.43 wage-earning workers. The combination of the adjustments results in the assumption that approximately seven households are formed for every ten new employees.

As analyzed, the lodging component is expected to generate significant numbers of households at the low-income level, while most jobs in the office component are expected to yield household incomes between median to above-moderate income levels. The estimate using unadjusted rates (high end) totals 329 worker households, 257 of which would be very low income and low-income households (below 80% area median income). The estimate using adjusted rates (low end) totals 238 worker households, 181 of which would be very low income and low-income households.

The City of Napa currently implements an affordable housing linkage fee for both commercial and residential development. As shown in Table 5.11-8, the estimated fee for development is approximately $1.1 million dollars.

<table>
<thead>
<tr>
<th>Development Program*1</th>
<th>Existing Linkage Fee per Square Foot²</th>
<th>Estimated Linkage Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>29,878</td>
<td>$3.55</td>
</tr>
<tr>
<td>Wine Wholesalers</td>
<td>26,214</td>
<td>$3.50</td>
</tr>
<tr>
<td>Lodging</td>
<td>155,557</td>
<td>$6.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>211,649</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. Trinitas development program as of August 2017
2. City of Napa Linkage Fee Schedule, 2017

5.11.5 Mitigation Measures

1. Standard Mitigation Measures

None required. The City of Napa Policy Resolution 27 does not include mitigation measures in the area of Population and Housing.
2. **Special Mitigation Measures**

To fulfill the City's required affordable housing fee for new development, the following mitigation measure is included herein:

| MM P/H-1 | Prior to the issuance of a building permit, Applicant shall pay the City the affordable housing impact fee as calculated by the Chief Building Official and based on the methodology identified by the City Council for non-residential development. |

5.11.6 **Level of Significance after Mitigation**

Thresholds of significance identified in CEQA Guidelines, Appendix G, state that a project would have a significant impact if it would:

a) Induce substantial population growth either directly or indirectly,

b) Displace substantial numbers of existing housing, or

c) Displace substantial numbers of people.

The proposed Project has the potential to generate jobs for 347 to 480 workers as stated in the Review of Housing Impacts Report based on typical indicators for the type of employment generated by the Project. The Project applicant has identified a proposed 190 total worker estimate based on actual anticipated employees required. However, the Project does not include the construction of new residences to accommodate a potential need for housing assuming not all potential employees are currently living in the City or immediate area. The Project will offer a diverse mix of professions and pay levels, requiring availability of a housing mix for all income levels. Therefore, the Project could induce population growth due to the availability of new jobs.

The Project will not displace substantial numbers of existing housing necessitating the construction of replacement housing or displace substantial numbers of people. The Project site is a vacant parcel within an industrial/corporate park and no housing exists on or adjacent to the Project. There will be no impact to existing housing or displacement of people residing in the area.

With implementation of Mitigation Measure MM P/H-1, no significant unavoidable impacts to population and housing are associated with the proposed Project. The required affordable housing linkage fee, according to the City's Affordable Housing Ordinance, may be used for, but not limited to, new construction of affordable units, acquisition of real property for the present or future development of affordable housing, conversion of existing market rate units to affordable units, preservation of existing affordable units, rehabilitation of affordable units at risk of loss, subsidies for developers that will promote and encourage the development of affordable housing units or rental units affordable to extremely low, very low and low income households. Therefore, the Project impacts related to population and housing are less than significant.
5.11.7 **Cumulative Impacts**

The Napa Pipe project, located directly northwest of the Project site, will add 2,580 dwelling units and approximately 721 new jobs on the Napa Pipe site. The proposed Project does not include residential development. The Napa Pipe project is required to contribute to the availability of affordable housing to offset impacts from the project. Cumulatively, the proposed Project will increase the City's need for affordable housing. However, Mitigation Measure MM P/H-1 will provide funding for the City to implement housing programs to assist employees in finding suitable and affordable housing in Napa. With mitigation, the Project's individual contribution to affordable housing impacts would not be considerable. The proposed Project would not result in a cumulative impact.

5.11.8 **Unavoidable Adverse Impacts**

With implementation of Mitigation Measure MM P/H-1, the Project, as proposed, will not result in any unavoidable adverse impacts related to Population and Housing.
5.12 Public Services

This section provides a discussion and analysis of public services that may be affected by the development of the proposed Project. Existing public agencies that will provide services to the Project site are identified and evaluated for potential impacts. Analysis in this section is based on individual Project conditions and cumulative conditions related to the development of the Napa Pipe project and the Meritage Commons project, which is currently under construction.

5.12.1 Existing Conditions

The Project site is located within the service areas of the following public service agencies.

1. Police Services

The proposed Project will be served by the City of Napa Police Department, which provides police services for residents and commercial properties within the City of Napa. The Police Department is located at 1539 1st Street in Napa. Other law enforcement agencies serving the immediate area are the Napa County Sheriff’s Office located at 1535 Airport Boulevard, the California Highway Patrol located at 975 Golden Gate Drive, and the American Canyon Police Department located at 911 Donaldson Way E, American Canyon.

2. Fire/Paramedic Services

The proposed Project is within the service and response area of the Napa City Fire Department. The Fire Department serves the community from four fire stations covering 18 square miles within the Napa City limits. A fifth fire station in the Browns Valley area will be fully operational by the end of 2017. Each station provides an Advanced Life Support (Paramedic) Engine company staffed with a minimum of three personnel. In addition, Fire Station One provides an Aerial Ladder Truck Company and a Heavy Rescue Unit for special operations and technical rescues. Department staffing consists of 62 public safety personnel, 8 civilian employees and 10 reserves. The Project site is served by Station Four located at 251 Gasser Drive, approximately 2.5 miles from the Project.

The Fire Department works closely with CAL FIRE and the Napa County Fire Department and maintains mutual and automatic aid agreements with those agencies, as well as with the cities of American Canyon and Vallejo. The Fire Department also participates in a Statewide Mutual Aid system as part of the California State Emergency Management Authority (EMA) by housing and staffing a state fire engine that can respond to large emergency incidents throughout the state. Exhibit 5.12-1, Napa City Fire and EMS Response Jurisdiction depicts the service area jurisdiction.
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures
Draft Environmental Impact Report

5.12 – Public Services

Exhibit 5.12-1  Napa City Fire and EMS Response Jurisdiction

Source: Napa Fire Department 2015-2020 Strategic Plan
3. **Schools**

   The proposed Project is located within the Napa Valley Unified School District (NVUSD). Overall, attendance within NVUSD was down 257 students between May 2016 and April 2017. The schools nearest the proposed Project and the most recent enrollment information are included in the following table.

<table>
<thead>
<tr>
<th>School</th>
<th>2016 Enrollment</th>
<th>2017 Enrollment</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillips Elementary School</td>
<td>541</td>
<td>523</td>
<td>-18</td>
</tr>
<tr>
<td>Silverado Middle School</td>
<td>845</td>
<td>818</td>
<td>-27</td>
</tr>
<tr>
<td>Napa High School</td>
<td>1744</td>
<td>1746</td>
<td>+2</td>
</tr>
</tbody>
</table>


   As shown, enrollment has declined in the elementary and middle schools that would serve the Project site.

4. **Parks**

   The City of Napa provides residents with access to more than 48 parks that cover 800 acres of park land. The City's park system consists of a variety of amenities such as parks, open space, playgrounds, sport fields, a golf course, the Napa River, and miles of natural and paved trails for walking, biking, and hiking. The City of Napa General Plan includes a policy (PR-1.1) to provide 12 acres of active and passive parkland per 1,000 residents. This includes citywide, community, neighborhood, and other special park sites and recreational amenities and open space.

5. **Libraries**

   Citizens of Napa are served by the Napa County Library, located at 580 Coombs Street on the south side of the Downtown area. The Library features a full modern collection, reference desk, and a popular community meeting room. The Library is open from 10:00 a.m. to 9:00 p.m. Monday through Thursday, 10:00 a.m. to 6:00 p.m. on Friday and Saturday, and closed on Sunday.

5.12.2 **Thresholds of Significance**

   The City's General Plan provides goals, objectives and policies related to the provision of public services. However, the City has not adopted thresholds to identify significant impacts to such services. For purposes of analysis the applicable thresholds listed in the CEQA Guidelines will be used. According to Appendix G of the CEQA Guidelines, the proposed Project would have a potentially significant impact if it will:

   a) Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered government 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:
• fire protection,
• police protection,
• schools,
• parks,
• other public facilities.

The City's General Plan/Envision Napa 2020 Policy Document provides the following related to the provision of public safety and emergency services.

• **Policy CS-1.3** - The City shall ensure through the development review process that adequate public facilities and services are available to serve new development.

• **Policy CS-2.1** - The City shall provide services and personnel necessary to maintain community order and public safety.

• **Policy CS-2.2** - The City shall endeavor to maintain a police and fire force sufficiently staffed and deployed to strive to provide a five-minute maximum response time to any call involving an immediate danger or loss of life or serious injury (response time means from the time the call is received in dispatch to the time the first emergency unit is on the scene).

• **Policy CS-5.1** - The City shall maintain adequate personnel and equipment necessary to provide fire suppression services for the City of Napa.

• **Policy CS-5.8** - The City shall continue to maintain mutual and/or automatic aid agreements with CAL FIRE, the County of Napa, and other local agencies.

For Emergency Medical Services, the City has adopted the following policies:

• **Policy CS-7.1** - The City shall maintain personnel and equipment necessary to provide medical emergency response services for the City of Napa.

• **Policy CS-7.2** - The City shall maintain personnel to seek to provide a maximum response time of five minutes to any call involving an immediate danger of loss of life as a result of a medical emergency.

### 5.12.3 Project Impacts Prior to Mitigation

The Project is located on a vacant parcel within an existing commercial/industrial park. The Project will be an addition to the existing corporate park and will be served by the same providers as the current tenants.

1. **Police Service**

The City of Napa Police Department provides law enforcement services to the Project site and the surrounding area. As noted, the City’s General Plan policies identify a standard response time of five minutes for emergency calls.23

The following detailed information about the Police Department was found on the Napa Police Department website: http://www.napapolice.com. The Police Operations department

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consists of over 40 officers who patrol the streets 24 hours a day, seven days a week. Patrol officers’ duties include:

- Respond to emergency, in-progress crimes
- Conduct on scene investigations, including fingerprinting, photography, interviewing and interrogation
- Write crime reports documenting incidents
- Arrest and book criminal offenders
- Stop traffic violators and warn or cite the driver
- Patrol an assigned area, checking residential and business areas for illegal activity
- Facilitate problem solving efforts with members of the community

The Special Operations department is comprised of a Sergeant, six detectives and a forensic specialist. The Youth Services Unit in this department provides school resource officers at the middle school and high school level. Other resource units include Special Enforcement, Diversion unit and the Homeless Outreach unit.

Police Services staff has indicated that the total number of calls for service in the Project area was 396 calls over an 18-month period ending in August 2017. This translates to approximately 216 calls per year. According to the Police services staff, 130 of the total calls resulted in dispatch with 32 reports filed, for an average of fewer than 2 reports filed per month. The proposed Project is anticipated to generate tax revenue that will offset any minor increase in calls for police services. By comparison, the Meritage Resort, where calls for police services were generated, includes ballrooms, conference rooms, restaurants, and outdoor events. The proposed Project is more limited in the types of activities that could require police and emergency services. It is anticipated that the proposed Project will be adequately served using existing police protection resources and will not generate significant new police demands or require the construction of or physically alter existing facilities. Impacts to police services will be less than significant and no mitigation is required.

2. Fire/Paramedic Services

As noted, a new fire station is currently under construction and scheduled for operation in late Fall of 2017. A new fire engine and associated equipment for the new station have been received. The Fire Department will hire, train and prepare for response additional personnel to staff the new station. As stated in the Napa Fire Department 2016 Annual Report, the Department’s identified response results for 2016 are shown below.

- Processing (goal is 1 minute, 90% of the time) 82.3%
- Turnout Time (goal is 2 minutes, 90% of the time) 94.5%
- Travel Time (goal is 4 minutes, 90% of the time) 69.2%
- 1st Apparatus on Scene (goal is 7 minutes 90% of the time) 86.0%

The Project site is approximately 2.5 miles from Station Four located on Gasser Drive. Based on the proximity of the fire station, it is feasible that the response time goal can be met in the event of a fire or medical emergency at the Project site.

24 City of Napa Fire Department 2016 Annual Report
Updated construction methods and materials, such as ignition-resistant construction, interior automatic fire sprinklers, infrastructure upgrades and current Building Code requirements for fire protection, in addition to adherence to current Fire Codes, will reduce potential fire occurrences and the need for fire-fighting services. The additional fire station and personnel will also reduce the potential that the Project will result in a need for new or updated facilities. However, the City's Municipal Code (Chapter 15.78) identifies the requirement for fire and paramedic fees which must be paid for new development. Mitigation has been included herein to provide for payment of such fees. Therefore, with payment of the required fees, the impact will be less than significant.

3. **Schools**

   The City's Municipal Code Section 15.80.010 identifies the requirement for the payment of school fees when a building permit is issued for new dwelling units. The Project does not propose any residential development and will not generate additional students within the Napa Valley Unified School District. Therefore, there will be no impacts to schools and no mitigation is required.

4. **Parks**

   The City's established policy of providing 12 acres of active and passive parkland per 1,000 residents would require approximately 940 acres of parkland based on the 2012 population estimates of 78,340. Current City statistics show a total of 802 acres of park land. Kennedy Park, is the City's largest park and is located along the Napa River just north and west of the Project site. The park includes the City golf course which is directly north of the Project site. The City's Municipal Code Chapter 15.68 requires the payment of fees for parkland only for new residential development.

   The proposed Project will not contribute to the current park deficit because the Project does not include residential development or the type of use that would result in a substantial increase in the use of or need for park land. Employees of the hotel, winery and office building could potentially be new residents in the City who have relocated to the area due to their jobs. However, that population will be dispersed throughout the area wherever housing is secured, and park use will similarly be dispersed at the many parks located throughout the City. Hotel guests will have on site amenities (pools, picnic areas) at both the Trinitas site and the Meritage Resort located in the industrial park. Therefore, no impacts to City parks will occur and no mitigation is required due to Project implementation.

5. **Libraries**

   Citizens of Napa are served by the Napa County Library, located at 580 Coombs Street on the south side of the Downtown area. The Library features a full modern collection, reference desk, and a popular community meeting room. The Library is open from 10:00 a.m. to 9:00 p.m. Monday through Thursday, 10:00 a.m. to 6:00 p.m. on Friday and Saturday, and closed on Sunday. Other libraries in the vicinity are the American Canyon Library, the Calistoga Library and the Yountville Library.
The proposed Project will not place a demand on existing library services as no residential development is included. However, new employees could potentially relocate to the City from other areas, thereby increasing the use of existing libraries. As stated in Section 5.11 – Population and Housing - of this DEIR, in reality, only a portion of Napa's workers reside in the City. Many workers commute from other areas for a variety of reasons, including the relative cost of housing among different communities. It is anticipated that the Project could result in the potential for as many as 347 new employment opportunities. However, those jobs could be filled by existing residents and no addition to the population base will occur. With the availability of four libraries in the vicinity, and taking into account that not all new jobs will be filled by employees moving into the area, the Project will result in minimal impacts in the use of library facilities. Therefore, no mitigation is required and there is no impact. No other public facilities will be impacted by Project implementation.

5.12.4 Mitigation Measures

1. Standard Mitigation Measures

The City's Policy Resolution No. 27 provides standard mitigation measures for impacts to public services. The following mitigation measures are contained therein.

| MM PS-1 | Developer shall pay the required fire and paramedic fees for new development in accordance with Napa Municipal Code Chapter 15.78. The fee for each unit of development within a development project shall be paid in full prior to the issuance of the building permit required for that unit of development. Such fees shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in the ordinance and Resolution 94-106 are incorporated herein. The City further finds that calculation of the fee pursuant to the formula set forth therein demonstrates that there is a reasonable relationship between the fees imposed and the cost of improvements attributable to this Project. |
| MM PS-2 | Developer shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and the Public Works Department (PWD) Standard Specifications and the Fire Department “Standard Requirements for Commercial/Residential Projects,” including, without limitation, the requirements for access, new construction, smoke detectors, fire extinguishers, and fire hydrants. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications. |
| MM PS-3 | All newly constructed buildings must have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which installation permit must be obtained from Fire Prevention. In multi-building complexes, or in buildings with three or more stories, special monitoring conditions will be required. Existing habitable buildings, which are retained, shall be retrofitted. |
2. **Special Mitigation Measures**

None required.

5.12.5 **Level of Significance after Mitigation**

CEQA Guidelines, Appendix G, identify a potentially significant impact if the Project results in substantial adverse physical impacts associated with the provision of new or altered government facilities or the need for new facilities to maintain acceptable service ratios, response times, or performance objectives in the following public service areas.

Implementation of the proposed Project would not result in significant adverse impacts to the provision of adequate public services as detailed below.

1. **Police Services**

The City of Napa Police Department currently serves the Napa Valley Commons corporate park and the proposed Project will be within the corporate park boundaries. The Police Operations department consists of over 40 officers who patrol the streets 24 hours a day, seven hours a day. Residential and business areas are patrolled regularly for illegal activity.

Because the Project is located in an existing, nearly built-out industrial park, where routine patrolling and police services are currently conducted, the Project site will be integrated into those functions. Additional staff will not be required to serve the proposed Project and expanded facilities will not be required to adequately provide police protection. Impacts to the availability of police services will be less than significant with Project implementation.

2. **Fire/Paramedic Services**

Updated and expanded facilities will be provided as a result of construction of an additional fire station. The Project site is in close proximity to an existing fire station that will respond to fire or medical emergencies. As analyzed herein, fire and paramedic services are meeting or close to the specified response time parameters established by the Fire Department. The close proximity of Fire Station Four will ensure that response time to the Project site is adequate to meet the needs for fire or paramedic services.

The Project will contribute fees as specified in the City's Municipal Code (Chapter 15.78) to ensure adequate services are provided to residents and guests of the City. Mitigation Measure MM PS-1 is included to ensure payment of the required fees. With payment of required fees, there will be no impact to fire/paramedic services due to implementation of the proposed Project.

**MM PS-4**  The Developer of any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards, or are classified by the Uniform Building Code as an H (hazardous) occupancy.
3. **Schools**

While the proposed Project will not directly add students to the school population because no residential development is proposed as part of the Project, new employees could potentially relocate to Napa to be closer to jobs. However, new employees will also be drawn from existing residents in the City. As shown herein, the nearest schools to the Project site show generally declining enrollment. In addition, housing locations for new residents will be dispersed throughout the area and students will be similarly dispersed throughout the Napa Valley Unified School District. The minimal number of potential new students in any particular school will result in less than significant impacts with Project implementation.

4. **Parks**

The proposed Project will not create the necessity for new or physically altered facilities or require the addition of parklands to serve the Project. No residential development is planned which could increase the demand for such facilities. Amenities have been included in the Project design to allow for outdoor activities on the Project site and within the larger corporate park for guests of the hotel. Future employees will be drawn both from existing residents and potential new residents relocating to be close to jobs. Because the Project does not include new housing, and relocating employees will reside in various areas of the City, there will be no impacts to any particular park. Therefore, no impacts related to the use of or need for additional park facilities to serve the proposed Project will occur and no mitigation is required.

5. **Libraries**

The proposed Project does not include residential development which would produce significant additional population using the City’s library system. New employees at the Project site will come from existing local workers as well as workers relocating to be closer to jobs. However, as noted herein, only a portion of Napa’s workers reside in the City for a variety of reasons, including availability of affordable housing. With four existing libraries in the general vicinity, including the Napa City Library, adequate facilities are available to serve the existing population as well as the anticipated minimal increase in population due to the Project. Therefore, no impacts would occur to existing libraries and no mitigation is required.

6. **Other Public Facilities**

Since the proposed Project will only minimally increase the permanent population base, and transient visitors to the area are not likely to impact existing facilities such as hospitals or government offices, there will be no impacts requiring new or additional facilities to serve the Project visitors and employees. No mitigation is required.

Mitigation Measure MM PS-1 will ensure that funds are available to provide adequate fire and medical personnel to serve the existing and proposed developments in the area. Additional mitigation is included as required by the City’s Policy 27 standard mitigation measures. The mitigation measures require compliance with Fire Codes and Standard Specifications as well as appropriate approvals from City Fire and Building departments related to fire and safety.
hazards. No additional mitigation is required and the Project, as proposed, will result in less than significant impacts in the area of public services.

5.12.6 Cumulative Impacts
The proposed Project has been designed to include features and technologies to assist the police and fire departments to protect guests and employees of not only the Project, but the adjacent developments. Adherence to building and fire codes will result in new construction that provides safer structures. Additional personnel will be added to staff and equip the new fire station. The Meritage Commons and Napa Pipe projects, which have been considered cumulatively for impacts throughout this DEIR, have been required to provide fees for new or expanded services required by those projects. The proposed Project’s individual contribution to school population or use of existing libraries or other public facilities, when combined with other area projects, would not be considerable. Therefore, with the Mitigation Measures proposed herein, the Project would not result in a cumulative impact related to public services.

5.12.7 Unavoidable Adverse Impacts
Mitigation has been included to reduce potential impacts to a level of insignificance for project operational and cumulative conditions. Therefore, no significant unavoidable impacts will result from Project implementation.
5.13 Transportation/Traffic

This section analyzes the Transportation and Traffic impacts associated with the proposed Project. Information in this section is based on the Transportation Impact Study (Traffic Study) prepared by Kimley-Horn dated December 2017. The Traffic Study, including Appendices, is included herein as Appendix O.

The Traffic Study was prepared to determine if any potential traffic-related impacts would result due to the construction of the proposed Project based on standards and methodologies set forth by the City of Napa. The Traffic Study includes intersection level of service (LOS) and queuing analyses for peak hour traffic at 16 intersections. The Traffic Study analysis is intended to assist the City with project planning and the identification of potential conditions of approval for the Project. Analysis included Existing Conditions, Existing Plus Project Conditions and Cumulative Conditions (year 2035). The Traffic Study shows the Project is estimated to generate 184 trips in the AM peak hour, 182 trips in the PM peak hour and 1,946 daily trips.

5.13.1 Existing Conditions

The Project boundaries are adjacent to State Route 221 (SR 221 or Napa Vallejo Highway) to the east, Napa Valley Corporate Drive to the west, and Napa Valley Corporate Way to the south. The Project site is currently undeveloped and is part of the substantially built development known as the Napa Valley Commons corporate park.

The proposed Project will take access from two roadways. Office employees and visitors will utilize the unsignalized driveway on Napa Valley Corporate Drive that will allow only right-in and right-out movements. The hotel and the winery will utilize the driveway on Napa Valley Corporate Way, an existing driveway on the north leg of Napa Valley Corporate Way, and Bordeaux Way.

The Traffic Study evaluated the following traffic scenarios:

- **Existing Conditions** – Based on traffic counts taken in November 2015 and May 2016. Counts were adjusted based on the City's month and day factors. Existing roadway geometry and traffic control in 2016 were used for this scenario.

- **Existing Plus Project Conditions** – Based on traffic generated by the proposed Project added to existing traffic volumes. Existing roadway geometry with proposed Project roadway improvements and traffic controls are assumed for this scenario.

- **Cumulative (2035) Conditions** – Based on future year traffic projections from the Napa Meritage Transportation Study and the Napa Pipe EIR. This scenario assumes roadway geometry and traffic control presents in 2035.

- **Cumulative (2035) Plus Project Conditions** – Based on traffic generated by the proposed Project added to future traffic volumes. Cumulative roadway geometry
with proposed Project roadway improvements and traffic controls are assumed for this scenario.

1. **Study Area Existing Conditions**

   **Traffic Analysis Study Area**

   In consultation with the City of Napa, the Traffic Study included 16 intersections. The proposed Project will generate new vehicular trips that will increase traffic volumes on the nearby street network. The intersections are listed in Table 5.13-1 and illustrated in Exhibit 5.13-1, Project Location and Study Intersections.

   **Table 5.13-1 **
   
<table>
<thead>
<tr>
<th>#</th>
<th>Intersection</th>
<th>Existing or Future Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SR 221/Kaiser Road</td>
<td>Existing</td>
</tr>
<tr>
<td>2</td>
<td>SR 221/Napa Valley Corporate Way</td>
<td>Existing</td>
</tr>
<tr>
<td>3</td>
<td>SR 12-SR 29/SR 221</td>
<td>Existing</td>
</tr>
<tr>
<td>4</td>
<td>Napa Valley Corporate Drive/Kaiser Road</td>
<td>Existing</td>
</tr>
<tr>
<td>5</td>
<td>Napa Valley Corporate Drive/West Project Driveway</td>
<td>Future</td>
</tr>
<tr>
<td>6</td>
<td>Napa Valley Corporate Drive/Napa Valley Corporate Way</td>
<td>Existing</td>
</tr>
<tr>
<td>7</td>
<td>Napa Valley Corporate Way/Bordeaux Way</td>
<td>Existing</td>
</tr>
<tr>
<td>8</td>
<td>Napa Valley Corporate Drive/Bordeaux Way</td>
<td>Existing</td>
</tr>
<tr>
<td>9</td>
<td>Napa Valley Corporate Drive/Anselmo Court</td>
<td>Existing</td>
</tr>
<tr>
<td>10</td>
<td>SR 221/Streblow Drive</td>
<td>Existing</td>
</tr>
<tr>
<td>11</td>
<td>SR 221/Magnolia Drive</td>
<td>Existing</td>
</tr>
<tr>
<td>12</td>
<td>Soscol Avenue (SR 221)/Imola Avenue (SR 121)</td>
<td>Existing</td>
</tr>
<tr>
<td>13</td>
<td>Soscol Avenue (SR 121)/Shelter Avenue</td>
<td>Existing</td>
</tr>
<tr>
<td>14</td>
<td>Soscol Avenue (SR 121)/Kansas Avenue</td>
<td>Existing</td>
</tr>
<tr>
<td>15</td>
<td>Soscol Avenue (SR 121)/Silverado Trail</td>
<td>Existing</td>
</tr>
<tr>
<td>16</td>
<td>Imola Avenue (SR 121)/Gasser Drive</td>
<td>Existing</td>
</tr>
</tbody>
</table>

**Existing Street System**

**State Route 12 (SR 12)** is an east-west highway between Sebastopol and San Andreas. Within the study area, it has four lanes and runs with SR 121, turns southeast on SR 29, intersects with SR 221, and continues south and then east out of Napa. The speed limit is 60 miles per hour (mph). There is a proposed Class II bike lane southeast of the intersection with SR 221.

**State Route 29 (SR 29)** is a long north-south highway between Vallejo in the south and Upper Lake in the north. Within the study area, it has four lanes and meets up with SR 12 from the south, veers west and intersects with SR 221, veers north and joins SR 121, then continues north out of Napa. The speed limit is 60 mph. There is a proposed Class II bike lane southeast of the intersection with SR 221.
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures
Draft Environmental Impact Report

5.13 – Transportation/Traffic

Draft Environmental Impact Report  page 5.13-3

January 2018 Trinitas Mixed-Use Project

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)

Exhibit 5.13-1  Project Location and Study Intersections
State Route 121 (SR 121) is a two- to four-lane highway within the study area. It runs for approximately 34 miles between Sears Point in the southwest and Lake Berryessa in the northeast. Near the study area, it veers east on Imola Avenue, north on Soscol Avenue, and then northeast on Silverado Trail. The speed limit is 35 mph throughout the study area. There is a Class II bike lane on Imola Avenue and Soscol Avenue. According to the City of Napa Bicycle Plan, a Class II bike lane is proposed on Silverado Trail. SR 121 has four lanes on Imola Avenue and Soscol Avenue and two lanes on Silverado Trail. SR 121 provides access to commercial, residential, and recreational land uses.

State Route 221 (SR 221 or Napa Vallejo Highway) is a four-lane north-south expressway within the study area. It runs for approximately 3 miles between SR 12/29 at its southern terminus and Imola Avenue at its northern terminus. It has a bike lane for 800 feet between Imola Avenue and Magnolia Drive. The speed limit is 55 mph between SR 12/29 and Streblow Drive, 50 mph between Streblow Drive and Magnolia Drive, and 40 mph to Imola Avenue. SR 221 provides access to commercial land uses.

Anselmo Court is a two-lane east-west roadway. Anselmo Court connects the driveway of Intelsat Corporate on the west side to Napa Valley Corporate Drive on the east side and provides access to commercial land uses. There is no posted speed limit on Anselmo Court.

Basalt Road is a two-lane east-west roadway that runs from Kaiser Road in the west to SR 221 in the east. It serves primarily industrial uses. There is no posted speed limit.

Bordeaux Way is a two-lane east-west local roadway within the study area that serves commercial and recreational land uses. There are Class II bicycle lanes on Bordeaux Way. There is no posted speed limit, and no parking is allowed.

Gasser Drive is a north-south collector roadway within the study area serving commercial and hotel land uses. Gasser Drive has two lanes north of Hartle Court and an additional third lane in the northbound direction south of Hartle Court. There is a Class II bicycle lane along Gasser Drive and parking is allowed north of Hartle Court. There is no posted speed limit.

Imola Avenue is a four-lane east-west arterial roadway within the study area serving residential and commercial land uses. Imola Avenue serves as SR 121 between SR 29 and Soscol Avenue (SR 221). There are Class II bicycle lanes on Imola Avenue and the posted speed limit is 35 mph.

Kaiser Road is a four-lane east-west local roadway within the study area that serves commercial and residential land uses. Kaiser Road connects Basalt Road on the west to SR 221 on the east. The speed limit is 40 mph. There is on-street parking west of Napa Valley Corporate Drive and a bicycle lane east of Napa Valley Corporate Drive.

Kansas Avenue is a two-lane east-west local roadway within the study area serving commercial and residential land uses. There are Class II bicycle lanes along Kansas Avenue between Gasser Drive and Soscol Avenue. Parking is allowed on both sides of the street east of Soscol and only on the north side west of Soscol. The speed limit is 30 mph west of Soscol and 25 mph east of Soscol.
**Magnolia Drive** is a two-lane east-west local roadway within the study area. It serves Napa Valley College and Napa State Hospital. There is a bicycle lane between James Diemer Drive and SR 221 and on-street parking between SR 221 and Spruce Drive. The posted speed limit west of SR 221 is 20 mph.

**Napa Valley Corporate Drive** is a four-lane north-south local roadway within the study area that serves commercial and recreational land uses. This roadway connects Kaiser Road on the north side to Soscol Ferry Road on the south side. Napa Valley Corporate Drive shrinks to two lanes south of Vista Point Drive. There is a Class II bicycle lane between Kaiser Road and Vista Point Drive, no parking is allowed, and the speed limit is 40 mph. Napa Valley Corporate Drive is a designated truck route south of Napa Valley Corporate Way.

**Napa Valley Corporate Way** is a four-lane east-west local roadway within the study area that serves commercial and recreational land uses. Napa Valley Corporate Way connects Napa Valley Corporate Drive on the west side to SR 221 on the east side. There is no posted speed limit and parking is not allowed. Napa Valley Corporate Way is a designated truck route.

**Shetler Avenue** is a two-lane east-west local roadway within the study area that serves residential and commercial land uses and Phillips Charter School. Shetler Avenue terminates at a shopping center in the west and connects to Sommer Street in the east. There is on-street parking east of Soscol Avenue and the speed limit is 30 mph.

**Silverado Trail/SR 121** is a two-lane, north-south arterial roadway within the study area that serves residential and commercial land uses. It connects to Soscol Avenue in the south and to SR 29 in Calistoga to the north. It serves as SR 121 between Soscol Avenue and Trancas Street. The speed limit is 35 mph on the portion of Silverado Trail within the study area. Silverado Trail has Class II bicycle lanes south of Fairview Drive.

**Soscol Avenue/SR 121** is a four-lane north-south arterial roadway within the study area that serves residential and commercial land uses. Soscol Avenue serves as a portion of SR 121 between Imola Avenue and Silverado Trail. Soscol becomes SR 221 south of Imola Avenue and becomes Big Ranch Road north of Trancas Street. The speed limit on the portion of Soscol in the study area is 35 mph. There is no on-street parking within the study area, but on-street parking is allowed north of Pearl Street. There are Class II bicycle lanes along Soscol Avenue.

**Streblow Drive** is a two-lane east-west local roadway within the study area which serves Napa Valley College and recreational land uses including the Napa Golf Course. It connects the Napa Valley Vine Trail in the west to SR 221 in the east. The posted speed limit is 25 mph.

### Existing Transit Facilities

The Napa Valley Transportation Authority (NVTA) provides transit services within Napa and other cities in Napa County. The NVTA operates multiple bus routes near the Project site (Routes 3, 4, 10, 11, 21, 25 and 29). The only route that services the nearby area of the Project, Route 11, was described as follows in the Traffic Study.

Route 11 is a local bus service that operates between the Redwood Park & Ride and the Vallejo Ferry. Route 11 runs south on SR 221 before heading west on
Kaiser Road and then south on Napa Valley Corporate Drive. On weekdays, Route 11 operates from 4:00 a.m. to 9:00 p.m. at headways ranging from 30 minutes to 70 minutes. On Saturdays, Route 11 operates from 6:30 a.m. to 7:00 p.m. at headways ranging from 50 minutes to 70 minutes. There is a bus stop near the Project site at the intersection of Napa Valley Corporate Drive and Kaiser Road and at the intersection of Napa Valley Corporate Drive and Napa Valley Corporate Way. Exhibit 5.13-2, Existing Transit System depicts the bus routes in the general vicinity of the Project.

**Existing Meritage Resort Shuttle**

Hotel guests for the proposed Project will be able to use the existing Meritage Resort shuttle. The shuttle is a passenger van with a capacity of approximately 27 passengers. The shuttle currently operates every 30 to 45 minutes between 3:15 p.m. and 8:30 p.m. and by request after 8:30 p.m.

**Existing Pedestrian Facilities**

A limited number of sidewalks and crosswalks exist in the study area for pedestrians to access nearby transit stops, residential uses, and commercial uses. Near the proposed Project, Kaiser Road and Enterprise Way are the only roads with sidewalks, and there are no marked crosswalks. There are no sidewalks adjacent to the Project site. It should be noted that the Napa Valley Commons Design Guidelines call for sidewalks throughout the Napa Valley Commons area.

**Existing Bicycle Facilities**

Class I bicycle facilities throughout the City of Napa are shown on Exhibit 5.13-3, Existing Bicycle Facilities. Following is a list of the Class I bicycle paths near the Project site:

- Napa Valley Vine Trail is a portion of the Bay Trail that runs alongside the Napa River. It begins near Kaiser Drive in the south and terminates north of the study area at 3rd Street. In the study area, the Vine Trail is existing from Kennedy Park to 3rd Street. The portion between Kennedy Park and Hartle Court overlaps with the Bay Trail. The section from Kaiser Road to Kennedy Park is proposed but not currently constructed.

- The River-to-Ridge Trail is a portion of the Bay Trail that runs east-west. It begins at the Napa Valley Vine Trail near Streblow Drive and runs alongside Streblow Drive to SR 221 and then continues east into Skyline Wilderness Park.
Exhibit 5.13-2  Existing Transit System

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
Exhibit 5.13-3  Existing Bicycle Facilities

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
Class II bicycle lanes are located throughout the City of Napa. Following is a list of Class II bicycle lanes near the study area.

- Napa Valley Corporate Drive between Kaiser Drive and Soscol Ferry Road
- Napa Valley Corporate Drive between Vista Point Drive and Soscol Ferry Road
- Bordeaux Way between Napa Valley Corporate Drive and Napa Valley Corporate Way (will be removed with construction of the Meritage expansion project)
- James Diemer Drive between Magnolia Drive and Streblow Drive
- Soscol Avenue between Trancas Street and Imola Avenue
- Gasser Drive between Kansas Avenue and Imola Avenue
- Kansas Avenue between Gasser Drive and Soscol Avenue
- Imola Avenue between SR 121/29 and SR 121/SR 221
- Devin Road south of Soscol Ferry Road
- Soscol Ferry Road between Napa Valley Corporate Drive and Devin Road.

Class III bicycle routes are located throughout the City of Napa. Following is a list of the Class III bicycle routes near the study area.

- Roy Patrick Drive between Magnolia Drive and Streblow Drive

2. **Methodology/Performance Criteria**

Analysis of significant environment impacts at intersections and freeway segments was based on the concept of Level of Service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of service for the Traffic Study were determined using methods defined in the Highway Capacity Manual, 2010 (HCM) and appropriate traffic analysis software.\(^{25}\)

**Intersection Level of Service**

The HCM includes procedures for analyzing side-street stop-controlled (SSSC) and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement and major street left-turns. Table 5.13-2 below provides operational characteristics for each LOS category for signalized and unsignalized intersections.

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Table 5.13-2  Intersection Level of Service Definitions

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>Signalized average control delay per vehicle (seconds per vehicle)</th>
<th>Unsignalized average control delay per vehicle (seconds per vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Free flow with no delays. Users are virtually unaffected by others in the traffic stream</td>
<td>delay (\leq 10.0)</td>
<td>delay (10.0)</td>
</tr>
<tr>
<td>B</td>
<td>Stable traffic. Traffic flows smoothly with few delays.</td>
<td>10.0 &lt; delay (\leq 20.0)</td>
<td>10.0 &lt; delay (\leq 15.0)</td>
</tr>
<tr>
<td>C</td>
<td>Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.</td>
<td>20.0 &lt; delay (\leq 35.0)</td>
<td>15.0 &lt; delay (\leq 25.0)</td>
</tr>
<tr>
<td>D</td>
<td>Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.</td>
<td>35.0 &lt; delay (\leq 55.0)</td>
<td>25.0 &lt; delay (\leq 35.0)</td>
</tr>
<tr>
<td>E</td>
<td>Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.</td>
<td>55.0 &lt; delay (\leq 80.0)</td>
<td>35.0 &lt; delay (\leq 50.0)</td>
</tr>
<tr>
<td>F</td>
<td>Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.</td>
<td>delay $80)</td>
<td>delay $50)</td>
</tr>
</tbody>
</table>

Signal Warrants

Traffic signals may be justified when traffic operations fall below acceptable thresholds and when one or more signal warrant is satisfied. Traffic volumes at the unsignalized study intersections were compared against the peak hour warrant in the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD)\(^{26}\). Traffic Signal Warrant #3, Peak Hour Volume Warrant, is satisfied when traffic volumes on the major and minor approaches exceed thresholds for 1 hour of the day. The Peak Hour Warrant is generally the first warrant to be satisfied. Other warrants such as those for minimum vehicle volumes, interruption of continuous traffic and traffic progression were not evaluated in the Traffic Study because they generally require higher traffic volumes to be satisfied.

Queuing

The Traffic Study analyzed the 95\(^{th}\) percentile queue for all study intersections. The 95\(^{th}\) percentile queue length represents a condition where 95% of the time during the peak hour, traffic volumes will be less than or equal to the queue length determined by the analysis. Average queuing is generally less.

Queues that exceed the turn pocket length can create potentially hazardous conditions by blocking or disrupting through traffic in adjacent travel lanes. These potentially hazardous conditions are generally associated with left-turn movements. Locations where the right turn pocket storage is exceeded are not considered potentially hazardous because the right-turn movement typically moves at the same time as the through traffic movement. A typical vehicle length of 25 feet was used in the queuing analysis.

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3. Existing Levels of Service

Existing Lane Configuration and Traffic Control

Table 5.13-3 identifies the existing lane configuration and traffic controls. Exhibit 5.13-4, Existing Lane Geometry and Traffic Control illustrates the intersections and lane geometry.

Table 5.13-3 Study Intersection and Traffic Control

<table>
<thead>
<tr>
<th>#</th>
<th>Intersection</th>
<th>Existing or Future Intersection</th>
<th>Traffic Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SR 221/Kaiser Road</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>2</td>
<td>SR 221/Napa Valley Corporate Way</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>3</td>
<td>SR 12-SR 29/SR 221</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>4</td>
<td>Napa Valley Corporate Drive/Kaiser Road</td>
<td>Existing</td>
<td>SSSC</td>
</tr>
<tr>
<td>5</td>
<td>Napa Valley Corporate Drive/West Project Driveway</td>
<td>Future</td>
<td>SSSC</td>
</tr>
<tr>
<td>6</td>
<td>Napa Valley Corporate Drive/Napa Valley Corporate Way</td>
<td>Existing</td>
<td>AWSC</td>
</tr>
<tr>
<td>7</td>
<td>Napa Valley Corporate Way/Bordeaux Way</td>
<td>Existing</td>
<td>SSSC</td>
</tr>
<tr>
<td>8</td>
<td>Napa Valley Corporate Drive/Bordeaux Way</td>
<td>Existing</td>
<td>SSSC</td>
</tr>
<tr>
<td>9</td>
<td>Napa Valley Corporate Drive/Anselmo Court</td>
<td>Existing</td>
<td>SSSC</td>
</tr>
<tr>
<td>10</td>
<td>SR 221/Streblow Drive</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>11</td>
<td>SR 221/Magnolia Drive</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>12</td>
<td>Soscol Avenue (SR 221)/Imola Avenue (SR 121)</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>13</td>
<td>Soscol Avenue (SR 121)/Shelter Avenue</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>14</td>
<td>Soscol Avenue (SR 121)/Kansas Avenue</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>15</td>
<td>Soscol Avenue (SR 121)/Silverado Trail</td>
<td>Existing</td>
<td>Signal</td>
</tr>
<tr>
<td>16</td>
<td>Imola Avenue (SR 121)/Gasser Drive</td>
<td>Existing</td>
<td>Signal</td>
</tr>
</tbody>
</table>

Note: AWSC – All-way Stop Control SSSC – Side Street Stop Control

Existing Peak-Hour Turning Movement Volumes

Weekday intersection turning movement volumes for the study intersections were collected in November 2015 and May 2016 during the AM (7:00-9:00 a.m.) peak period and PM (4:00-6:00 p.m.) peak period on a weekday when local schools were in session. The counts were adjusted using the methodology outlined in the Policy Guidelines - Traffic Impact Analysis for Private Development Review to get average August Thursday traffic. Using that methodology, the November counts were multiplied by 1.064 for the month of year multiplier and 1.0 for the day of week multiplier, and May counts were multiplied by 1.067 for the month of year multiplier and 1.02 for the day of week multiplier. Peak hour turning movements are shown on Exhibit 5.13-5, Existing Peak Hour Turning Movement Volumes. Worksheets are included in the Traffic Study (Appendix O).

Exhibit 5.13-4 Existing Lane Geometry and Traffic Control
Exhibit 5.13-5 Existing Peak Hour Turning Movement Volumes

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
Existing Intersection Level of Service

Existing traffic at the study intersections was evaluated in the Traffic Study, and the results are presented in Table 5.13-4 below. The table includes the LOS criteria, intersection control, and LOS/delay for each intersection, with locations operating unacceptably in **bold** print. As shown, the intersections operating at unacceptable LOS under existing conditions are:

- #3 - SR 12-SR 29/SR 221 (AM and PM peak hours)
- #12 - Soscol Avenue (SR 221/Imola Avenue (SR 121) (PM peak hour)

<table>
<thead>
<tr>
<th>#</th>
<th>Intersection</th>
<th>LOS Criteria</th>
<th>Control¹</th>
<th>AM Peak Delay²</th>
<th>PM Peak Delay²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SR 221/Kaiser Road</td>
<td>E Signal</td>
<td>B</td>
<td>10.4</td>
<td>B 12.6</td>
</tr>
<tr>
<td>2</td>
<td>SR 221/Napa Valley Corporate Way</td>
<td>E Signal</td>
<td>E</td>
<td>58.8</td>
<td>D 37.9</td>
</tr>
<tr>
<td>3</td>
<td>SR 12-SR 29/SR 221</td>
<td>E Signal</td>
<td>F</td>
<td>102.5</td>
<td>F 160.4</td>
</tr>
<tr>
<td>4</td>
<td>Napa Valley Corporate Drive/Kaiser Road</td>
<td>Mid-E SSSC</td>
<td>C</td>
<td>15.1 (NBL)</td>
<td>C 20 (NBL)</td>
</tr>
<tr>
<td>5</td>
<td>Napa Valley Corporate Drive/West Project Driveway</td>
<td>Mid-E SSSC</td>
<td>Future Intersection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Napa Valley Corporate Drive/Napa Valley Corporate Way</td>
<td>E AWSC</td>
<td>A</td>
<td>8.4</td>
<td>C 21.8</td>
</tr>
<tr>
<td>7</td>
<td>Napa Valley Corporate Way/Bordeaux Way</td>
<td>Mid-E SSSC</td>
<td>B</td>
<td>10.4 (SB)</td>
<td>C 15.5 (SB)</td>
</tr>
<tr>
<td>8</td>
<td>Napa Valley Corporate Drive/Bordeaux Way</td>
<td>Mid-E SSSC</td>
<td>A</td>
<td>9.9 (WB)</td>
<td>D 28.7 (EB)</td>
</tr>
<tr>
<td>9</td>
<td>Napa Valley Corporate Drive/Anselmo Court</td>
<td>Mid-E SSSC</td>
<td>A</td>
<td>9.2 (EB)</td>
<td>C 16.5 (EB)</td>
</tr>
<tr>
<td>10</td>
<td>SR 221/Streblow Drive</td>
<td>E Signal</td>
<td>B</td>
<td>10.1</td>
<td>B 11.6</td>
</tr>
<tr>
<td>11</td>
<td>SR 221/Magnolia Drive</td>
<td>E Signal</td>
<td>C</td>
<td>27.8</td>
<td>D 44.5</td>
</tr>
<tr>
<td>12</td>
<td>Soscol Avenue (SR 221)/Imola Avenue (SR 121)</td>
<td>E Signal</td>
<td>E</td>
<td>56.9</td>
<td>F <strong>86.4</strong></td>
</tr>
<tr>
<td>13</td>
<td>Soscol Avenue (SR 221)/Shetler Avenue</td>
<td>E Signal</td>
<td>C</td>
<td>29.7</td>
<td>C 27.3</td>
</tr>
<tr>
<td>14</td>
<td>Soscol Avenue (SR 221)/Kansas Avenue</td>
<td>E Signal</td>
<td>C</td>
<td>30.1</td>
<td>C 20.3</td>
</tr>
<tr>
<td>15</td>
<td>Soscol Avenue (SR 221)/Silverado Trail³</td>
<td>E Signal</td>
<td>C</td>
<td>22.3</td>
<td>C 21.9</td>
</tr>
<tr>
<td>16</td>
<td>Imola Ave (SR 121)/Gasser Drive³</td>
<td>E Signal</td>
<td>B</td>
<td>11.0</td>
<td>B 14.5</td>
</tr>
</tbody>
</table>

Note: Intersections that are operating below acceptable levels are shown in **BOLD**.

It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

SB = southbound; EB = eastbound; WB = westbound; NBL = northbound left; WBR = westbound right
1  Signal = Signalized intersection, AWSC = All-Way Stop Controlled intersection, SSSC = Side-Street Stop Controlled intersection
2  The average control delay is reported for signalized and AWSC intersections. The delay for the worst movement is reported for SSSC intersections.
3  Used HCM 2000 Methodology to determine LOS and delay

Existing Signal Warrants

Signal warrants were evaluated for peak hour conditions utilizing Traffic Signal Warrant #3, Peak Hour Volume Warrant in the CA MUTCD. Signal warrants were evaluated at the unsignalized study intersections. As shown below, none of the intersections met the peak hour signal warrant criteria. Signal warrant work sheets are included in the Traffic Study (Appendix O).

- Intersection #4 - Napa Valley Corporate Drive/Kaiser Road - did not meet peak hour signal warrant
• Intersection #6 - Napa Valley Corporate Drive/Napa Corporate Way - did not meet peak hour signal warrant
• Intersection #7 - Napa Valley Corporate Way/Bordeaux Way - did not meet peak hour signal warrant
• Intersection #8 - Napa Valley Corporate Drive/Bordeaux Way - did not meet peak hour signal warrant
• Intersection #9 - Napa Valley Corporate Drive/Anselmo Court - did not meet peak hour signal warrant

5.13.2 Regulatory Setting

The City of Napa General Plan sets forth goals, policies, and actions for developing the transportation network in Napa, which result in transportation improvement projects that will help mitigate the increased vehicular demand on the network. The following are relevant goals, policies and implementation programs regulating development in the City of Napa.

Goal T-1 To provide for extension and improvement of the City’s roadway system to ensure the safe and efficient movement of people and goods.

Policy T-1.1 The City shall require all new development to mitigate traffic impacts in accordance with the circulation system classifications.

Policy T-1.2 The City shall assess fees on new development sufficient to cover the fair share portion of that development’s impacts on the local and regional transportation system.

Implementation Program T-1.C - The City shall review and update the Street Improvement Fee Program (traffic mitigation program) in order to fund construction of street improvements identified in the General Plan that are aimed at resolving capacity, service level and safety problems.

Implementation Program T-1.D - The City shall continue to implement Resolution 89-362, which establishes a Street Improvement Fee for all new development within the City of Napa, to mitigate local and regional impacts.

The General Plan also states that the City shall ensure that traffic LOS will not exceed midrange LOS D at all signalized intersections on arterial and collector streets and LOS E as a threshold for unsignalized intersections.

5.13.3 Thresholds of Significance

The state encourages local agencies to adopt their own thresholds, but it is not required. The City does not have adopted thresholds of significance for transportation and traffic. Therefore, for purposes of this analysis, the applicable thresholds listed in the CEQA Guidelines will be used. Appendix G of the CEQA Guidelines states that the project would have a potential significant impact with respect to transportation and traffic if it would:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking not account all
modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)

e) Result in inadequate emergency access

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities.

The City of Napa has established mid-range LOS D as its criteria at all signalized intersections on arterial and collector streets with the following exceptions where mid-range LOS E is permitted:

1. Downtown Napa bounded by Soscol Avenue, First Street, California Boulevard and Third Street
2. Jefferson Street between Third Street and Old Sonoma Road
3. Silverado Trail between Soscol Avenue and First Street

The City also established LOS E as a threshold for traffic signals on state highway facilities (SR 12, SR 29, SR 122 and SR 221), consistent with the criteria set in the former Napa County Congestion Management Agency for freeway mainlines and freeway ramps.

The City uses LOS E as a threshold for unsignalized intersections as recommended by the Envision Napa 2020, Policy Document, adopted December 1998. For unsignalized intersections with a low volume movement, LOS E or LOS F may be considered as acceptable by considering both total delay and LOS. An intersection with a stop-controlled approach can be deemed acceptable if:

- Total delay is less than 4.0 vehicle-hours for a single lane movement with low volume
- Total delay is less than 5.0 vehicle-hours for multilane movements with low volumes
The adjacent figure shows the comparison of minor movement volume to average control delay for unsignalized intersections.

The City of Napa does not have specified standards for queuing in its policy guidelines. The Traffic Study considered that impacts occur under conditions where Project traffic causes the queue in a left-turn pocket to extend beyond the turn pocket by 25 feet or more into adjacent traffic lanes that operate separately from the left-turn lane. Where the vehicle queue currently exceeds that turn pocket length under pre-Project conditions, a queuing impact would occur if project traffic lengthens the queue by 25 feet or more.

**Vehicle Miles Traveled Analysis**

Senate Bill 743 (SB 743) was signed into law on September 27, 2013. The bill replaces level of service (LOS) analysis with vehicle miles travelled (VMT) as the primary benchmark in the transportation impact analysis process under CEQA. In addition, parking and aesthetics impacts will no longer be considered significant impacts on the environment for residential mixed use or employment center developments on infill sites, although local authorities may still consider either under local discretionary authority.

SB 743 streamlines the environmental review process for employment center and mixed-use projects by expanding existing CEQA exemptions for projects within one-half mile of a major transit stop and consistent with both a specific plan certified through the environmental impact report process as well as a sustainable communities strategy (SCS) enacted by local government. This policy removes impediments to infill development, transit and active transportation projects by promoting a more holistic approach to transportation impact analysis.

At this time, it is anticipated that the regulations will be effective statewide in 2019. Therefore, an analysis of VMT is not required for this EIR. This information is intended as a summary of the latest VMT developments in transportation planning and how VMT will be used as a transportation planning tool. Prior to SB 743, the CEQA process analyzed a project's increase in traffic volume and resulting delays. SB 743 is intended to balance traffic management concerns with statewide efforts to reduce greenhouse gas (GHG) emissions, develop multimodal transportation networks, encourage a diversity of land uses and promote public health.
5.13.4 Project Impacts Prior to Mitigation

Project impacts are determined by comparing conditions with the proposed Project and those without the proposed Project. The Traffic Study used guidelines outlined by the Public Works Department in the Policy Guidelines - Traffic Analysis for Private Development Review. Guidelines for direct and indirect impacts include the following:

**Direct Impacts:** When a development project causes degradation in the LOS of an intersection or roadway facility that violates the City’s LOS policy guidelines or exceeds the Crucial Corridor threshold. These direct impacts may include the following scenarios:

a) When a signalized intersection operates at midrange LOS D or better under existing or cumulative conditions, the addition of the project trips degrades the intersection operations to LOS E or F. The project mitigation should bring the facility to operate at midrange LOS D, at a minimum.

b) When a signalized intersection operates at mid-range LOS E (as allowed by the General Plan in some locations and for state highway facilities) or better under existing or interim baseline conditions, the addition of the Project trips degrades the intersection operations to LOS F. The Project mitigation should bring the facility to operate at mid-range LOS E at minimum.

c) At an unsignalized intersection when the minor stop-controlled approach operates at LOS E or better or has acceptable operation in terms of total control delay, the addition of the project trips increases the total control delay to more than 4.0 vehicle-hours for a single lane approach or 5.0 vehicle-hours for a multilane approach, at a minimum. The Project mitigation should bring the facility to operate at LOS E or bring the total control delay to less than 4.0 vehicle hours for a single lane approach, or 5.0 vehicle hours for a multi-lane approach, at a minimum.

**Indirect Impacts:** When a development project contributes more than 50 peak hour trips to pre-existing or pre-project LOS deficiencies that fall below the City’s LOS policies, the addition of such project trips shall be deemed as a potentially significant indirect impact of the project. These indirect impacts may include the following scenarios:

a) When a signalized intersection operates at midrange LOS F under existing or cumulative conditions, the addition of more than 50 peak hour project trips contributes to the continuing operational failure at the intersection. The project mitigation should bring the facility to pre-project conditions.

b) At an unsignalized intersection when the minor stop-controlled approach operates at LOS F and does not have acceptable operation in terms of total control delay, the addition of more than 50 peak hour trips contributes to the continuing operational failure at the minor approach. The project mitigation should bring the facility to pre-project conditions.

The Traffic Study states that all significant direct impacts caused by the Project shall be mitigated at the developer’s cost. Indirect significant impacts shall be mitigated by the
Project paying its fair share of the improvements necessary to bring the intersection to pre-Project LOS conditions, at a minimum. The Project fair share contribution shall be calculated as the ratio of the Project trips over the trips under Baseline Plus Project conditions. Baseline refers to either Existing or Cumulative conditions.

1. **Existing Plus Project Conditions**

**Trip Generation**

Trip generation is typically calculated based on information in the Institute of Transportation Engineer’s (ITE) publication, Trip Generation Manual. A trip is defined in the Trip Generation Manual as a single- or one-directional vehicle movement with either the origin or destination at the Project site. A trip can be either “to” or “from” the site and, therefore, a single visitor to a site is counted as two trips. For purposes of determining the worst-case impacts of traffic on the surrounding street network, the trips generated by a proposed development are typically estimated between the hours of 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. on a weekday.

ITE trip generation rate for ITE Land Use 310 Hotel, ITE Land Use 311 All Suites Hotel, and ITE Land Use 710 General Office building were used to calculate trips for the hotels and the office building. Winery trips were calculated using the County of Napa Winery Traffic Information/Trip Generation Sheet due to limited data for winery trips in the ITE Manual. The City’s information sheet only provides calculations for the total number of daily and PM peak hour trips. Therefore, the AM peak hour trips were assumed to equal the number of full-time employees arriving at the winery, and all PM peak hour trips were assumed to equal the number leaving the winery.

Because mixed-use development has a potential for interaction among uses within the site, trips are considered internal and are “captured” within the site. The standard engineering reference for determining internal capture reductions for the proposed land uses is the ITE Trip Generation Handbook, 3rd Edition. Utilizing this methodology, internal capture rates of 1% and 3% were calculated for the AM and PM peak. This methodology does not include calculations for daily trips; therefore, an average percentage of the AM and PM peak was used for daily internal capture rates.

In addition to internal capture, a vehicle reduction was taken to account for the shuttle service to the downtown area for hotel guests. This reduction assumed a reduction of one vehicle trip for every two shuttle passengers. The reduction for the daily trips assumed 10 shuttle round trips (20 shuttle trips) at 75% occupancy, or 20 passengers, for a total reduction of 180 vehicle trips. During the PM peak hour, two round trips were assumed, where the shuttle was operating at 75% occupancy for shuttles departing the hotel and 37% occupancy for the shuttles arriving at the hotel. This reduction was only applied along the shuttle route that operated along Napa Valley Corporate Way, SR 221 and Soscol Avenue.

Table 5.13-5 below depicts the trip generation for the proposed Project. As shown, the

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29 Napa County, Use Permit Application, 2015  
Project is estimated to generate 1,946 daily trips with 184 trips in the AM peak hour and 182 trips in the PM peak hour.

### Table 5.13-5  Project Trip Generation

<table>
<thead>
<tr>
<th>ITE Land Use Code</th>
<th>Land Use</th>
<th>Size</th>
<th>Daily Trips</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>310</td>
<td>Hotel</td>
<td>153 rooms</td>
<td>1,252</td>
<td>81</td>
<td>48</td>
</tr>
<tr>
<td>311</td>
<td>All Suites Hotel</td>
<td>100 rooms</td>
<td>492</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td>710</td>
<td>General Office Building</td>
<td>29,878 SF</td>
<td>330</td>
<td>47</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Winery(^1)</td>
<td>–</td>
<td>100</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Total Project Trips</td>
<td></td>
<td></td>
<td>2,174</td>
<td>186</td>
<td>130</td>
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<tr>
<td>Internal Capture(^2)</td>
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<td></td>
<td>-48</td>
<td>-2</td>
<td>-1</td>
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<tr>
<td>Shuttle Reduction(^3)</td>
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<td>-180</td>
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<td>0</td>
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<tr>
<td>Total External Project Trips</td>
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<td></td>
<td>1,946</td>
<td>184</td>
<td>129</td>
</tr>
</tbody>
</table>

1 Daily and total PM trip generation values were calculated using County of Napa Winery Traffic Information/Trip Generation Sheet. Hours of operation for the winery are from 10:00 a.m. to 7:00 p.m.; therefore, the AM peak hour only assumes full-time employees arriving. The PM peak hour assumes 60% of the trips are employees leaving and 40% are patrons. The entering and exiting split for the patrons assumes the same directional distribution as ITE Land Use 925 - Drinking Place (66% entering and 34% exiting).

2 AM and PM peak hour values were calculated using the NCHRP 684 Internal Trip Capture Estimation Tool. Daily Internal Capture reductions used the average percentages of the AM and PM peak hours.

3 During the weekday, the 27-passenger downtown shuttle operates every 30-45 minute between 3:15 p.m. and 8:30 p.m., and by request between 8:30 p.m. and 10:30 p.m.

Daily Trips assumed 10 round trips (20 shuttle trips) at 75% capacity (20 persons) per shuttle and a person-to-vehicle ratio of 2 persons per vehicle, which equates to a reduction of 9 vehicles per shuttle (minus 10 vehicles + 1 shuttle).

PM peak hour shuttle reductions assumed 2 round trips (4 shuttle trips) with the departing shuttle operating at 75% capacity and the arriving shuttle operating at 37% capacity.

### Project Trip Distribution and Assignment

Project trip distribution was based on existing traffic count information, general orientation of population sources to the site and other nearby projects with the same land use. Exhibit 5.13-6, Project Trip Distribution presents the traffic distribution assumed for the analysis. Based on the assumed trip distribution and assignment, the new vehicle trips generated by the Project were assigned to the street network as shown in Exhibit 5.13-7, Project-Generated Peak Hour Turning Movement Volumes.

### Existing Plus Project Intersection Level of Service

The study intersections were analyzed for traffic operations under existing conditions plus traffic generated by the Project. Table 5.13-6, Existing Plus Project Intersection Level of Service Summary (page 5.13-23 below), shows the results of the analysis for each intersection with intersections operating at unacceptable levels of service shown in **bold**. Exhibit 5.13-8 depicts the peak hour turning movement under Existing Plus Project conditions. The impacted intersections are:

- **#3 - SR 12-SR 29/SR 221 (AM and PM peak hours)**
  - Intersection operating unacceptably without project and project adds more than 50 peak hour trips - Significant Impact
- **#12 - Soscol Avenue (SR 221)/Imola Avenue (SR 121) (PM peak hour)**
  - Intersection operating unacceptably without project and project adds more than 50 peak hour trips - Significant Impact
Exhibit 5.13-6  Project Trip Distribution
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

Exhibit 5.13-7  Project-Generated Peak Hour Turning Movement Volumes

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
### Table 5.13-6  Existing Plus Project Intersection Level of Service Summary

<table>
<thead>
<tr>
<th>#</th>
<th>Intersection</th>
<th>LOS Criteria</th>
<th>Control</th>
<th>AM Peak</th>
<th>PM Peak</th>
<th>AM Peak</th>
<th>Project Trips</th>
<th>PM Peak</th>
<th>Project Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LOS</td>
<td>Delay</td>
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<td>Delay</td>
<td>Var</td>
<td>Trips</td>
<td>Delay</td>
<td>Trips</td>
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<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>1</td>
<td>SR 221/Kaiser Road</td>
<td>E Signal</td>
<td>B 10.4</td>
<td>B 12.6</td>
<td>B 10.6</td>
<td>0.2</td>
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<td>1.0</td>
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<td>SR 221/Napa Valley Corporate Way</td>
<td>E Signal</td>
<td>E 58.8</td>
<td>D 37.9</td>
<td>E 64.1</td>
<td>5.3</td>
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Note: Intersections that are operating below acceptable levels are shown in **bold** and significant impacts are highlighted. It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

SB = southbound; EB = eastbound; WB = westbound; NBL = northbound left; WBR = westbound right

1. Signal = Signalized intersection, AWSC = All-Way Stop Controlled intersection, SSSC = Side-Street Stop Controlled intersection
2. The average control delay is reported for signalized and AWSC intersections. The delay for the worst movement is reported for SSSC intersections.
3. Used HCM2000 Methodology to determine LOS and delay.
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

Draft Environmental Impact Report

January 2018 Trinitas Mixed-Use Project

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)

Exhibit 5.13-8 Existing Plus Project Peak Hour Turning Movement Volumes
Existing Plus Project Signal Warrants

Signal warrants were evaluated at the unsignalized study intersections under Existing Plus Project conditions. The list below shows the results of the signal warrants analysis for the unsignalized intersections. None of the intersections meet the peak hour signal warrant. Signal warrant worksheets are included in the Traffic Study (Appendix O).

- Intersection #4 – Napa Valley Corporate Drive/Kaiser Road - did not meet peak hour signal warrant
- Intersection #5 – Napa Valley Corporate Drive/West Project Driveway - did not meet peak hour signal warrant
- Intersection #6 – Napa Valley Corporate Drive/Napa Valley Corporate Way - did not meet peak hour signal warrant
- Intersection #7 – Napa Valley Corporate Way/Bordeaux Way - did not meet peak hour signal warrant
- Intersection #8 – Napa Valley Corporate Drive/Bordeaux Way - did not meet peak hour signal warrant
- Intersection #9 – Napa Valley Corporate Drive/Anselmo Court - did not meet peak hour signal warrant

2. Cumulative (2035) Conditions

2035 Transportation Improvements

The Traffic Study analysis of transportation improvements in year 2035 only assumed planned and fully funded improvements. Exhibit 5.13-9, Cumulative (2035) Lane Geometry and Traffic Control depicts the intersection geometry and traffic control assumed in the analysis. The following roadway improvements are assumed for 2035 cumulative conditions.

- Intersection #1 – SR 221/Kaiser Drive: Construction of dual left-turn lanes on northbound SR 221 that are equal in length to the existing 280-foot single left-turn lane.
- Intersection #9 – Napa Valley Corporate Drive/Anselmo Court: Construction of a single-lane roundabout with a bypass lane installed on the southbound and eastbound approaches.31
- Intersection #10 – SR 221/Streblow Drive: Construction of an additional northbound left-turn lane and a receiving lane on Streblow Drive.31

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31 Napa Pipe Development Agreement - Exhibit C - Intersection Improvement Plan, July 2014
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.13 – Transportation/Traffic

Exhibit 5.13-9  Cumulative (2035) Lane Geometry and Traffic Control

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
Chapter 5. Environmental Setting, Impacts, and Mitigation Measures

5.13 – Transportation/Traffic

Cumulative (2035) Traffic Volume

The Napa-Solano’s Travel Demand Model has base year volumes from 2015 and future year volumes from 2040 for roadway links in Napa. The model volumes were used to determine the incremental growth between the base year and the future year. It was determined that multiple roadway links within the study area had negative growth. To achieve Cumulative (2035) traffic conditions, Cumulative Plus Project volumes from the Napa Meritage Transportation Study32 and Napa Pipe Draft EIR33 were used at similar locations. At locations that were not included in either study, volumes were calculated based on adjacent intersections.

Cumulative (2035) Intersection Level of Service

Cumulative (2035) volumes as evaluated at the study intersections are shown in Exhibit 5.13-10, Cumulative (2035) Peak Hour Turning Movement Volumes with the results detailed below in Table 5.13-7 below. Locations operating at unacceptable levels of service are shown in bold. The intersections that would operate at unacceptable levels of service are:

- #1 – SR 221/Kaiser Road (AM and PM peak hours)
- #2 – SR 221/Napa Valley Corporate Way (AM and PM peak hours)
- #3 – SR 12-SR 29/SR 221 (AM and PM peak hours)
- #6 – Napa Valley Corporate Drive/Napa Valley Corporate Way (PM peak hour)
- #8 – Napa Valley Corporate Drive/Bordeaux Way (PM peak hour)
- #10 – SR 221/Streblow Drive (AM and PM peak hours)
- #11 – SR 221/Magnolia Drive (AM and PM peak hours)
- #12 – Soscol Avenue (SR 221)/Imola Avenue (SR 221) (AM and PM peak hours)
- #13 – Soscol Avenue (SR 221)/Shetler Avenue (AM and PM peak Hours)
- #14 – Soscol Avenue (SR 221)/Kansas Avenue (AM and PM peak hours)
- #15 – Soscol Avenue (SR 221)/Silverado Trail (AM and PM peak hours)
- #16 – Imola Avenue (SR 121)/Gasser Drive (PM peak hour)

33 Napa Pipe Draft EIR. Prepared by Design, Community & Environment. October 2009
Exhibit 5.13-10 Cumulative (2035) Peak Hour Turning Movement Volumes
### Table 5.13-7 Cumulative (2035) Intersection Level of Service Summary

<table>
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<th>#</th>
<th>Intersection</th>
<th>LOS Criteria</th>
<th>Control¹</th>
<th>Cumulative Baseline (2035)</th>
<th>AM Peak</th>
<th>PM Peak</th>
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<td>2</td>
<td>SR 221/Napa Valley Corporate Way</td>
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<td>Signal</td>
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<td>69.3</td>
<td>F</td>
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Note: Intersections that are operating below acceptable levels are shown in **BOLD**.

It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

SB = southbound; WB = westbound; NBR = northbound right

1 Signal = Signalized intersection, AWSC = All-Way Stop Controlled intersection, SSSC = Side-Street Stop Controlled intersection
2 The average control delay is reported for signalized and AWSC intersections. The delay for the worst movement is reported for SSSC intersections.
3 Used HCM 2000 Methodology to determine LOS and delay
Cumulative (2035) Signal Warrants

Cumulative (2035) signal warrants were evaluated at the unsignalized study intersections under existing traffic conditions. The results of the five unsignalized intersections analyzed are as follows.

- Intersection #4 - Napa Valley Corporate Drive/Kaiser Road - met signal warrant in AM and PM peak hours
- Intersection #6 - Napa Valley Corporate Drive/Napa Valley Corporate Way - met signal warrant in PM peak hour
- Intersection #7 - Napa Valley Corporate Way/Bordeaux Way - did not meet peak hour signal warrant
- Intersection #8 - Napa Valley Corporate Drive/Bordeaux Way - did not meet peak hour signal warrant
- Intersection #9 - Napa Valley Corporate Drive/Anselmo Court - did not meet peak hour signal warrant

Although the intersection of Napa Valley Corporate Drive/Kaiser Road met the peak hour signal warrant, the intersection operates acceptable in the Cumulative (2035) conditions.

While the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way met the peak hour signal warrants and operates at unacceptable during the PM peak hour, it is recommended that other signal warrants (e.g., 8-hour vehicular volume, 4-hour vehicular volume) or other lane geometry modification be considered before signalizing this intersection.

3. Cumulative (2035) Plus Project Conditions

Cumulative (2035) Plus Project Intersection Level of Service

Results of the Cumulative (2035) Plus Project traffic conditions at the study intersections are shown on Exhibit 5.13-11, Cumulative (2035) Plus Project Peak Hour Turning Movement Volumes. Table 5.13-8, Cumulative (2035) Plus Project Intersection Level of Service Summary details the results of the analysis. Locations operating unacceptably and significant Project impacts are highlighted in bold.

- #1 - SR 221/Kaiser Road (AM and PM peak hours)
  Intersection operating unacceptably without project and project adds more than 50 peak hour trips – Significant Impact
- #2 - SR 221/Napa Valley Corporate Way (AM and PM peak hours)
  Intersection operating unacceptably without project and project adds more than 50 peak hour trips - Significant Impact
- #3 - SR 12-SR 29/SR 221 (AM and PM peak hours)
  Intersection operating unacceptably without project and project adds more than 50 peak hour trips - Significant Impact
- #6 - Napa Valley Corporate Drive/Napa Valley Corporate Way (PM peak hour)
  Intersection operating unacceptably without project and project adds more than 50 peak hour trips - Significant Impact
Exhibit 5.13-11 Cumulative (2035) Plus Project Peak Hour Turning Movement Volumes

Source: Transportation Impact Study, Kimley Horn, December 2017 (Appendix O to this EIR)
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Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted. It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

1. Signal = Signalized intersection, AWSC = All-Way Stop Controlled intersection, SSSC = Side-Street Stop Controlled intersection
2. The average control delay is reported for signalized and AWSC intersections. The delay for the worst movement is reported for SSSC intersections.
3. Used HCM2000 Methodology to determine LOS and delay.
#7 - Napa Valley Corporate Way/Bordeaux Way (AM and PM peak hours)
Intersection operating acceptably without project and project causes intersection
to exceed 4.0 vehicle-hours of total delay for the worst approach - **Significant Impact**

#8 - Napa Valley Corporate Drive/Bordeaux Way (PM peak hour)
Intersection operating unacceptably without project and project adds less than
50 peak hour trips - **Not a significant impact**

#10 - SR 221/Streblow Drive (AM and PM peak hours)
Intersection operating unacceptably without project and project adds more than
50 peak hour trips - **Significant Impact**

#11 - SR 221/Magnolia Drive (AM and PM peak hours)
Intersection operating unacceptably without project and project adds more than
50 peak hour trips - **Significant Impact**

#12 - Soscol Avenue (SR 221)/Imola Avenue (SR 221) (AM and PM peak hours)
Intersection operating unacceptably without project and project adds more than
50 peak hour trips - **Significant Impact**

#13 - Soscol Avenue (SR 221)/Shetler Avenue (AM and PM peak hours)
Intersection operating unacceptably without project and project adds less than
50 peak hour trips - Not a significant impact

#14 - Soscol Avenue (SR 221)/Kansas Avenue (AM and PM peak hours)
Intersection operating unacceptably without project and project adds less than
50 peak hour trips - Not a significant impact

#15 - Soscol Avenue (SR 221)/Silverado Trail (AM and PM peak hours)
Intersection operating unacceptably without project and project adds less than
50 peak hour trips - Not a significant impact

#16 - Imola Avenue (SR 121)/Gasser Drive (PM peak hour)
Intersection operating unacceptably without project and project adds less than
50 peak hour trips - Not a significant impact

**Cumulative (2035) Plus Project Signal Warrants**

Signal warrants were evaluated at the unsignalized study intersections. Results of the
analysis are listed below for the five unsignalized intersections with results for meeting the
warrants shown in **bold.**

- Intersection #4 - Napa Valley Corporate Drive/Kaiser Road - **Met signal warrant in AM and PM peak hours**
- Intersection #5 - Napa Valley Corporate Drive/West Project Driveway - did not meet peak hour signal warrant
- Intersection #6 - Napa Valley Corporate Drive/Napa Valley Corporate Way - **Met signal warrant in PM peak hour**
- Intersection #7 - Napa Valley Corporate Way/Bordeaux Way - did not meet peak hour signal warrant
- Intersection #8 - Napa Valley Corporate Drive/Bordeaux Way - did not meet peak hour signal warrant
• Intersection #9 - Napa Valley Corporate Drive/Anselmo Court - did not meet peak hour signal warrant

Although the intersection of Napa Valley Corporate Drive/Kaiser Road met the peak hour signal warrant, the intersection operates acceptable in the Cumulative (2035) conditions.

While the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way met the peak hour signal warrants and operates at unacceptable during the PM peak hour, it is recommended that other signal warrants (e.g., 8-hour vehicular volume, 4-hour vehicular volume) or other lane geometry modification be considered before signalizing this intersection.

4. Vehicle Queuing Analysis

To provide analysis for vehicle queuing, queue lengths were determined for each turn lane. Synchro software calculates the 95th percentile queues based on HCM 200 methodology. The 95th percentile queue is used to account for fluctuations in traffic and represents a condition where 95% of the time during the peak period, traffic volumes will be less than or equal to the queue determined by the analysis.

The 95th percentile queuing was estimated under the various development conditions and in consideration of the planned intersection and signal timing improvements. A typical vehicle length of 25 feet was used in the analysis. An impact was assumed to occur if the queue increased by one or more vehicles and the vehicle queue exceeded the turn pocket length.

The analysis showed that some existing turn bay lengths were exceeded. In most cases, the inadequate queue lengths are not associated with the proposed Project but are the result of pre-existing deficiencies. As an example, the 95th percentile northbound left turn queue length at the intersection of SR 12/SR 29 and SR 221 is 630 feet during the PM peak hour in the Existing Conditions and 644 feet during the PM peak hour in the Existing Plus Project Conditions. Although the turn pocket length is 170 feet long and the queue spills out of the turn pocket, this is a pre-existing deficiency not associated with the Project. At the Project study locations, the increase in vehicle queuing is typically less than one vehicle except at the following:

• Intersection #6 - Napa Valley Corporate Drive/Napa Valley Corporate Way
  • Existing Plus Project, PM Peak: Westbound left turn queue length of 240 feet exceeds the 100-foot turn pocket length in the Existing Plus Project Condition. The Project increases the queuing by approximately two vehicles or 47 feet of the total queue.
  • Cumulative Plus Project, PM Peak: Westbound left turn queue length of 535 feet exceeds the 100-foot turn pocket length in the Cumulative Plus Project Condition. The Project increases the queuing by approximately three vehicles or 70 feet of the total queue.
• Intersection #10 - Soscol Avenue (SR 221)/Streblow Drive
  • Cumulative Plus Project, PM Peak: Northbound left turn queue length of 457 feet exceeds the 315-foot turn pocket length in the Cumulative Plus Project Condition. The Project increases the queuing by approximately five vehicles or 136 feet of the total queue.

• Intersection #12 - Soscol Avenue (SR 221)/Imola Avenue (SR 121)
  • Existing Plus Project, PM Peak: Northbound left turn queue length of 614 feet exceeds the 415-foot turn pocket length in the Existing Plus Project Condition. The Project increases the queuing by approximately two vehicles or 60 feet of the total queue.
  • Cumulative Plus Project, PM Peak: Northbound left turn queue length of 1,009 feet exceeds the 415-foot turn pocket length in the Cumulative Plus Project Condition. The Project increases the queuing by approximately one vehicle or 29 feet of the total queue.

As noted in the Traffic Study, Mitigation Measures T-4, T-6, and T-8 require fair share contributions that will mitigate the queuing impacts identified above.

5. Site Access and Circulation

Analysis was conducted at the Project access driveways – one driveway on Napa Valley Corporate Drive and one driveway on Napa Valley Corporate Way. The driveway on Napa Valley Corporate Drive will be utilized by office employees and visitors. The driveway will be unsignalized and will only allow right-in and right-out movements. The existing driveway on the north leg of Napa Valley Corporate Way and Bordeaux Way will serve the hotel and winery uses.

A queuing analysis was also conducted for the Project access driveways. The queuing analysis at the Project driveways indicates that the 95th percentile queues would be no greater than one vehicle (25 feet) for any of the Project driveways. Therefore, no on-site queuing concern was identified.

Pedestrians on-site can use the available sidewalks throughout the Project to traverse the development. The sidewalk network provides a safe route to the hotels, winery or offices. Therefore, no sidewalk deficiencies were identified.

Bicyclists on-site can share the proposed on-site roadways with vehicles. Employees and visitors can access the City network of bicycle facilities via the bike lanes adjacent to the site on Napa Valley Corporate Drive.

5.13.5 Mitigation Measures

The Traffic Study summarized the significant impacts due to Project implementation and provided recommended mitigation to address the identified impacts. Table 5.13-9 below presents a summary for each intersection where the Project will result in direct or indirect impacts that are considered significant without mitigation and includes a column showing the Project fair share percentage for the recommended improvement. City fair share percentages are calculated based on the City of Napa Policy Guidelines: Traffic Impact Analysis for Private Development Review, Section IV-F, adopted 12/12/02 and revised 5/12/05. Cost calculations
are also presented in this section and are based on the larger percentage of the AM and PM peak for each identified intersection.

**Table 5.13-9  Impact Summary**

<table>
<thead>
<tr>
<th>#</th>
<th>Intersection</th>
<th>Scenarios</th>
<th>Indirect or Direct Impact</th>
<th>Fair Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SR 221/Kaiser Road</td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>1.84%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.51%</td>
</tr>
<tr>
<td>2</td>
<td>SR 221/Napa Valley Corporate Way</td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>3.43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>2.72%</td>
</tr>
<tr>
<td>3</td>
<td>SR 12-SR 29/SR 221</td>
<td>Existing Plus Project AM Peak</td>
<td>Indirect</td>
<td>1.37%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existing Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.61%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>2.12%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.87%</td>
</tr>
<tr>
<td>6</td>
<td>Napa Valley Corporate Drive/</td>
<td>Existing Plus Project PM Peak</td>
<td>Indirect</td>
<td>11.20%</td>
</tr>
<tr>
<td></td>
<td>Napa Valley Corporate Way</td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>4.21%</td>
</tr>
<tr>
<td>7</td>
<td>Napa Valley Corporate Way/</td>
<td>Cumulative Plus Project AM Peak</td>
<td>Direct</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Bordeaux Way</td>
<td>Cumulative Plus Project PM Peak</td>
<td>Direct</td>
<td>100%</td>
</tr>
<tr>
<td>10</td>
<td>SR 221/Streblow Drive</td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>2.09%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.94%</td>
</tr>
<tr>
<td>11</td>
<td>SR 221/Magnolia Drive</td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>1.48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.73%</td>
</tr>
<tr>
<td>12</td>
<td>Soscol Avenue (SR 221)/Imola Avenue (SR 121)</td>
<td>Existing Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.39%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project AM Peak</td>
<td>Indirect</td>
<td>1.68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative Plus Project PM Peak</td>
<td>Indirect</td>
<td>1.33%</td>
</tr>
</tbody>
</table>

Based on the above-identified impacts, the Traffic Study recommends the following mitigation.

- **#1 – SR 221/Kaiser Road** – The intersection of SR 221 and Kaiser Road has a level of service impact in the following scenario due to the proposed Project:
  - **Cumulative Plus Project – AM and PM peak hours** – In the Cumulative Plus Project scenario, the intersection of SR 221/Kaiser Road will operate at an unacceptable LOS F in the AM and PM peak hours. Because the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips to the intersection, this is a significant impact. It should be noted that this is a pre-existing LOS deficiency, and therefore this is an indirect impact.

To mitigate the indirect impact, additional northbound and southbound through lanes should be constructed, and signal timing should be optimized. The additional through lanes were also identified as a mitigation measure for the Napa Pipe Project. While the intersection will still operate at LOS F, the delay for the intersection will improve by 96.9 and 97.5 seconds during the AM and PM peak hours, respectively. With mitigation, the indirect impact is less than significant.

Because this is an indirect impact, the applicant shall be responsible to pay its fair share of the costs to implement the mitigation. Because this intersection is on a state highway facility, the fair share is calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing without Project and Cumulative without Project volumes. The fair share for this mitigation is 1.84% (the larger of the AM and PM peak percentages).

- **#2 - SR 221/Napa Valley Corporate Way** - An LOS impact was identified under Cumulative Plus Project conditions for both AM and PM peak hours resulting in an unacceptable LOS F. The intersection currently operates at an unacceptable LOS F without the Project. However, the Project adds more than 50 peak hour trips resulting in a significant indirect impact. Recommended mitigation consists of the addition of northbound and southbound through lanes and optimized signal timing. While the intersection will continue to operate at LOS F, the delay for the intersection will improve by 327.7 and 430.5 seconds during the AM and PM peak hours, respectively, reducing the indirect impact to less than significant.

  This intersection is on a state highway facility; therefore, the fair share has been calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing without Project and Cumulative without Project volumes. The fair share for this mitigation is 3.43%.

- **#3 - SR 12-SR 29/SR 221** - An LOS impact for this intersection was identified in the Existing Plus Project AM and PM peak hours and the Cumulative Plus Project AM and PM peak hours.

  - **Existing Plus Project scenario** - The intersection operates at an unacceptable LOS F without the Project and the Project adds more than 50 peak hour trips, resulting in a significant indirect impact. The City, Caltrans, and Napa Valley Transportation Authority plan to improve operations, such as a fully grade-separated interchange. The fully grade-separated interchange has been proposed in the County's State Route 29 Gateway Corridor Improvement Plan\(^\text{35}\) and analyzed in Caltrans’ SR 29/221 Soscol Junction Improvement Project Draft EIR/EA. This improvement is also listed in the Napa County transportation plan Countywide Plan Vision 2040 as part of the Soscol Junction Project.\(^\text{36}\) The interchange would remove the southbound approach, add a median along SR 12/SR 29, and remove the signal; and would result in a side-street stop control intersection with only a stop-control on the northbound approach from Soscol Ferry Road. The side-street stop control intersection would operate at LOS C for the worst approach for both the AM and PM peak hours. It should be noted that the overall intersection would operate at LOS A for both AM and PM peak hours. Another mitigation being considered would replace the signal with a roundabout and would result in improved operations.

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35 Napa County Transportation and Planning Agency, State Route 29 Gateway Improvement Plan, October 2014.
The Project will be required to contribute a fair share fee towards the mitigation that will be implemented. The fair share, as stated by Caltrans, is calculated as the ratio of the Project trips divided by the trips under the Existing Plus Project scenario, resulting in a 1.61% share. This intersection is on a state highway facility, and the fair share fee was calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing Without Project and Cumulative Without Project volumes.

- **Cumulative Plus Project scenario** - The intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Since the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips, this is a significant indirect impact. As stated under the Existing Plus Project conditions, a fully grade-separated interchange is being considered. This improvement would result in improved operations at the intersection. With mitigation, the indirect impact is less than significant.

As stated for the mitigation improvement under the Existing Plus Project Conditions, an interchange or a roundabout is being considered. The interchange option would result in the intersection operating at LOS F for the worst approach. However, it should be noted that the overall intersection would operate at LOS A with an improvement in delay of 808.1 seconds during the AM peak hour and at LOS F with an improvement in delay of 397.5 seconds in the PM peak hour. With mitigation, the indirect impact is less than significant.

Because this is an indirect impact, the Applicant shall be responsible to pay its fair share of the costs to the mitigation that will be implemented. Because this intersection is on a state highway facility, the fair share is calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing Without Project and Cumulative Without Project volumes. The fair share for this mitigation is 2.12% (the larger of the AM and PM peak percentages).

- **#6 - Napa Valley Corporate Drive/Napa Valley Corporate Way**

- **Existing Plus Project scenario** - In the Existing Plus project scenario, the queue for the westbound left-turn movement is 240 feet in the PM peak, which exceeds the 100-foot turn pocket. Without the Project, the westbound queue is 193 feet. The proposed Project adds 47 feet or approximately two vehicles. Because the queue exceeds the left-turn pocket and the proposed Project increases the queue length by at least one vehicle, this is a queuing impact.

To mitigate the queuing impact, the westbound approach should be restriped to be one left-turn lane, one shared left/through lane, and one right-turn lane. This migration would reduce the queue length to 53 feet, which is less than the existing queue length of 193 feet,

Because this is an indirect impact, the applicant shall be responsible to pay its fair share of the costs to implement the mitigation. The fair share, as stated by
the City, is calculated as the ratio of the project trips divided by the trips under the Existing Plus Project scenario. The fair share for this mitigation is 11.20%.

- **Cumulative Plus Project scenario** – In the Cumulative Plus Project scenario, the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way will operate at an unacceptable LOS F in the PM peak hour. Because the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips to the intersection, this is a significant impact. It should be noted that this is a pre-existing LOS deficiency, and therefore this is an indirect impact. Per the City of Napa, the required fair share of the costs to implement the mitigation is calculated as the ratio of the Project trips divided by the trips under the Cumulative Plus Project scenario, resulting in a 4.21% share.

  In addition, the queue for the westbound left-turn movement is 535 feet in the PM peak, which exceeds the 100-foot turn pocket. Without the Project, the westbound queue is 465 feet. The proposed Project adds 70 feet or approximately three vehicles. Because the queue exceeds the left-turn pocket and the proposed Project increases the queue length by at least one vehicle, this is a queuing impact.

  Similar to Existing Plus Project conditions, the westbound approach should be restriped to be one left-turn lane, one shared left/through lane, and one right-turn lane. This mitigation would improve the intersection to LOS D with a delay of 29.7 seconds in the PM peak hour, and would reduce the westbound left-turn queue to 120 feet. The intersection operates better than the Without Project conditions. With mitigation, the indirect impact is **less than significant**.

- **#7 - Napa Valley Corporate Way/Bordeaux Way** - The impact to this intersection with Project implementation will occur in the Cumulative Plus Project AM and PM peak hours. Under Cumulative Without Project, the intersection operates at an acceptable LOS F, but is considered an acceptable operation because the total delay was less than 4.0 vehicle-hours for a single lane movement with low volume. Because the addition of the Project trips under cumulative conditions causes the intersection to operate at an unacceptable LOS F and the total delay is greater than 4.0 vehicle hours in the AM and PM peak hours, this is a direct significant impact. Because the direct significant impact is triggered in the cumulative (year 2035) condition, to mitigate the impact, the Project Applicant will pay 100% of the cost of the mitigation to the City for future implementation of intersection improvements at the intersection of Napa Valley Corporate Way/Bordeaux Way. The intersection improvements of a traffic signal or a roundabout at this location would achieve acceptable intersection LOS. Constructing a traffic signal would result in the intersection operating at LOS B for AM and PM peak periods. Constructing a roundabout would result in the intersection operating at LOS A for AM and PM peak periods. With mitigation, the impact is less than significant.
**#10 - SR 221/Streblow Drive** - Project implementation will result in a Cumulative Plus Project AM and PM peak hour LOS impact and a Cumulative Plus Project PM peak hour queuing impact at this intersection. Because the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips to the intersection, this is a significant indirect impact.

In addition, the queue for the northbound left-turn movement is 457 feet in the PM peak, which exceeds the 315-foot turn pocket. Without the Project, the westbound queue is 321 feet. The proposed Project adds 136 feet of approximately five vehicles. Because the queue exceeds the left-turn pocket and the proposed Project increases the queue length by at least one vehicle, this is a queuing impact.

Recommended mitigation would include the construction of an additional through lane in the northbound and southbound direction and the optimization of signal timing. This improvement is listed in the Napa County transportation plan Countywide Plan Vision 2040 as part of the Soscol Avenue Widening Project. The mitigation would improve the intersection to LOS D with a delay of 39.8 seconds in the AM peak hour and LOS C with a delay of 22.1 seconds in the PM peak hour. In addition, the northbound left-turn queue in the PM peak is reduced to 213 feet and the intersection operates better than the Without Project conditions. With mitigation, the impact would be less than significant.

The Project would be required to pay a fair share cost to implement the improvement. The fair share, as stated by the City, is calculated as the ratio of the Project trips divided by the trips under the Cumulative Plus Project scenario, resulting in a 2.09% Project share.

**#11 - SR 221/Magnolia Drive** - The Project will have an impact at this intersection under Cumulative Plus Project AM and PM peak hours. Since the intersection currently operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak our trips, this is a significant indirect impact.

Proposed mitigation includes the addition of a through lane in the northbound and southbound direction and signal timing should be optimized. This improvement is listed in the Napa County transportation plan Countywide Plan Vision 2040 as part of the Soscol Avenue Widening Project. The intersection will still operate at LOS F; however, the delay will improve by 285.3 and 401 seconds during the AM and PM peak hours, respectively, resulting in a less than significant impact with mitigation.

The Project will be responsible to pay fair share fees to implement the mitigation. Since this intersection is on a state highway facility, the fair share is calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing without Project and Cumulative without Project volumes, resulting in a 1.73% Project share.
• **#12 - Soscol Avenue (SR 221)/Imola Avenue (SR 121)** - Project implementation will result in intersection impacts in the Existing Plus Project PM peak hour and queuing, the Cumulative Plus Project (LOS) AM and PM peak hours and PM peak hour queuing.

• **Existing Plus Project scenario** – In the Existing Plus Project scenario, the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) Road will operate at an unacceptable LOS F in the PM peak hour. Because the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips to the intersection, this is a significant impact. It should be noted that this is a pre-existing LOS deficiency and therefore this is an indirect impact.

In addition, the queue for the northbound left turn movement is 614 feet in the PM peak, which exceeds the 415-foot turn pocket. Without the Project, the northbound queue is 554 feet. The proposed Project adds 60 feet or approximately two vehicles. Because the queue exceeds the left-turn pocket and the proposed Project increases the queue length by at least one vehicle, this is a queuing impact.

To mitigate the indirect impact, the signal timing should be optimized. This mitigation would improve the intersection to LOS E with a delay of 74.5 seconds of delay in the PM peak and the northbound queue length reduced to 551 feet. The intersection operates better than the Without Project conditions. With mitigation, the indirect impact is less than significant.

Because this is an indirect impact, the Project Applicant shall be responsible to pay its fair share of the costs to implement the mitigation. The fair share, as stated by the City, is calculated as the ratio of the project trips divided by the trips under the Existing Plus Project scenario. The fair share for this mitigation is 1.39%.

• **Cumulative Plus Project scenario** – In the Cumulative Plus Project scenario, the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) will operate at an unacceptable LOS F in the AM and PM peak hours. Because the intersection operates at an unacceptable LOS F without the Project, and the Project adds more than 50 peak hour trips to the intersection, this is a significant impact. It should be noted that this is a pre-existing LOS deficiency, and therefore this is an indirect impact.

In addition, the queue for the northbound left turn movement is 1,009 feet in the PM peak, which exceeds the 415-foot turn pocket. Without the Project, the northbound queue is 980 feet. The proposed Project adds 29 feet or approximately one vehicle. Because the queue exceeds the left-turn pocket and the proposed Project increases the queue length by at least one vehicle, this is a queuing impact.

To mitigate the indirect impact, an additional through lane in the northbound and southbound direction should be constructed and the signal timing should
be optimized. This improvement is listed in the Napa County transportation plan Countywide Plan Vision 2040 as part of the Soscol Avenue Widening Project\textsuperscript{37}. While the intersection will still operate at LOS F, the delay for the intersection will improve by 133.8 and 365.6 seconds during the AM and PM peak hours, respectively. The northbound queue length is 975. With mitigation, the indirect impact is less than significant.

Because this is an indirect impact, the Project Applicant shall be responsible to pay its fair share of the costs to implement the mitigation. Because this intersection is on a state highway facility, the fair share is calculated using Caltrans methodology where the fair share is based on project traffic divided by the growth between Existing without Project and Cumulative without Project volumes. The fair share for this mitigation is 1.68\% (the larger of the AM and PM peak percentages).

The table below depicts the intersections detailed above, the mitigation proposed and the corresponding fair share percentages. As previously noted, the requirement is that the Project contribution be the larger of the AM and PM peak percentages where an impact occurs during both peak periods. This is reflected in the table below.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Int # & Intersection Name & Mitigation & Fair Share (\%) \\
\hline
Existing & & & \\
12 & Soscol Avenue (SR 221)/Imola Avenue (SR 121) & Optimize cycle length and splits & 1.39\% \\
Cumulative & & & \\
1 & SR 221/Kaiser Road & Construct additional northbound and southbound through lanes; optimize signal timing & 1.84\% \\
2 & SR 221/Napa Valley Corporate Way & Construct additional northbound and southbound through lanes; optimize signal timing & 3.43\% \\
3 & SR 12 and SR 29/SR 221 & Construct interchange or roundabout & 2.12\% \\
6 & Napa Valley Corporate Drive/Napa Valley Corporate Way & Restripe WB approaches & 11.2\% \\
7 & Napa Valley Corporate Way/Bordeaux Way & Convert to traffic signal or roundabout & 100.00\% \\
10 & SR 221/Streblow Drive & Construct additional northbound and southbound through lanes; optimize signal timing & 2.09\% \\
11 & SR 221/Magnolia Drive & Construct additional northbound and southbound through lanes; optimize signal timing & 1.73\% \\
12 & Soscol Avenue (SR 221)/Imola Avenue (SR 121) & Construct additional northbound and southbound through lanes & 1.68\% \\
\hline
\end{tabular}
\caption{Mitigation Fair Share Summary}
\end{table}

\textsuperscript{37} Napa County Transportation and Planning Agency. Countywide Plan Vision 2040. September 2015
1. **Standard Mitigation Measures**

The City of Napa Policy Resolution 27 identifies Standard Mitigation Measures applicable to the Project as follows:

| MM T-1 | All required public frontage and street improvements shall be designed and built in accordance with City of Napa ordinances and the PWD Standard Specifications. Unless waived by the Public Works Director, street improvements shall include curbs, gutter, sidewalk, planting, streetlights, and street trees. Any additional right-of-way necessary to accommodate these improvements shall be dedicated to the City. |
| MM T-2 | During non-working hours, open trenches shall be provided with appropriate signage, flashers and barricades approved by the Street Superintendent to warn oncoming motorists, bicyclists and pedestrians of potential safety hazards. |
| MM T-3 | All road surfaces shall be restored to pre-Project conditions after completion of any Project-related pipeline installation activities. |
| MM T-4 | To mitigate the cumulative impact of the traffic generated by the subject Project on the City's arterial and collective street system, the Developer shall pay a Street Improvement Fee in accordance with Napa Municipal Code Chapter 15.84 and implementing resolutions to pay for the traffic improvements identified therein. Such fee shall be payable at the rate in effect at the time of payment. The findings set forth in the ordinance and implementing resolutions are incorporated herein. The City further finds that the calculation of the fees in accordance with the trip generation capacity of development demonstrates there is a reasonable relationship between the amount of the fees imposed and the cost of the street improvements attributable to this Project. |

2. **Special Mitigation Measures - Long-Term Impacts**

The following Special Mitigation Measures are provided herein based on the recommendations in the Traffic Study as detailed above.

| MM T-5 | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 1.84% fair share contribution to the following improvement: provide additional northbound and southbound through lanes and optimization of signal timing at the intersection of SR 221/Kaiser Road. |
| MM T-6 | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 3.43% fair share contribution to the following improvement: provide additional northbound and southbound through lanes and optimization of signal timing at the intersection of SR 221/Napa Valley Corporate Way. |
| MM T-7  | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.12% fair share contribution to the following improvement: replace the existing signal by constructing a fully grade-separated interchange or roundabout at the intersection of SR 12-SR 29/SR 221. |
| MM T-8  | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay an 11.20% fair share contribution to the following improvement: restripe westbound approach to one left-turn lane, one shared through/left-turn lane, and one right-turn lane at the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way. |
| MM T-9  | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay 100% of the cost of the following cumulative impact improvement: installation of a traffic signal or a roundabout at the intersection of Napa Valley Corporate Way/Bordeaux Way. |
| MM T-10 | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.09% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound direction and optimization of signal timing at the intersection of SR 221/Streblow Drive. |
| MM T-11 | Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 1.73% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound and optimization of signal timing at the intersection of SR 221/Magnolia Drive. |
| MM T-12 | Prior to issuance of Certificates of Occupancy, at the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) under Existing plus Project conditions, the Project Applicant shall pay a 1.39% fair share contribution to the following improvement: optimization of signal timing. Under Cumulative Plus Project conditions, the Project Applicant shall pay a 1.68% fair share contribution for an additional through lane in the northbound and southbound direction and signal timing optimization. |

### 5.13.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state the Project would have a significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establish measures of effectiveness for performance of the circulation system.
- Conflict with an applicable congestion management program.
- Result in a change in air traffic patterns.
- Substantially increase hazards due to a design feature or incompatible uses.
- Result in inadequate emergency access, or
- Conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities.
The proposed Project will generate approximately 1,946 daily trips, of which 184 trips will occur in the AM peak hour and 182 trips in the PM peak hour. Under existing conditions, 2 of the 16 study area intersections operate at unacceptable levels of service. The intersections are SR 12-SR 29/SR 221 (#3) and Soscol Avenue/Imola Avenue (#12). The same intersections operate at unacceptable levels of service under Existing Plus Project conditions due to the addition of 50 or more peak hour trips at each location. Impacts are considered significant without mitigation.

The immediately surrounding area consists of office and industrial development, which is consistent with the industrial park designation. The City's General Plan Program EIR (PEIR) considered the anticipated growth and build-out of the Project vicinity based on the industrial park designation. Contributions to environmental impacts based on the anticipated development of the entire area were identified and mitigation was provided in the PEIR. A Statement of Overriding Considerations (SOC) was adopted for the PEIR where mitigation was not available or sufficient to reduce impacts to less than significant. The PEIR identified a significant unavoidable impact for predicted LOS F operation at the intersection of SR 12-29/SR 221/Soscol Ferry Road and adopted a SOC. The proposed Project will contribute to these anticipated impacts but would not involve any new or more severe environmental effects than were predicted in the PEIR.

Cumulative (2035) intersection level of service analysis shows that 12 intersections in the study area would operate at unacceptable levels of service. In addition, two intersections (#4 and #6) met the signal warrant. However, intersection #4, Napa Valley Corporate Drive/Kaiser Road, met the peak hour signal warrant. The intersection operates acceptably under 2035 cumulative conditions.

Under Cumulative Plus Project conditions (2035) it is expected that eight study intersections would operate at unacceptable levels of service without mitigation. In addition, the signal warrant analysis determined that the unsignalized intersection of Napa Valley Corporate Drive/Kaiser Road and the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way met the peak hour volume thresholds for Cumulative (2035) scenarios. Because this Napa Valley Corporate Drive/Kaiser Road intersection operates at acceptable LOS with and without the Project under cumulative conditions, signalization of the intersection is not required. While the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way met the peak hour signal warrants and operates at unacceptable during the PM peak hour, it is recommended that other signal warrants (e.g., 8-hour vehicular volume, 4-hour vehicular volume) or other lane geometry modification be considered before signalizing this intersection.

The queuing analysis showed that existing turn bays lengths were exceeded at several intersections. However, in most cases, the inadequate queue lengths are not associated with the Project but are the result of pre-existing deficiencies. No on-site queuing concerns were identified. At locations affected by the Project traffic, the increase in vehicle queuing is typically less than one vehicle except at the following intersections:

- Napa Valley Corporate Drive/Napa Valley Corporate Way
- Soscol Avenue (SR 221)/Streblow Drive
- Soscol Avenue (SR 221)/Imola Avenue
Mitigation requiring fair share fees at these intersections will mitigate the queuing impacts.

The proposed Project will not conflict with an applicable plan, ordinance or policy to establish measures of effectiveness for the performance of the circulation system or conflict with an applicable congestion management program. The Project site is approximately 4 miles from Napa Valley Airport and is not located within the airport's flight plan area and will not result in a change in air traffic patterns. While the Project site is within the Napa County Airport Land Use Compatibility Plan, the majority of the site is within Zone E which is the least restrictive land use area.

There will be no increase in hazards due to design features or incompatible uses because the Project will take access via existing driveways within the corporate park where the Project is located. No existing emergency access routes will be impacted by Project construction. Emergency ingress/egress will be taken on the existing roadways within Napa Valley Commons corporate park.

There will be no conflicts with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, and no decrease in the performance or safety of such facilities. Visitors, guests, and employees can utilize the VINE bus routes via bus stops for Route 11 within walking distance of the Project site. Cyclists will have access to the development using bicycle facilities on Napa Valley Corporate Drive. There are no pedestrian walkways adjacent to and surrounding the Project site, as is the condition throughout this area of the City of Napa. However, sidewalks available throughout the Project site provide pedestrians with a safe route between the hotels, winery and offices.

The Project impact on the surrounding circulation system under existing and cumulative with Project conditions will be less than significant with implementation of Mitigation Measures MM T-5 through MM T-12.

5.13.7 Cumulative Impacts

The Traffic Study identified two projects in the vicinity of the proposed Project that, when taken together, could potentially result in a cumulatively significant impact. Each project will generate new traffic, which was considered based on projections within the Napa Meritage Transportation Study and the Napa Pipe EIR. The cumulative impact analysis assumed the implementation of planned and fully funded roadway improvements. The Napa Pipe and Meritage Commons projects fully analyzed traffic impacts in their environmental documents, and provided mitigation to offset significant impacts. With the implementation of mitigations, the Project's individual contribution to traffic impacts would not be considerable. The proposed Project would not result in a cumulative impact.

5.13.8 Unavoidable Adverse Impacts

No unavoidable adverse impacts related to Transportation and Traffic are associated with the proposed Project with the incorporation of mitigation measures included herein.
5.14 Tribal Cultural Resources

CEQA Guidelines Appendix G, Environmental Checklist, has been expanded to include Tribal Cultural Resources. Similar to Cultural Resources, included herein as Section 5.4, this section discusses impacts to cultural resources directly related to Native American tribal cultures that populated the area where the Project is located. The distinction for Tribal Cultural Resources is that they are described as 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. Cultural Resources are generally considered as archaeological or paleontological resources which are typically beneath the surface of the ground and are discovered or uncovered through disturbance of the site. The potential tribal cultural resources impacts associated with the proposed Project are identified and discussed herein.

Information in this section is based on information provided by, as well as an Archaeological Inventory Survey (Archaeological Survey) prepared by, Genesis Society dated August 30, 2017. The report in its entirety is included herein as Appendix G. Where general information is applicable to both Cultural Resources (Section 5.4) and this section, the reader will be referred to Section 5.4 for additional detail.

5.14.1 Existing Conditions

The proposed Project is located within a portion of the Tulucay Ranch Land Grant as shown on Exhibit 5.14-1, USGS Napa, California, 7.5’ Series Quadrangle. The area of potential effect (APE) for the Archaeological Survey is the entire 11.5-acre Project site. The elevation within the APE averages 20 feet above mean sea level (AMSL) and no naturally occurring sources of surface water are located within the APE.

The area lies within the Coast and Interior Coast Ranges, near the terminal intersection of the southwestern terminus of the Vaca Mountains and the San Pablo Bay delta region. The APE is situated on relatively flat terrain adjacent to rolling hills that comprise the foothills that form the eastern margin of the Napa River. More detailed descriptions of the dominant features of the area are found Section 5.14.4 (beginning on page 5.14-8).

Exhibit 5.14-2, California Tribal Homelands Map, identifies the Native American tribes and their geographic locations throughout the state.
Source: Figure 3, Archaeological Inventory Survey; Sean Michael Jensen, M.A.; August 30, 2017 (Appendix G to this EIR)

**Exhibit 5.14-1** USGS Napa, California, 7.5’ Series Quadrangle
Chapter 5 – Environmental Setting, Impacts, and Mitigation Measures

5.14 – Tribal Cultural Resources

Exhibit 5.14-2 California Tribal Homelands Map

Source: Archaeological Inventory Survey (Appendix G to this EIR)
Historic Background

The archaeological record of the San Francisco Bay Area has typically fallen into two systems:

- The Early-Middle-Late Period nomenclature known as the Central California Taxonomic System
- The Archaic-Emergent temporal structure

The Archaic period is divided into three sub-periods: the Lower Archaic (8,000 BP to 5,000 BP), the Middle Archaic (5,000 BP to 1,500 BP), and the Upper Archaic (2,500 BP to 1,000 BP). Overall, Archaic occupants continued to practice relatively high geographic mobility but with an increase in permanent/semi-permanent resource procurement bases. The range of resources increases during this period, as evidenced by the diversity of artifacts, including the addition of milling stone tools and obsidian and chert concave-based projectile points. The Middle Archaic witnesses the introduction of the bowl mortar, further supporting the intensification of across as a subsistence resource. The increase in geographical/resource diversity, along with an expanding population during the Upper Archaic, contributed to an increase in the number of permanent settlements and additional complexities in the cultural manifestations.

During the Emergent period, the archeological record became more complex as specialized adaptations to locally available resources were developed and populations expanded. Further, interactions with cultures from the Sacramento Valley, the Delta and the San Francisco Bay regions resulted in numerous cultural changes for the North Coastal region inhabitants. Many sites dated to this time period contain mortars and pestles and/or are associated with bedrock mortars. The range of subsistence resources utilized along with reginal exchange systems expanded significantly. Archeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items.

5.14.2 Regulatory Setting

1. State Laws and Regulations

California Environmental Quality Act

CEQA states that it is state policy to: “take all action necessary to provide the people of this state with . . . historic environmental qualities.” CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the Act requires that alternative plans and mitigation measures be considered. CEQA includes historic, archaeological and paleontological resources as integral features of the environment. If such resources are identified as being within the proposed Project study area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.
California Register of Historical Resources

The Register is a listing of all properties considered to be significant historical resources in the state. These include all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks. The criteria for listing are the same as those of the National Register. The California Register statute specifically provides that historical resources listed or determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA.

Resources eligible for listing include buildings, sites, structures, objects or historic districts that retain historic integrity and are historically significant at the local, state or national level under one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- It is associated with the lives of persons important to local, California or national history;
- It embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

California Public Resources Code §21074

(a) Tribal Cultural Resources are either of the following:

1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
   a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
   b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Public Resources Code §21084.1

A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subdivision (k) of §5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of §5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of §5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section.

Assembly Bill 52

In September 2014, legislation was enacted that imposes new requirements for consultations regarding projects that may affect a tribal cultural resource and includes a list of recommended mitigation measures. AB 52 states that tribal cultural resources must meet the following:

1. Included or determined to be eligible for inclusion in the California Register of Historical Resources
2. Included in a local register of historical resources
3. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1
4. A cultural landscape that meets one of the above criteria and is geographically defined in terms of the size and scope of the landscape
5. A historical resource described in PRC 21084.1, a unique archaeological resource described in PRC 21083.2 or a non-unique archaeological resource if it conforms to the above criteria

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the
lead agency’s environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

Lead agencies are to provide notice to tribes traditionally or culturally affiliated with the geographic area of the proposed Project that may have expertise with regard to their tribal history and practices. Tribes can request consultation which may include discussing the type of environmental review necessary, the significance of the tribal cultural resources, the significance of the project’s impacts on the resource and the alternatives and mitigation measures recommended by the tribe.

Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place
- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria
- Local Regulations/Ordinances

The City of Napa General Plan - Envision Napa 2020 - includes a chapter entitled Historic Resources which identifies policies for the preservation of cultural resources as follows:

- HR-6.1 - The City shall enforce current federal and state and procedure for identifying, preserving and protecting prehistoric sites.
- HR-6.2 - The City shall require investigation during the planning process for all proposed developments in archaeologically sensitive areas in order to determine whether prehistoric resources may be affected by the project and, if so, require that appropriate mitigation measures be incorporated into the project design.
- HR-6.3 - Recognizing that Native American burials or archaeological artifacts may be encountered at unexpected locations, the City shall continue to enforce state mandates with its current mitigation requirement, applied to all development permits and tentative subdivision maps, that upon discovery of remains during construction, all activity will cease until qualified professional archaeological examination and reburial in an appropriate manner is accomplished.

5.14.3 Thresholds of Significance

Thresholds of significance for evaluation of the proposed Project’s impacts are based on the County of Napa Environmental Checklist and the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines). Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

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.

Per CEQA, an archaeological resource is considered “unique” (Section 21083.2(g)) when the resource not merely adds to the current body of knowledge, but when there is a high probability that the resource also:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information,
- Has a special and particular quality such as being the oldest of its type or the best available example of its type,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A project may have a significant impact or adverse effect on cultural resources/historic properties if the project will or could result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance or values of the resource would be materially impaired.

5.14.4 Project Impacts Prior to Mitigation

The Archaeological Survey includes a detailed explanation of the prehistoric and historic setting of the Project site and area generally. As noted, the entire report is included herein in Appendix G. Following is a summary of the historical information as well as the results of the pedestrian survey of the Project site conducted by Sean Jensen of Genesis Society. The specific tasks performed by Genesis Society in compliance with CEQA requirements and guidelines follow:

- Conduct a records search at the Northwest Information Center of the California Historical Resources Information System and consult with the Native American Heritage Commission. The goals of the records search and consultation were to determine (a) the extent and distribution of previous archaeological surveys, (b) the locations of known archaeological sites and any previously recorded archaeological districts and (c) the relationships between known sites and environmental variables.
- Conduct a pedestrian survey of the APE in order to record and evaluate any previously unidentified cultural resources. Based on map review, a complete coverage, intensive survey was conducted given the presence of moderate to high archaeological sensitivity within the property. The purpose of the pedestrian
survey was to ensure that any previously identified sites are relocated and evaluated in relation to the present project/undertaking.

- Preparation of a Final Report identifying Project effects and recommending appropriate mitigation measures for sites that might be affected by the undertaking and that are considered significant or potentially significant per CEQA and/or eligible or potentially eligible for inclusion on the California Register of Historical Resources.

All field survey work followed guidelines provided by the State Historic Preservation Office (Sacramento) and conforms to accepted professional standards.

1. **Ethnography**

The Project area is located within territory claimed by the Southern Patwin near the border shared with the Coast Miwok at the time of initial contact with European/American culture. The territorial boundaries of the Patwin are described as extending along the Sacramento River from the town of Princeton to the San Pablo and Suisun bays, abutting the Pomo and Wappo to the west.

The basic social unit for the Patwin was the family, although the village may also have functioned as a social, political and economic unit. Villages were usually located near water sources, with major villages inhabited mainly in the winter as it was necessary for at least some of the population to relocate into the hills and higher elevation zones to establish temporary camps during food gathering seasons (i.e., spring, summer and fall). Villages typically consisted of a variable number of bark houses, numbering from four or five to several dozen in larger villages such as the large village once situated to the north, in Napa, with each house containing a single family of from three to seven people.

As with all northern California Indian groups, economic life for the Patwin revolved around hunting, fishing and the collecting of plant foods. Deer was an important meat source and the animals were hunted by individuals by stalking or snaring, or by groups in community drives. Salmon runs, and other food resources available along the Napa River and its major tributaries, also contributed significantly to local economies. While much of the fish protein was consumed immediately, a significant percentage, particularly during the fall salmon run, was prepared for storage and consumed during winter months. Acorns represented one of the most important vegetal foods and were particularly abundant within the Oak Park Woodland which once dominated lands within the study area along the Napa River, and in association with higher ground and natural stream courses both east and west of Napa.

The ceremonial chief directed the entire tribelet’s Kuksu Cult, a religious cult and secret society that performed tribal initiations, ghost ceremonies and curing ceremonies (Kroeber 1907). The Patwin were documented by Asians and Europeans as early as the late 16th century, and their populations remained relatively stable until the incursion of Spanish settlers and missionaries during the latter portion of the 18th century. The indigenous populations at this time were “missionized” and relocated to various missions south of their traditional territory. Due to “missionization,” inter-tribal marriages became more common, and new missions were established throughout the tribe’s traditional lands.
Mexico gained independence from Spain in 1821, and the Mission Period officially ended in 1834. The newly established secular government resulted in the Patwin being freed from the Franciscan missionaries, only to find themselves serving new, land-grant masters. In 1837, a smallpox epidemic resulted in the deaths of a substantial portion of the native population in Napa County, and subsequent epidemics continued to erode their population.

2. Historic Setting

Interior California was initially visited by Anglo-American fur trappers, Russian scientists, and Spanish-Mexican expeditions during the early part of the 19th Century. These early explorations were followed by a rapid escalation of European-American activities, which culminated in the massive influx fostered by the discovery of gold at Coloma in 1848. Early Spanish expeditions arrived from Bay Area missions as early as 1804, penetrating the northwestern San Joaquin Valley (Cook 1976). By the mid-1820s, hundreds of fur trappers were annually traversing the Valley on behalf of the Hudson’s Bay Company (Maloney 1945). By the late 1830s and early 1840s, several small permanent European-American settlements had emerged in the Central Valley and adjacent foothill lands, including Ranchos in the interior Coast Range, and of course the settlement at New Helvetia (Sutter’s Fort) at the confluence of the Sacramento and American Rivers (Sacramento).

With the discovery of gold in the Sierra Nevada, large numbers of European-Americans, Hispanics, and Chinese arrived in and traveled through the Valley. The Valley’s east-side mining communities’ demands for hard commodities led quickly to the expansion of ranching and agriculture throughout the Great Central Valley and the interior valleys of the Coast Range. Stable, larger populations arose and permanent communities slowly emerged in the Central Valley, particularly along major transportation corridors.

The present APE is located within Napa County, which is one of California’s original counties. The County’s first courthouse and seat of government was established in Napa in 1851. Napa, itself, was founded in 1847 by Nathan Coombs who had received the future town site property from Nicolas Higuera, the original holder of the Rancho Entre Napa Mexican land grant.

The onset of the gold rush resulted in an influx of population to the region as miners and their families sought a refuge from the harsh Sierra Nevada winters. However, in 1858, the great silver rush began in the Napa Valley, and miners flocked the region. Mining continued to expand throughout the 1860s, and by 1872, Napa was incorporated. The Napa State Asylum for the Insane, located north of the present APE, was opened in 1876, and the Napa Valley Opera House opened in 1880.

Early settlers into the county cultivated fruits and vegetables for local consumption and grains were grown on a larger scale for exportation. Dry farm crops such as wheat and oats, used for cattle fodder, proved profitable in the area despite limited irrigation. Initially, agricultural products were transported via the waterways but with the completion of California Pacific Railroad, connecting directly with the Transcontinental Railroad in 1869, goods were transported by rail.
While agriculture dominated the northern portion of the county, banking and business enterprises intensified within the City of Napa. Among these businesses were leather workers and some of the early electronic technology efforts that ultimately led to the foundation of Magnavox Company in 1917. While these endeavors continued throughout the 20th century, concerns for regional flooding became an important theme that continues to the present day.

3. Record Searches/Sources Consulted

Several types of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the Project area. The information evaluated prior to conducting the pedestrian survey includes data maintained by the Northwest Information Center, and available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Northwest Information Center Records

The official Napa County archaeological records were examined on August 15, 2017 (NWIC File No. 17-0316). These records document the following existing conditions for a one-eighth mile radius of the APE:

- According to the information center, the existing APE has been subjected to archaeological survey as a result of two previous investigations. Gerry (1978) conducted a linear survey, which included the eastern portion of the present APE (S-001200). Salzman (1981) conducted an archaeological survey for the Napa Industrial Park project which involved approximately 246-acres, including the existing APE (S-2547). Five (5) archaeological investigations have been conducted on lands within 1/8-mile of, the present APE: S-21260, 47936, 38004, 13188 and 13025. However, there appears to be no overlap of these previous investigations with the present APE configuration. Additionally, thirteen (13) reports, located within the search radius, are classified as Other Reports. These reports involved little or no fieldwork, or are missing maps.

- According to the Information Center’s records, no cultural resources have been formally documented within the subject APE. One resource (P-28-001212), a rock wall fence, has been documented within the search radius, but outside of the present APE. This site was recommended and determined not eligible/significant, and was subsequently destroyed.

AB 52 - Native American Consultation

The City of Napa initiated consultation communications with the Yocha Dehe Wintun Nation on June 29, 2017, via letter, and the Tribe responded, via letter, on July 18, 2017, indicating that the Project is located within traditional Yocha Dehe lands, and requesting copies of any archaeological investigations prepared in conjunction with this Project.

Initial consultation, with the Native American Heritage Commission (NAHC), for the Project was undertaken by the City of Napa. On August 4, 2017, the NAHC responded to
the City of Napa with a five-page letter outlining various laws, codes and ordinances. The NAHC letter did not indicate that a search of their Sacred Lands Files (SLF) had been undertaken, nor was there an appended list of “Native American Contacts.” The City of Napa has completed the requirements for Native American consultation under AB 52 and no additional consultation is required.

Additional Sources

Genesis Society initiated consultation with the NAHC regarding sacred land listings for the property via an information request letter that was delivered to the NAHC on August 9, 2017. The NAHC responded on August 18, 2017, indicating that “Sacred Sites and Tribal Cultural Resources were identified in the project area provided.” The NAHC advised contacting Chairman Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley to obtain additional information concerning this data. As noted in this DEIR, the Project is within traditional Yocha Dehe Winton Nation lands and the City has sent Project information to the tribal contact for Yocha Dehe. The Mishewal-Wappo Tribe has not requested placement on the City’s contact list.

In addition to examining the archaeological site and survey records of Napa County maintained at the Northwest Information Center, the following sources were also included in the search conducted at the Information Center, or were evaluated separately:

- The National Register of Historic Places (1986, Supplements)
- The California Register of Historical Resources
- The California Inventory of Historic Resources (State of California 1976)
- The California Historical Landmarks (State of California 1996)
- The California Points of Historical Interest (May 1992 and updates)
- The Historic Property Data File (OHP 2014)
- California Place Names (Gudde 1969)
- Napa 7.5' Quadrangle (1951, Photorevised 1980)
- 1859 Tulucay Rancho Map
- 1863 GLO, T5N, R4W
- 1895 O.H. Buckman Map
- 1916 USGS Mare Island Quadrangle
- Existing published and unpublished documents relevant to prehistory, ethnography, and early historic developments in the vicinity. These sources, reviewed below, provided a general environmental and cultural context by means of which to assess likely site types and distribution patterns for the project area.

4. **Survey Methods/Results**

The following information is applicable to both the Cultural Resources and Tribal Cultural Resources sections.
The entire APE was subjected to intensive pedestrian survey by means of walking systematic transects, spaced at 20-meter intervals. In searching for cultural resources, the surveyor took into account the results of background research and was alert for any unusual contours, soil changes, distinctive vegetation patterns, exotic materials, artifacts, feature or feature remnants and other possible markers of cultural sites.

Fieldwork was undertaken on August 27, 2017 by Sean Michael Jensen and Sutter Jensen. Mr. Jensen is a professional archaeologist, with 31 years’ experience in archaeology, history and architectural history, who meets the Secretary of Interior’s Standards for Professional Qualification, as demonstrated in his listing on the California Historical Resources Information System list of qualified archaeologists and historians. No special problems were encountered, and all survey objectives were satisfactorily achieved.

Fieldwork identified the following general conditions within the APE. The majority of the APE has been subjected to intensive disturbance as a result of past demolition, grading, and re-contouring. Examination of the both the USGS and Aerial images provided by NETR did provide a visual historic context for the APE, which is listed and summarized below.

**USGS Maps**
- 1942 Two structures present in southeast corner (one residence, one barn), railroad present along eastern boundary
- 1952 Two structures present in southeast corner (one residence, one barn)
- 1958 Structure present in southeast corner
- 1963 Two structures present in southeast corner (one residence, one barn)
- 1966 Structure present in southeast corner
- 1967 Vacant
- 1969 Two structures present in southeast corner (one residence, one barn)
- 1975 Two structures present in southeast corner (one residence, one barn)
- 1980 Vacant
- 1982 Vacant
- 1984 Structure present in southeast corner

**Aerial Maps**
- 1948 Structures present within the extreme southeast property corner
- 1968 Vacant, demolition scars evident within the southeast property corner
- 1993 Vacant
- 2002 Vacant
- 2005 Vacant
- 2009 Vacant
- 2010 Vacant
- 2012 Vacant

The evidence gleaned from the USGS quadrangles and aerial photographs demonstrate that a small complex, likely a family farm/ranch existed within the southeastern portion of the present APE prior to 1949, and that by 1968 the entire complex had been razed. Over the
subsequent decades, the entire APE, and surrounding lands, were subject to intensive
disturbance associated with adjacent commercial development.

According to the Northwest Information Center, no prehistoric or historic-era sites have been
documented within the APE. In addition, no prehistoric or historic-era sites were identified
during the pedestrian survey conducted in August 2017.

5. Conclusion

The proposed Project would not cause a substantial adverse change in the significance of a
tribal cultural resource. The results of the Archaeological Survey analysis indicate there are
no known archaeological or built environment historic resources within the Project area. The
Project area is considered to have low sensitivity for prehistoric and historical archaeological
deposits because a records search and pedestrian survey failed to identify any significant
historical resources or unique archaeological resources within the APE. While no impacts are
identified, a City Standard Mitigation Measure has been included in Section 5.4 – Cultural
Resources – that will protect any resources found during Project construction. No additional
mitigation is recommended as the Project site does not meet the threshold criteria
established by CEQA for Tribal Cultural Resources. There will be no significant impact on
tribal resources due to Project implementation.

5.14.5 Mitigation Measures

The City’s Policy Resolution No. 27 provides standard mitigation measures for potential
environmental impacts to cultural resources. Mitigation Measures MM CR-1 through
MM CR-3 in Section 5.4 will ensure that all cultural resources will be protected, and no
additional mitigation measures are required for tribal cultural resources.

5.14.6 Level of Significance after Mitigation

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state the Project
would have a significant impact if it would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource,
defined in Public Resources Code Section 21074 as either a site, feature, place,
cultural landscape that is geographically defined in terms of the size and scope of the
landscape, sacred place or object with cultural value to a California Native American
tribe.

The Archaeological Survey concludes that the proposed Project will not cause a substantial
adverse change in the significance of a tribal cultural resource. Based on the absence of any
contributing components of any significant historical resources/unique archaeological
resources within the APE, archaeological clearance is recommended for the Project as
presently proposed.

The proposed Project, with Mitigation Measures MM CR-1 through MM CR-3, is consistent
with the Historic Resources Chapter of the City of Napa General Plan because any discovered
cultural resources within the Project site will be identified, evaluated and preserved.
The proposed Project is not eligible for listing in the California Register of Historical Resources or a local register of historical resources. The City, as lead agency, has not identified a tribal cultural resource on the Project site pursuant to criteria in Public Resources Code §5024.1. With implementation of the recommended mitigation measures contained in Section 5.4, any Project impacts to cultural resources will be reduced to a less than significant level.

5.14.7 Cumulative Impacts

Development of the proposed Project will not significantly impact tribal cultural resources within or adjacent to the Project boundaries. Individual Project impacts are evaluated and mitigated on a project-by-project basis. Project development in combination with other area projects would not considerably contribute to the alteration any regional or cumulative tribal cultural, scientific or historic resources. The proposed Project would not result in a cumulative impact.

5.14.8 Unavoidable Adverse Impacts

No impacts to tribal cultural resources have been identified on the Project site and none will result from Project implementation. Therefore, there are no unavoidable adverse impacts to tribal cultural resources associated with the development of the proposed Project.
5.15 Utilities and Service Systems

This section provides a discussion of utilities and service systems that may be affected by the implementation of the proposed Project. Existing utility systems that would provide services to the proposed Project are identified and evaluated for potential impacts. Service providers include water, sanitary sewer, solid waste, gas, and electric.

5.15.1 Existing Conditions

The Project site is in the substantially built out Napa Valley Commons corporate park. The Napa Valley Commons totals approximately 237 acres and is largely developed with commercial and industrial uses with a limited amount of winery and hotel use. The corporate park is currently served by existing utilities and service providers which will also serve the Project site.

1. Water Service

Domestic water service is provided to the Napa Valley Commons by the City of Napa Water Division (NWD). Recycled water is provided to Napa Valley Commons by Napa Sanitation District (NSD).

**Domestic Water**

The City provides drinking water to an area encompassing much of the lower Napa Valley and extending up the foothills east and west of the valley, as shown on Exhibit 5.15-1 below. The City of Napa water system qualifies under the *California Health and Safety Code*, §116275, as a “Public Water System” that provides drinking water for human consumption and is regulated by the State Water Resources Control Board, Division of Drinking Water. The Water Division of the Public Works Department of the City is responsible for the operation, maintenance, and improvement of the municipal drinking water utility owned by the City of Napa.

The Urban Water Management Planning Act (UWMPA), adopted by the California State Legislature as Assembly Bill (AB) 797 in 1983, requires all urban water suppliers of a certain minimum size to develop an Urban Water Management Plan (UWMP), and to update it every 5 years based upon requirements set forth in the UWMPA. A UWMP describes and evaluates sources of water supply, projected population, and future water demand over a 20-year planning horizon. Water conservation, water service reliability, contingencies for droughts, recycled water usage, and other related subjects are also addressed in an UWMP.38 The City of Napa has prepared a UWMP 2015 Update to provide a framework for long-term water resources planning and specifically to meet the requirements of the UWMPA. The UWMPA was adopted by the City Council on September 5, 2017.

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38 City of Napa Urban Water Management Plan, 2015 Update
Exhibit 5.15-1  Napa Water District Service Area

Source: Figure 3-2: City of Napa, Urban Water Management Plan, 2015 Update
NWD breaks down water use by customer sector, as shown on Table 5.15-1. Single-family and multi-family residential customers make up 92% of the City’s water accounts; however, only 58% of the actual water demand came from the residential sector in 2015. The proposed Project includes water facilities with standard domestic connections to water mains in accordance with the NWD standard specifications.

Table 5.15-1  Retail: Demands for Potable and Raw Water – Actual, 2015

<table>
<thead>
<tr>
<th>Use Type (add rows as needed)</th>
<th>Additional Description (as needed)</th>
<th>Level of Treatment When Delivered</th>
<th>Volume (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family</td>
<td></td>
<td>drinking water</td>
<td>5,462</td>
</tr>
<tr>
<td>Multi-family</td>
<td></td>
<td>drinking water</td>
<td>1,600</td>
</tr>
<tr>
<td>Commercial</td>
<td>Commercial businesses, industrial,</td>
<td>drinking water</td>
<td>2,518</td>
</tr>
<tr>
<td></td>
<td>schools, non-City institutional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional/Governmental</td>
<td>City municipal accounts only</td>
<td>drinking water</td>
<td>151</td>
</tr>
<tr>
<td>Landscape</td>
<td>Dedicated irrigation accounts</td>
<td>drinking water</td>
<td>739</td>
</tr>
<tr>
<td>Agricultural irrigation</td>
<td>Interruptible-surplus agreements outside City</td>
<td>drinking water</td>
<td>195</td>
</tr>
<tr>
<td>Sales/Transfers/Exchanges to other agencies</td>
<td>City of St. Helena, Town of Yountville California</td>
<td>drinking water</td>
<td>582</td>
</tr>
<tr>
<td>Other</td>
<td>Hydrant flushing, firefighting</td>
<td>drinking water</td>
<td>29</td>
</tr>
<tr>
<td>Losses</td>
<td>Real and apparent losses</td>
<td>drinking water</td>
<td>758</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>12,034</td>
</tr>
</tbody>
</table>

Note: The City is a drinking water provider only and does not distribute raw water to customers.

Recycled Water

Recycled water is municipal wastewater that has been treated to a specified quality to enable it to be used again for a beneficial purpose. This safe, non-potable water supply is typically distributed to large irrigation users such as golf courses, vineyards, parks, and commercial businesses. In the City’s water service area, recycled water treatment and distribution is managed by a separate special district, the Napa Sanitation District (NSD) at their Soscol Water Recycling Facility.

NSD services Napa Valley Commons with recycled water for irrigation; however, the recycled water line has not yet been extended through a large portion of Napa Valley Commons; therefore, not all of Napa Valley Commons is currently serviced by the Napa Sanitation District. In addition, Napa Valley Commons Owners Association provides a separate recycled water system for area businesses. However, as noted in the UWMP 2015 Update, the City and NSD have entered into a 20-year agreement that would allow NSD to make recycled water available to customers in a service area east of the Napa River, south of Imola, west of Highway 221, and north of American Canyon.

2. Sanitary Sewer/Storm Drain Service

The Napa Sanitation District (NSD) provides customers within its service boundary with wastewater disposal and strives to maintain a wastewater disposal system that will meet Napa’s long-term urban growth needs. NSD has one wastewater treatment facility to handle the treatment process. The Soscol plant has a permitted dry weather treatment capacity of
15.4 million gallons per day. The facility has adequate capacity to treat typical wastewater amounts from the office and hotel components. Winery industrial wastewater quantities, treatment, and disposal will be handled on-site as discussed herein and also detailed in Section 5.8, Hydrology and Water Quality.

The storm drainage system for the City of Napa, including the Project site area, is owned and maintained by the City. The City's General Plan states that the existing storm drainage system service area covers approximately 22 square miles. NSD provides for the operation and maintenance of sewer facilities within Napa Valley Commons. The Project storm drains will connect to the existing lines within the corporate park.

3. Solid Waste

The City of Napa Materials Diversion Division is responsible to meet the City's Disposal Reduction Policy and the State of California's mutual goal of diverting at least 75% of waste away from landfills by the year 2020. Policy R2012 100 establishes a disposal reduction policy including, but not limited to, extended producer responsibility, sustainable purchasing responsibility, the High Performance Building Ordinance and the Construction and Demolition Debris Recycling Ordinance. The City is proactive in providing recycling and waste material diversion. Upon request, the City conducts site visits to determine what services are available based on the type and intensity of the business. Napa Recycling and Waste Service, the City's franchise waste collection purveyor, is responsible for transport of solid waste from the Project to the Devlin Road Recycle and Transfer Facility.

4. Other Utilities and Services

The Project is within the service area of Pacific Gas & Electric (PG&E) for the provision of electric service and gas service.

5.15.2 Thresholds of Significance

The state encourages local agencies to adopt their own thresholds, but it is not required. The City of Napa does not have adopted thresholds of significance for utilities and service systems. For purposes of this analysis, the applicable thresholds listed in the CEQA Guidelines will be used. Appendix G of the CEQA Guidelines provides the following to determine if the Project could have a significant adverse impact on utilities and service systems. Would the Project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;

f) Comply with federal, state and local statutes and regulations related to solid waste.

5.15.3 Project Impacts Prior to Mitigation

1. **Water Service**

   The NWD provides water service within an area generally coinciding with the Rural Urban Limit (RUL) with a limited number of customers outside the RUL also purchasing city water. Water is currently delivered to tenants within Napa Valley Commons corporate park, and the proposed Project will connect to existing transmission lines. The City’s 2015 Update to its Urban Water Management Plan includes projects that were not envisioned in the City’s General Plan, such as the Napa Pipe project. However, the development of Napa Valley Commons, of which the Project is a part, was considered for planning purposes. NWD notes that reductions in per capita water use over the last decade have more than offset gradual population increases within the service area. Total water use has declined from 15,370 acre-feet in year 2000 to 13,877 acre-feet in 2010. Year 2015 represents the lowest total at 12,034 acre-feet. The commercial and institutional/governmental sectors have shown a reduced usage of 30% compared to 2013. Therefore, the proposed Project will not increase water demand beyond what has been considered and analyzed in the City’s General Plan and the 2015 Updated UWMP and no special mitigation is required.

2. **Sanitary Sewer/Storm Drains**

   The proposed Project will increase wastewater service demand with the addition of office, hotel, and winery operations. The Napa Sanitation District (NSD) Code regulates the installation and connection of building sewers, the installation of sewer laterals and public sewer main extensions. NSD provides wastewater collection, treatment and disposal services to the residents and businesses in the City of Napa and surrounding unincorporated areas of Napa County.

   The proposed Project includes retrofits for upsizing of connection pipes within the public domain and a storm water detention tank on the Project site for the purpose of detaining the discharge differential between the 25-year and 10-year storm event. In addition, the Project will provide and implement Drainage Management Area and Integrated Management Practices strategies in accordance with the City’s Municipal Separate Storm Sewer (MS4) Permit. Wastewater generated by the Project is considered suitable for standard wastewater treatment with the exception of the winery operations, which will employ a filtration/treatment process to separate solid and liquid elements of the wine processing.

3. **Solid Waste**

   Solid waste from the Project will be disposed of at Devlin Road Recycle and Transfer Facility located approximately 4 miles from the Project site. It is not anticipated that the Project will produce solid waste in excess of what is typically produced by similar uses. The City actively
participates in waste recycling and offers specialized services to assist businesses with recycling. The City’s standard mitigation measures are included herein to reduce potential impacts from solid waste collection and dispersal. No special mitigation measures are required with respect to the disposition and recycling of solid waste and no significant impacts to existing facilities will occur.

4. Other Utilities and Services

Pacific Gas and Electric serves the Napa Valley Commons corporate park and will provide service to the proposed Project. The Napa Sanitation District will condition the Project to extend the recycled water pipeline to the northern property line to use recycled water for landscape irrigation. There will be no impacts associated the provision of gas and electric service and no mitigation is required beyond what is included in the City’s standard mitigation measures.

5.15.4 Mitigation Measures

1. Standard Mitigation Measures

Standard mitigation measures per the City’s Policy Resolution No. 27 are included herein as follows.

<table>
<thead>
<tr>
<th>MM U-1</th>
<th>Prior to trenching within existing roadway areas, the Developer’s engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM U-2</td>
<td>Water and energy conservation measures shall be incorporated into Project design and construction in accordance with applicable codes and ordinances.</td>
</tr>
<tr>
<td>MM U-3</td>
<td>The Project shall be connected to the Napa Sanitation District for sanitary sewer service. If the subject property is currently served by individual sewage disposal systems, the septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction and after connection to the District, the existing septic tank(s) shall be properly destroyed.</td>
</tr>
<tr>
<td>MM U-4</td>
<td>The Project shall be connected to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well-destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water District’s specifications.</td>
</tr>
<tr>
<td>MM U-5</td>
<td>The Project shall be designed and built in accordance with the PWD Standard Specification regarding the adequate conveyance of storm waters.</td>
</tr>
</tbody>
</table>

| MM U-6 | All faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute. |
| MM U-7 | All showerheads shall be of a design to limit the maximum flow to 2.5 gallons per minute. |
| MM U-8 | The Developer shall completely offset the water requirements of this Project by complying with the retrofit requirements of Napa Municipal Code Chapter 13.09. |
| MM U-9 | During the construction/demolition/renovation period of the Project, Developer shall use the franchised garbage hauler for the service area in which the Project is located to remove all wastes generated during Project development, unless Developer transports Project waste. If the Developer transports the Project’s waste, Developer must use the appropriate landfill for the service area in which the Project is located. |
| MM U-10 | Developer shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the Developer transports such wood waste to a location where wood waste is recycled. |
| MM U-11 | A recycling/solid waste enclosure shall be provided in accordance with Chapter 17.102, et seq. of the Napa Municipal Code for all commercial, industrial, and multi-family projects with common solid waste facilities. |

2. **Special Mitigation Measures**

None required.

5.15.5 **Level of Significance after Mitigation**

Thresholds of significance identified in the CEQA Guidelines, Appendix G, state that a project would have a significant impact if it would:

- a) Exceed wastewater treatment requirements of the applicable regional water quality control board,
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities,
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities,
- d) Have sufficient water supplies available to serve the project from existing entitlements and resources,
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project, or
- f) Comply with federal, state and local statutes and regulations related to solid waste.
1. **Water**

The proposed Project is not subject to the water supply assessment requirements of Water Code §10910 (SB 610) or the requirements of *California Government Code* §664737 (SB 221), because it does not meet the criteria for preparation of an assessment. To ensure that new construction is water efficient, the City has adopted local High Performance Building Regulations that are more stringent than the California Green Building Standards Code. For non-residential projects, the City requires an additional 12% indoor savings and the same lower maximum water pressure as residential. The UWMP notes that the recent uptick in hotel and resort development suggests an increase in water demand in this segment. However, the 2015 Update to the UWMP factors in the extreme efficiency of newer buildings based on the locally modified CALGreen provisions. Overall, water use in the commercial sector is expected to remain at about 21-22% of the total system demand. Therefore, compliance with standard mitigation measures identified herein and conformance with the City’s standards for new development and water efficiency will result in Project impacts that are less than significant.

2. **Sanitary and Storm Sewers**

Wastewater treatment for wine waste will be provided on-site. Development plans include the provision of a tank beneath the winery where wastewater from the winery will be held and transferred through an underground piping system to an on-site 2,800-square-foot wastewater treatment area. The waste will be filtered through a process where solid and liquid elements will be separated. The solids will be dewatered and disposed of with normal trash. The remaining water will be filtered to a pure state through a reverse osmosis system. The filtered water will be stored in tanks. The stored water will be dispersed through the Project’s landscape irrigation system, which will be directly connected to the pure water storage tanks.

The Project will connect with existing sanitary sewers that are maintained by Napa Sanitation District. The Project will connect into the City’s storm drainage system including the construction of new storm drain facilities, consisting of drain inlets, storm drain lines and on-site treatment facilities. Compliance with the Standard Mitigation Measures provided herein will ensure that the Project will have no significant impact on sanitary and storm sewer systems.

3. **Solid Waste**

Solid waste will be disposed of at the Devlin Road Recycle and Transfer Facility which has sufficient capacity to handle solid waste from the Project. No additional facilities will be required to serve the Project.

4. **Other Utilities and Services**

Pacific Gas & Electric will serve the Project site as part of the larger Napa Valley Commons corporate park area. No new or expanded facilities are necessary, and no mitigation is required.
The Cultural Resources Assessment analysis responds to CEQA Guidelines, Appendix G Checklist as follows.

The proposed Project will not exceed wastewater treatment requirements of the San Francisco Regional Water Quality Control Board or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. No additional storm water drainage facilities will be required other than what is included within the proposed Project and there will be no increase in the required capacity.

Implementation of the Project will not result in significant impacts related to water service, sanitary sewer service, storm water sewer service, solid waste disposal, electric or gas service. Points of sewer and water connection will be sufficient to accept increased flows due to the Project. Standard mitigation measures have been included to ensure coordination with service providers to reduce impacts to a less than significant level.

5.15.6 **Cumulative Impacts**

Implementation of the proposed Project will increase the demand for utility and service systems. However, standard mitigation measures have been included herein to reduce any impacts. The two projects that are considered for cumulative impacts include Meritage Commons, located within the Napa Valley Commons corporate park, and the Napa Pipe project west of the Project site. Meritage Commons was fully analyzed for environmental impacts prior to project approval. Napa Pipe, while not originally envisioned in the City's General Plan, has been included in the current update to the City's UWMP for water demand. The Napa Pipe DEIR also evaluated the impact to sewers, wastewater treatment, trash collection, landfill capacity and compliance with state and local regulations. All impacts due to cumulative projects have been adequately analyzed and mitigated. Therefore, the Project when combined with other area projects will not considerably contribute impacts related to utilities and service systems. The proposed Project would not result in a cumulative impact.

5.15.7 **Unavoidable Adverse Impacts**

Implementation of recommended mitigation measures will reduce potential impacts to a level of less than significant for Project construction and cumulative conditions. Therefore, with implementation of the recommended mitigation measures included herein, no unavoidable adverse impacts to utilities and service systems will result from the proposed Project.
6. Alternatives Analysis

6.1 Introduction

CEQA has long recognized that a rigorous evaluation of project alternatives is key to ascertaining whether major environmental impacts brought about by a proposed Project can be avoided or significantly lessened. CEQA and its associated case law require that alternatives be evaluated that are capable of feasibly attaining most of the basic Project objectives and offering substantial environmental advantages over the project proposed. CEQA does not require that an agency speculate unnecessarily or re-evaluate previously analyzed alternatives where no new significant information – i.e., in an earlier CEQA document – shows that such alternatives will now be feasible. Additionally, CEQA does not require that the agency evaluate ostensibly infeasible alternatives, or address alternatives that are independent of the goal of reducing environmental impacts.

Therefore, an adequate alternatives analysis is focused on avoiding or substantially lessening the significant environmental impacts brought on by the project as proposed taken in the context of previous environmental and policy evaluations. CEQA is not intended to be used as a means of studying alternative dispositions of a project independent of the environmental impacts that attend it. In other words, CEQA does not require the EIR to address alternatives that are unrelated to the reduction of impacts.

The City of Napa General Plan, which was adopted in 1998 and updated in 2015, designates the site as Corporate Park (CP). The City Zoning Code designates the site as Industrial Park (IP-A, IP-B). The Project includes approval of Planned Development Overlay for over-height features and shared parking as well as a Use Permit to allow a hotel in the IP-A zoning district.

To allow an appropriate context for evaluating alternatives, CEQA requires that the Lead Agency enumerate the basic Project objectives. This disclosure assists in developing the range of Project alternatives to be investigated in this section, as well as providing a rationale for the adoption of a Statement of Overriding Considerations, if one is adopted. Listed below are the main goals and objectives as stated in Section 4.7, Project Objectives (page 4-68).

- Comply with the City's General Plan
- Provide a high quality mixed-use project consistent with the intent of the City of Napa Zoning Code
- Provide safe access at the Project site including adequate wayfinding information for vehicular access to and within the Project site
- Provide safe pedestrian and bicycle access within the Project site
- Design a project consistent with the Napa Valley Commons Design Guidelines

Although CEQA calls for the evaluation of alternatives that could feasibly attain most of the basic purposes of the Project, the central goal of the EIR alternatives analysis is to reduce or eliminate environmental effects of the proposed Project that have been identified in the analytical portions of the EIR (CEQA Guidelines §15126.6), not to evaluate Project
alternatives that are not capable of reducing impacts, or that are merely variations on a theme.

It is the intent of this section to describe, or reference the description of, reasonable and feasible alternatives to the proposed Project that could attain most of the basic Project objectives and avoid or substantially lessen any significant effects of the project. These alternatives appeal to a wide range of mitigation and palliative effects, and provide a strong foundation for public discussion. Sufficient information is presented herein to create variations of alternatives, if desired.

6.2 Feasibility

Section 15126.6(f)(1) of the CEQA Guidelines explains how feasibility is to be considered for alternatives capable of otherwise resolving environmental impacts resulting from the Project as proposed. This section states that among the factors that may be considered in determining feasibility are:

- Site suitability
- Economic viability
- Availability of infrastructure
- General Plan consistency
- Other plans and regulatory limitations
- Jurisdictional boundaries (projects with regionally significant impacts should consider the regional context)
- Whether the proponent can reasonably acquire, control or otherwise have access to an alternative site or off-site areas

6.3 Alternatives Considered But Not Advanced

CEQA does not require that the discussion of alternatives be exhaustive, or demand evaluation of alternatives that are not realistically possible, given the failure to meet the basic Project objectives and limitation of time, energy, and funds. The EIR does not consider alternatives that are infeasible, and the alternatives discussed in this section were rejected for the following reasons:

- The project alternative is considered infeasible due to failure to carry out the basic goals and objectives of the proposed Project
- The project alternative is considered infeasible because its implementation is remote and speculative.
- The project alternative would not avoid or substantially lessen significant effects of the Project.
The following Project alternative was considered but not advanced for future review. This alternative fails to carry out the goals and objectives of the proposed Project.

- **Alternative Location** – The Project site is consistent with the City of Napa General Plan for development with a hotel, office and winery as proposed. The Project Applicant is the owner of the property, and the Project site is located within the Industrial Park designation in the City’s Zoning Code. The Project Applicant does not own a similar property in the Napa Valley Commons corporate park or the near vicinity. The Project site has readily available roads, utilities, and service connections within a well-established corporate park environment. The downtown Napa area was not considered because a sufficiently sized parcel for an equivalent hotel, winery and office development and associated parking is not available. Additionally, the costs associated with such downtown development, including a parking structure, would be prohibitive to achieve an economically feasible project. Therefore, an alternative location, if available, could potentially result in more significant impacts than the proposed Project and was, therefore, not considered as a feasible alternative.

### 6.4 Alternatives Presentation

The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines §15126.6(f)). With the historical and regulatory context as a backdrop, a review can proceed of alternatives to the Project that minimize impacts brought about by the Project and are not addressed in other CEQA documents. The reader will find two alternatives in this section.

- **No Project Alternative** – This alternative allows decision-makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project and leaving the site in its current condition.

- **Reduced Intensity/Reduced Hotel Size** – This alternative reduces the hotel component from a dual brand hotel consisting of a total of 253 units to a single brand consisting of 100 units.
### Table 6-1 Summary Matrix of Impacts of Alternatives in Relation to Proposed Project as Mitigated

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative 1 - No Project</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>Alternative 2 – Reduced Intensity/Reduced Hotel Size</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>*</td>
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<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Potential impacts are greater than proposed Project
* Potential impacts are less than proposed Project
* Potential impacts are equal to proposed Project

### 6.5 Project Alternative 1 – No Project

#### 6.5.1 Description of Alternative

The No Project Alternative assumes that the Project would not be built as described in this EIR. A review of the No Project Alternative must be included in every EIR pursuant to state law. Impacts from the proposed Project would not be as stated in the EIR. The proposed Project is designated Corporate Park in the General Plan Land Use Element. This category permits manufacturing, warehousing and office, public and quasi-public uses, and similar compatible uses in a campus-like setting. Development in this designation is required to have integrated design requirements, including extensive landscaping and unifying design features.

The Project is designated Industrial Park (IP-A, IP-B) under the City’s Zoning Code. Areas A and B within the industrial park district are zoned for professional and business offices, research and development and certain light industrial uses in enclosed buildings, and limited hotel accommodations and retail and service uses such as restaurants, convenience markets, banks, and service stations primarily for area workers or business visitors. Permitted uses also include wine tasting rooms, retail sales and related uses accessory to wine manufacture or bottling.

Section 15126.6(e)(2) of the CEQA Guidelines states:

The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
Section 15126.6(e)(3)(B) of the CEQA Guidelines indicates that when the project is not a land use or regulatory plan, the “no project” alternative:

... is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others... this “no project” consequence should be discussed.

Because the Project site is largely undeveloped, with the exception of the presence of shrubs, grasses, and trees that are regularly groomed, the No Project Alternative would not involve any new or additional environmental impacts.

1. **Aesthetics**

   The No Project Alternative would result in the site being left in its current condition, sparsely covered with trees and vegetation. The majority of the mature trees are located at the corner of Napa Valley Corporate Way and State Route 221 and along the western boundary of the Project site and immediately adjacent developed parcel.

   The proposed Project would result in greater impacts due to the construction of the hotel(s), office building and winery where no development currently exists. With the No Project Alternative, views across the Project site would not be altered, and typical night lighting would not occur. Although it has been determined that the proposed Project would not result in Aesthetics impacts, the No Project Alternative would allow an open space area within the corporate park to remain with views of natural vegetation and would, therefore, be marginally superior.

2. **Air Quality**

   Under the No Project Alternative, the Project site would remain as a sparsely vegetated open space area that is regularly groomed. From an environmental standpoint, no air quality environmental impacts result from the Project site in its current condition, because no thresholds would be exceeded. Analysis for the proposed Project shows that construction and operational emissions are all below the significance thresholds established by the BAAQMD. Therefore, no local or regional adverse impacts to air quality are projected during Project construction or operation. However, even with impacts under the proposed Project being identified as less than significant, there are incremental impacts to air quality which would not occur under the No Project Alternative. Therefore, the No Project alternative is marginally superior to the proposed Project.

3. **Biological Resources**

   The No Project Alternative allows the site to remain in an undisturbed condition relative to biological resources. The open space vegetation would continue to function through growth and the provision of potential foraging area and habitat for local species. By comparison, the proposed Project will impact several of the existing trees on the Project site. Of these, four trees require preservation per the City of Napa’s municipal code. The Tree Protection
Guidelines prepared for the proposed Project state that 43 of the 46 remaining non-protected trees are worth preserving based on their condition. These trees will be minimally impacted by the Project, because they are located generally along the perimeter of the site and outside the footprint of the new buildings. A Tree Protection and Preservation Plan for the proposed Project will define which of the non-protected trees will be retained.

With regard to special status plants and wildlife, a biological resources report determined there are no special status animals, plants, or wildlife observed on the site; however, several species of animals have limited to moderate potential to occur on the site. The following have the potential to occur: golden eagle, ferruginous hawk, Swainson’s hawk, northern harrier, and white-tailed kite. There is also the potential for nesting birds in the trees and shrubs on site and for the occurrence of seasonal wetlands.

As analyzed, mitigation provided for potential impacts to biological resources in the form of avoidance and payment of mitigation fees will reduce any impacts to less than significant. However, the No Project Alternative would allow the site to remain in its current condition; therefore, no impacts would occur, and no mitigation would be required. The No Project Alternative is marginally superior to the proposed Project with respect to impacts to biological resources.

4. Cultural Resources

The results of the Archaeological Inventory Survey indicate there are no known archaeological resources within the Project area. The report notes that, based on the absence of any contributing components of any significant historical resources/unique archaeological resources within the area of potential effect (APE), archaeological clearance is recommended for the project/undertaking as currently proposed. With the mitigation included herein, Project development would not significantly alter any regional or cumulative cultural, scientific, or historic resources.

The No Project Alternative would not reduce or increase the potential for impacts to cultural resources, because no impacts are anticipated with Project implementation. Therefore, impacts in the area of Cultural Resources will be the same as compared to the proposed Project.

5. Geology and Soils

Under the No Project Alternative, no earthwork would occur and, therefore, no impacts to existing geological conditions on the site would result. The Geology and Soils analysis has determined that, based on the engineering analysis, the proposed Project can be built as planned, provided the recommendations presented in the geological report are incorporated into its design and construction. The report did not identify any unusual or significant geological issues such as faulting, seismicity, soil quality, or landslides, among others. However, grading could result in erosion or the loss of topsoil, requiring preparation of an erosion control plan that has been included as mitigation. This potential would not occur with the No Project Alternative, as no ground disturbance would occur. Therefore, the No Project Alternative is marginally superior as compared to the proposed Project in terms of impacts.
6. **Greenhouse Gas Emissions**

The No Project Alternative would have no impact on greenhouse gas emissions (GHG), because no construction or development will occur that could create GHG. The proposed Project would produce GHG both during construction and during long-term operation. In year 2020 (buildout), annual net emissions resulting from the operation of the proposed Project are estimated to be 2,277 MTCO2e without mitigation and 2,058 MTCO2e with mitigation, which exceeds the BAAQMD threshold of 1,100 MTCO2e. Therefore, the No Project Alternative is superior to the proposed Project because no GHG emissions would occur.

7. **Hazards and Hazardous Materials**

National Due Diligence Services (NDDS) conducted a site reconnaissance to assess the possible presence of petroleum products and hazardous materials at the Project site. The assessment revealed no evidence of a recognized environmental condition (REC), a controlled REC or a Historical REC in connection with the Project site. No other environmental issues of concern were identified, and no further investigations were recommended. In addition, the Project site is not within the City’s Urban/Wildland Interface with potential for the occurrence of wildfires. The Project does not propose any uses that would result in the presence of hazardous materials or hazardous conditions.

Neither the No Project Alternative nor the proposed Project would result in impacts due to hazards or hazardous materials. Therefore, both are substantially the same with respect to potential impacts.

8. **Hydrology and Water Quality**

Drainage currently flows across the Project site towards Napa Valley Corporate Drive. To meet the current City criteria, the proposed on-site storm system will include an underground storage vault. This vault will be designed to detain the differential volume between the 25- and 10-year rainfall events. The proposed storm water and detention system will convey storm runoff north and west through the Project site, with a new connection to the existing underground storm drain piping in Napa Valley Corporate Drive along the west frontage of the Project. The winery wastewater will be held in a subterranean tank beneath the winery and transferred through an underground piping system to an on-site wastewater treatment area located immediately across the internal drive aisle from the winery. The resultant pure water will be stored in tanks in the wastewater treatment area and dispersed through the Project’s landscape irrigation system, which will be directly connected to the pure water storage tanks.

Under existing conditions, the underground storm system within Napa Valley Corporate Drive collects the storm water and directs it to South Creek (at the west side of Napa Valley Corporate Drive, past Napa Valley Corporate Way) and eventually into Napa River Marsh. With the No Project Alternative, there will be no new detention system to convey storm water runoff. The proposed Project will provide bio-filtration of runoff and self-treating permeable pavement to filter pollution from the storm water runoff. The No Project Alternative would not provide improvements to drainage or water quality due to storm water runoff. Therefore, the proposed Project will have a more positive impact on hydrology and
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water quality compared to allowing the site to remain in its current condition under the No Project Alternative.

9. **Land Use and Planning**

The No Project Alternative would not require a Conditional Use Permit to allow a hotel in the Industrial Park (IP-A) zoning district and a winery in the Industrial Park zoning district. Approval of a Planned Development Overlay would also not be required to allow for shared parking and an increase in height for the winery and office buildings. Therefore, the No Project Alternative would result in fewer impacts related to land use and planning, because no Conditional Use Permits or Overlays would be required.

10. **Noise**

Under the No Project Alternative, current noise levels on the site would remain unchanged with intermittent noise generated from the landscaping equipment used to groom the site. The proposed Project would introduce new uses to the site. Analysis shows that short-term construction activities could generate noise levels above the City thresholds. Assuming that all construction activities for the proposed Project are conducted in accordance with Section 8.08.025 of the Napa Municipal Code, noise generated by construction activities would not be in excess of the established standards. Operational noise for each component of the Project was analyzed and, with incorporation of mitigation measures and conditions of approval, was shown to be less than significant.

The Noise Analysis for the Project shows that the proposed Project will not result in short-term or long-term noise impacts that cannot be reduced to less than significant levels through implementation of the mitigation measures, conditions of approval, and best management practices identified herein. However, due to the addition of Project-related traffic to the cumulative condition, the No Project Alternative is marginally superior, because no new traffic would be added to the average daily trip totals at any of the study area intersections, and no resulting noise from the additional traffic would occur.

11. **Population and Housing**

The proposed Project does not include the construction of new residences and will not add to the population by increasing the population generally. However, the Project will provide jobs that could encourage the addition of employees who would seek housing in the City of Napa. The Project will be required to contribute to the City’s established Affordable Housing fee program to assist the City in providing services and housing for lower income households.

The No Project Alternative would not result in the significant fee payment towards affordable housing that will be provided by the Project. However, it would also not result in the housing demand created by the proposed Project. Therefore, while the proposed Project has a positive and beneficial impact on the City’s ability to provide affordable housing, the No Project Alternative would result in less impacts as no housing demand would occur.
12. Public Services

The No Project Alternative would not require the addition of services or facilities related to police and fire protection, emergency medical services, schools, parks, or libraries. The proposed Project will require provision of police, fire, and emergency medical services and will include payment of fees towards additional or improved police and fire services as required by the City’s Municipal Code. However, the No Project Alternative would not result in the requirement for additional services and no impacts to existing services would occur. Therefore, the No Project Alternative is superior to the proposed Project as there would be no new or more significant impacts resulting from the Project site remaining undeveloped and additional or expanded public services would not be required.

13. Transportation and Traffic

The No Project Alternative would not add traffic to the existing roadways, some of which are operating at unacceptable levels of service currently. The proposed Project will generate approximately 1,946 daily trips. The traffic analysis reviewed 12 intersections in the Project vicinity, and two intersections were identified to operate at unacceptable levels under both Existing Conditions and Existing Plus Project conditions. Under Cumulative Plus Project Conditions, seven study intersections will operate at unacceptable levels of service without mitigation. However, implementation of mitigation measures will result in less than significant impacts, including under cumulative conditions. However, the No Project Alternative is superior to the proposed Project because there will be no impact related to traffic and no additional traffic would be added to already deficient intersections.

14. Tribal Cultural Resources

The No Project Alternative would not disturb or contribute to the destruction of any archaeological, paleontological, or tribal cultural resources, because there would be no ground disturbance and no construction. The distinction for Tribal Cultural Resources is that they are described as 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. According to the Northwest Information Center, no prehistoric or historic-era sites have been documented within the Project area surveyed. Likewise, no prehistoric or historic-era sites were identified during the pedestrian survey conducted for Project analysis by NDDS. Therefore, the proposed Project construction would not disturb or destroy any such resources as none are known to exist on the Project site. The No Project Alternative and the proposed Project are identical, because neither would result in significant environmental impacts to tribal cultural resources.

15. Utilities and Service Systems

The No Project Alternative would not require the use of utilities or service systems, because no development would occur. Utilities and service systems are currently available to the Project site, as the site is within the developed Napa Valley Commons corporate park. New development has the ability to connect to existing water, recycled water, sewer, electrical, gas, and cable connections, and the provision of utilities was considered when the corporate park was built. Because the utilities have existing adequate capacity to accommodate the
Project’s proposed needs, no impacts would occur. Therefore, impacts will be less than significant. The No Project Alternative would not require the use of gas, electricity, or water, would result in conservation of the resource and is, therefore, marginally superior to the proposed Project.

6.5.2 Attainment of Project Objectives

Under the No Project Alternative, there would be significantly fewer impacts in the areas of greenhouse gas emissions, land use and planning, transportation and traffic. The No Project Alternative would not add greenhouse gas emissions to the environment, would not require special use permits or amendments to the City's General Plan or zoning and would not contribute to transportation and traffic impacts because no vehicle trips would occur.

Impacts would be marginally fewer with the No Project Alternative in the areas of aesthetics, air quality, biological resources, geology and soils, noise, and utilities and service systems. Similar or the same impacts would occur with cultural resources, hazards and hazardous materials, and tribal cultural resources, because there would be no impacts in these areas with either this Alternative or the proposed Project.

The proposed Project is superior in the areas of hydrology and water quality and population and housing, because the Project would provide additional and/or updated drainage systems and enhanced water quality control and also provide funding for the City to expand its affordable housing programs to meet the needs of lower income families.

This Alternative would not meet the following goals and objectives:

- Comply with the City’s General Plan – The proposed Project is part of a larger development called Napa Valley Commons corporate park. This area was envisioned in the General Plan for the type of development that currently exists. The No Project Alternative does not support the completion of the corporate park as intended and allows the currently vacant Project site to be underutilized in terms of consistency with the General Plan land use designation and intention.

- Provide a high quality mixed use project consistent with the intent of the City of Napa Zoning Code – The vacant Project site is designated and zoned for uses compatible with the corporate park, and the proposed Project meets the definitions for the proposed uses. The proposed Project supports the vision of the City for the build-out of the corporate park with uses that complement the vision and type of use intended. The No Project Alternative does not advance the intention of allowing the designated and permitted uses to be developed.

- Design a project consistent with the Napa Valley Commons Design Guidelines – The corporate park design envisions a fully utilized and developed industrial area with additional complimentary and consistent uses. The No Project Alternative would allow the 11.55-acre site to remain undeveloped and underutilized.
6.6 Project Alternative 2 – Reduced Intensity/Reduced Size Hotel

6.6.1 Description of Alternative

The Reduced Intensity/Reduced Size Hotel Alternative would change the proposed dual-brand hotel concept by eliminating the AC Hotel component, which proposes 153 units. Only the Residence Inn, consisting of 100 guest rooms, would be built. The other Project components, including the winery and the office building, would remain as identified in the proposed Project.

1. Aesthetics

The dual-hotel concept appears as one unified component covering approximately 99,076 square feet of the total 155,557 square feet encompassed by the AC Hotel and Residence Inn facilities. Aesthetically, the elimination of the building housing the AC Hotel would open a view corridor from Highway 221 into the corporate park, much as currently exists on the undeveloped site. Visually the proposed Project situates the two hotels to appear as an L-shape, providing massing relief by obscuring a portion of the building. No aesthetics impacts were identified in the DEIR analysis, because the hotel building, at four stories in height, is consistent with the maximum heights allowed by the General Plan/Zoning designations. This Alternative would provide a more open view from off-site, but would not reduce any aesthetics impacts, as none were identified. Therefore, the proposed Project and this Alternative are substantially the same.

2. Air Quality

The Reduced Intensity Alternative would result in marginally fewer air quality impacts, because the building housing 153 hotel units would not be constructed. Construction work on the hotel component was analyzed as ongoing during the entire 19-month construction schedule for the entire Project. Elimination of the AC Hotel would result in commensurate construction schedule reductions. Analysis in this DEIR shows that there are no projected air quality impacts during construction, and no local or state thresholds will be exceeded. However, the incremental reduction in air quality impacts is a benefit to air quality in the region generally and, therefore, this Alternative is marginally superior to the proposed Project.

3. Biological Resources

The Reduced Intensity Alternative would result in fewer impacts biologically due to the reduction in the building footprint for the hotel component. While no special status plant or animal species have been identified on the Project site, there is a potential for seasonal wetlands to occur in locations that parallel and are adjacent to Highway 221. The proposed Project includes ground disturbance of that area and the construction of parking lots and new landscaping. The Reduced Intensity Alternative may avoid the area, because the Project would have a commensurate reduction in the requirement for parking with the reduction in hotel rooms. While the proposed Project has been required to mitigate the impact due to the potential wetland disturbance, and impacts would be reduced to less than significant,
avoidance of wetlands is a preferred alternative of the resource agencies responsible for their protection. Mitigation for the proposed Project includes payment of fees to protect/enhance wetlands off-site. Therefore, the Reduced Intensity Alternative is superior to the proposed Project with regard to biological resources.

4. **Cultural Resources**

Impacts to cultural resources would be identical with either the Reduced Intensity Alternative or the proposed Project. The analysis herein, which is based on an Archaeological Inventory Survey prepared for the proposed Project, concludes that no cultural resources have been discovered in the Project area and it is unlikely that any will be discovered. The entire area has been previously graded and disturbed; however, mitigation has been provided for protection of such resources if discoveries occur during grading of the site. Therefore, impacts would be identical with either the proposed Project or the Reduced Intensity Alternative.

5. **Geology and Soils**

The Reduced Intensity Alternative would result in less grading potentially. The elimination of the AC Hotel building and the commensurate reduction in the need for parking spaces would require less disturbance of the ground for construction. However, other than the potential for soil erosion and runoff, no other impacts were identified in the Geotechnical Study Report. The report included recommendations for grading and building geotechnical concerns, which will be implemented with either the proposed Project or this Alternative. The recommendations and mitigation measures provided in the Geotechnical Report will reduce impacts to less than significant. Therefore, impacts will be substantially the same with either the proposed Project or the Reduced Intensity Alternative.

6. **Greenhouse Gas Emissions**

This Alternative would reduce the number of workers, the energy consumption, and the vehicle trips that contribute to GHG emissions, because there would be 153 fewer hotel rooms. With the proposed Project, long-term operational emissions will result in an exceedance of the BAAQMD threshold of 1,100 MTCO\textsubscript{2}e per year by approximately 1,058 MTCO\textsubscript{2}e per year without mitigation. The exceedance is due, in large measure, to mobile emissions and energy consumption for hotel workers and guests. Removal of 153 rooms from the Project is estimated to result in 1,127 unmitigated and 1,064 mitigated GHG emissions. Mitigated emissions would be below the BAAQMD threshold under this Alternative. In addition, Project emissions, combined with emissions from the adjacent developments of Napa Pipe and Meritage Commons, will contribute to an exceedance of BAAQMD standards on a cumulative basis. The cumulative operational impact will remain significant and unavoidable. The reduction of hotel rooms will make a significant contribution to the reduction in GHG emissions and, therefore, the Reduced Intensity Alternative is superior to the proposed Project.
7. **Hazards and Hazardous Materials**

The Phase I ESA prepared for the proposed Project did not recommend additional environmental studies for the site based on the findings that no known or suspected on-site conditions warrant regulatory involvement. No actions requiring environmental soil sampling, soil remediation, groundwater sampling, and/or groundwater remediation are required. No on-site RECs, off-site RECs, CRECs or HRECs with the potential to adversely impact the Project site were identified during the assessment. The Reduced Intensity Alternative would not introduce new or additional uses that could result in the use of or contamination by hazardous materials. Proximity to the Napa Airport would remain the same with no impacts from either the proposed Project or this Alternative. No impacts due to potential wildland fires were identified with the proposed Project, and this Alternative would not increase or lessen that potential. Therefore, no impacts would occur with either the proposed Project or the Reduced Intensity Alternative.

8. **Hydrology and Water Quality**

The original storm system within the Napa Valley Commons corporate park was designed for a commercial runoff coefficient and a 10-year storm event. Current city design standards require the proposed on-site piping system to convey the 25-year storm event while not impacting the existing infrastructure. Therefore, to meet the current City criteria the proposed on-site storm system will include an underground storage vault. This vault will be designed to detain the differential volume between the 25- and 10-year events and employ an outfall that will constrict the discharge to match the 10-year storm, thereby matching the maximum flow of the existing infrastructure piping within Napa Valley Corporate Drive. In addition, the Project proposes the use of permeable pavements to allow water to permeate the surface layer and pass into a porous base course and bedding materials and are underlain by a perforated pipe and storm water system. The reduction in the number of hotel rooms with this alternative would not alter the requirements for hydrology and water quality improvements associated with development on the Project site.

The industrial wastewater treatment for the winery includes a filtration process where solid and liquid elements of the wastewater will be separated. The solids will be dewatered and disposed of with normal trash, and remaining water will be filtered to a pure state through a reverse osmosis system. The resultant pure water will be stored in tanks in the wastewater treatment area and dispersed through the Project’s landscape irrigation system, which will be directly connected to the pure water storage tanks. The proposed winery will not connect into the sewer system or use a hauling system, because all wastewater produced by the winery will be treated on-site. Domestic wastewater flows from the winery will be discharged to the Napa Sanitation District pipeline for treatment. No change to this component of the Project will occur with the reduction of the number of hotel rooms.

The Reduced Intensity Alternative would be required to comply with all the local and state regulations and requirements for hydrology and water quality facilities and the prevention of project related contaminants impacting local water sources. The DEIR analysis concluded that, with implementation of mitigation measures, including the construction of an underground storage vault for storm event detention, impacts would be less than significant.
Therefore, the proposed Project and this Alternative would be the same with regard to impacts to hydrology and water quality.

9. **Land Use and Planning**

This Alternative would be consistent with the City's General Plan and Zoning Code designations for uses in the corporate park. This alternative would require a Conditional Use Permit for a hotel in the Industrial Park (IP-A) zoning district, similar to the proposed Project. However, this Alternative would not require approval of a Planned Development Overlay to permit shared parking. The reduction of the number of hotel rooms would reduce the required parking for the Project, and adequate parking can be provided on-site to comply with the City's parking requirements.

As analyzed with the proposed Project, the General Plan identifies a maximum FAR for the proposed Project of 0.40. The proposed Project will have an FAR of 0.42. The General Plan and Zoning Code allow for combining and averaging of FAR for projects that encompass several buildings on several lots. The proposed Project is under the same ownership within the corporate park as The Meritage Resort and Meritage Commons. Averaging the three components results in a 0.38 FAR. The Reduced Intensity Alternative would not require the averaging, because a reduction of 153 hotel units would result in consistency with the maximum FAR allowance as a result of deducting the development square footage proposed for the AC Hotel.

Therefore, from the standpoint of Land Use and Planning, this Alternative is superior to the proposed Project by reducing the number of discretionary approvals required and being more consistent with the existing City requirements for FAR and parking.

10. **Noise**

This alternative would result in temporary construction and long-term operational impacts similar to the proposed Project. Adherence to the City's Municipal Code noise regulations would reduce impacts to less than significant for construction activities. Long-term operational noise related to traffic, hotel interior noise levels, and airport noise has been mitigated to a level of insignificance with the proposed Project. The potential reduction in construction noise with the elimination of the AC Hotel is a benefit with this alternative. Similarly, traffic noise will be incrementally less than with the proposed Project. However, with mitigation, neither this Alternative nor the proposed Project will result in noise impacts that are considered significant. No cumulative impacts were identified with the proposed Project. Therefore, noise impacts remain substantially the same with the Reduced Intensity Alternative and the proposed Project.

11. **Population and Housing**

This Alternative is the same as the proposed Project for impacts to population and housing. No housing is proposed with either scenario. However, both would be required to make an affordable housing fee payment to the City to offset housing costs for potential new low-income residents in the area who will be employed by the new development. Therefore, impacts would be the same under either this alternative or the proposed Project.
12. Public Services

This Alternative would require police, fire, and medical emergency services to serve the new development. A reduction in the number of hotel rooms would not have an appreciable lessening in the requirement for these services. The number of new residents that could potentially relocate to the City of Napa is too speculative to quantify for either this alternative or the proposed Project, but local schools have adequate capacity to include potential students. The proposed Project is required to pay the City's development fee towards new or updated police, fire, and medical emergency service facilities and personnel. The Reduced Intensity Alternative would have the same requirement. Therefore, impacts under this Alternative and the proposed Project are substantially similar.

13. Transportation and Traffic

The proposed Project will generate approximately 1,946 daily trips with build out of all components as described herein. The Reduced Intensity Alternative would reduce the number of trips commensurately with the elimination of the 153 hotel rooms proposed for the AC Hotel. The Traffic Study for the proposed Project shows that impacts under Existing Plus Project Conditions are considered significant without mitigation. Under Cumulative Conditions, the proposed Project will impact seven study intersections that would operate at unacceptable levels of service without mitigation. Mitigation measures contained in the DEIR reduce the proposed Project's impacts to a less than significant level.

The Reduced Density Alternative will result in fewer trips per day based on the reduction of hotel rooms. As detailed in the traffic analysis, the AC Hotel generates 1,252 daily trips based on the ITE land use code for a hotel. This is a considerable reduction in the total daily trips from what is anticipated for the proposed Project. Impacts to individual intersections could be significantly reduced, and fair share fees required by the City could be substantially reduced with this alternative. Therefore, the Reduced Density Alternative is superior to the proposed Project in the area of transportation and traffic.

14. Tribal Cultural Resources

The Reduced Density Alternative would require ground disturbance and construction similar to the proposed Project. According to the Northwest Information Center, no prehistoric or historic-era sites have been documented within the Project area surveyed. Likewise, no prehistoric or historic-era sites were identified during the pedestrian survey conducted for Project analysis by NDDS. Therefore, the proposed Project construction would not disturb or destroy any such resources, as none are known to exist on the Project site. The No Project Alternative and the proposed Project are identical, as neither would result in significant environmental impacts to tribal cultural resources.

15. Utilities and Service Systems

The Reduced Density Alternative would require the use of utilities and service systems similar to the proposed Project. Utilities and service systems are currently available to the Project site, as the site is within the developed Napa Valley Commons corporate park. New development has the ability to connect to existing water, sewer, electrical, gas, and cable
connections, and the provision of utilities was considered when the corporate park was built. Because the utilities have existing adequate capacity to accommodate the proposed Project’s needs, no impacts would occur. There would be a reduction in the amount of water, gas, and electric required with this Alternative resulting in conservation of the resource. The Reduced Intensity Alternative is, therefore, marginally superior to the proposed Project.

### 6.6.2 Attainment of Project Objectives

Under this Alternative, impacts would be the same or similar in the areas of aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, tribal cultural resources, and utilities and service systems.

The Reduced Density Alternative is superior to the proposed Project with fewer impacts in the areas of biological resources, greenhouse gas emissions, land use and planning, transportation and traffic.

This Alternative is not feasible because it would not meet the Project objectives:

- **Comply with the City’s General Plan** – The proposed Project is part of a larger development called Napa Valley Commons corporate park. This area was envisioned in the General Plan for the type of development that currently exists and was analyzed by the City. The Reduced Density Alternative does not support the completion of the corporate park as intended and allows the currently vacant Project site to be underutilized in terms of consistency with the General Plan land use designation and intention.

- **Provide a high quality mixed-use project consistent with the intent of the City of Napa Zoning Code** – The Reduced Density Alternative proposes construction of a studio style hotel in the Industrial Park (IP-A) zoning district. The corporate park also includes The Meritage Resort and Meritage Commons, which provide full-service resort-style accommodations. However, the proposed Project would provide two hotels styled and priced for families and business class guests, including a suites hotel and a single-room style hotel. The Reduced Density Alternative eliminates the single-room hotel, thereby reducing a hotel style choice that is more accessible to budget-conscious travelers.

### 6.7 Environmentally Superior Alternative

Per CEQA Guidelines §15126.6, a range of reasonable alternatives has been considered in this DEIR. The Alternatives were intended to reduce the significant impact of the proposed Project and to address concerns presented at the Scoping Meeting and in Notice of Preparation comment letters, CEQA does not require that an alternative meet all project objectives, rather, CEQA §15126.6(f) specifies that alternatives should “feasibly attain most of the basic objectives of the project.” In addition, CEQA Guidelines §15126.6(e)(2) requires that if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify another environmentally superior alternative.
While the No Project Alternative would have fewer environmental impacts, most impacts have been mitigated to a less than significant level with Project implementation. Those impacts include greenhouse gas emissions, land use and planning, transportation and planning. Impacts would be marginally fewer in the areas of aesthetics, air quality, biological resources, geology and soils, noise and utilities and service systems. All other impact areas would be substantially the same.

As detailed above, the No Project Alternative does not meet most of the project objectives because it would not comply with the City's General Plan which envisioned the Napa Valley Commons corporate park as a fully built out development. The Project site, designated for industrial park uses, would be underutilized. The No Project Alternative would also fail to provide a high quality of mixed uses consistent with the intent of the City's Zoning Code. The site is zoned for uses compatible with the corporate park and this alternative would not advance the intent of allowing designated uses to be developed. In addition, the Napa Valley Commons Design Guidelines envision a fully utilized industrial area which would not result if no project were developed.

The remaining project alternative presented herein, the Reduced Intensity/Reduced Size Hotel, would reduce Project impacts in the areas of biological resources, greenhouse gas emissions, land use and planning and transportation and traffic. Impacts would be similar in the areas of aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, tribal cultural resources and utilities and service systems.

This Alternative would not comply with the City's General Plan by not supporting the completion of the corporate park as envisioned. Consistency with the City's Zoning Code would not be achieved because the Project would not be built to the full extent allowed by providing a high quality mixed-use project. This alternative would reduce a hotel style choice that would impact budget-conscious travelers with fewer rooms available at moderate prices. However, for purposes of this analysis, Alternative 2 – Reduced Intensity/Reduced Size Hotel would meet several of the Project objectives and substantially reduce the significant impact in the area of greenhouse gas emissions and traffic. All remaining impacts under this Alternative would be less than significant with mitigation. Therefore, Alternative 2 is considered the environmentally superior alternative.
7. Summary of Cumulative Impacts

CEQA requires the consideration of cumulative impacts. Defined, these impacts are “two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines §15355). Where the Project will create an impact to the existing residential developments, such impacts are noted in Chapter 5 of the DEIR. In addition to assessment of impacts on the environment, including the existing built environment, this section analyzes whether the Project will result in incremental effects that, when combined with other past, present and probable future projects, are cumulatively considerable.

The proposed Project is located in the City of Napa within an established industrial/corporate park. The Kaiser Data Center is northerly of the site across a vacant parcel. The immediate surrounding area is largely built-out with low-rise office and industrial development. An existing hotel and planned hotel are located on Bordeaux Way. Vineyards are located easterly of the Project site across SR 221. A planned redevelopment project known as Napa Pipe is located westerly of the site within the County of Napa and the City’s sphere of influence. The Napa County Airport and the Airport Industrial Park are located approximately 4 miles to the south.

The DEIR analyzed approved and anticipated development projects within the general vicinity in terms of impacts that could be cumulative when added to the proposed Project. The existing commercial developments and related projects identified herein were taken into consideration to assess impacts as discussed in each topical section below. Chapter 5 of the DEIR contains additional analysis of cumulative impacts for each topical environmental section. Specifically, the existing built environment was used to accurately describe the existing setting without the proposed Project and was contemplated to determine whether the proposed Project, when combined with other past, present and reasonably foreseeable future projects, would result in cumulatively considerable impacts. Cumulative impact conclusions are based on two key criteria:

1. Level of project-specific impact. When an analysis concludes a project’s impacts are individually minor but “cumulatively considerable,” the project may have a significant impact on the environment.

2. Consideration of non-existing conditions and other cumulative projects. If there is a serious existing problem such that any additional amount of impact, when compared to the pre-existing conditions, would be significant, any additional amount of project impact would contribute to a cumulative impact.

The table below identifies each environmental topic and discusses cumulative impacts related to each.
<table>
<thead>
<tr>
<th>Environmental Issue/Topic</th>
<th>Project Specific Impact</th>
<th>Conclusion Regarding Cumulative Impacts</th>
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<tr>
<td>Aesthetics</td>
<td>Construction of a hotel, winery and office building will create visual impacts due to the currently undeveloped condition of the site and new sources of light will be introduced to the site. Standard Mitigation Measures have been included herein to reduce potential impacts to a less than significant level. No special mitigation measures are required.</td>
<td>Views of the site will be similar to other development within the corporate park setting where the Project is located. No scenic views, vistas or resources will be impacted because the Project is not within a scenic view corridor or state scenic highway. Therefore, the Project will not result in a cumulative impact to aesthetics within the community.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>The Project could contribute incrementally to two projects within the immediate vicinity of the Project. They include the Napa Pipe project and the Meritage Commons project. Both projects have been analyzed for impacts to air quality and mitigation has been included to reduce impacts. The proposed Project’s contribution alone will be minimal because both short-term construction and long-term operational impacts are below BAAQMD thresholds.</td>
<td>The proposed Project has been determined to have less than significant impacts to air quality. The Napa Pipe project has been determined to have emissions exceeding local standards. However, as noted, the Project will result in a minimal contribution cumulatively to air quality impacts because impacts are below BAAQMD thresholds and mitigation will further reduce potential cumulative impacts to a level of insignificance.</td>
</tr>
<tr>
<td>Biological Resources</td>
<td>The proposed Project does not have the potential for cumulative impacts associated with special-status vegetation communities or special-status species. Potential cumulative impacts due to the Project could occur to isolated wetlands. Mitigation has been included requiring the purchase of mitigation bank credits which will result in less than significant impacts.</td>
<td>Any impacts to wetlands will be contained on the Project site and not contribute to off-site wetland area impacts. The potential wetlands are considered isolated; therefore, no downstream or adjacent cumulative impacts will occur. No other significant impacts to biological resources have been identified that cannot be substantially lessened with the implementation of the proposed mitigation measures.</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>Development of the proposed Project is not anticipated to significantly impact cultural resources within or adjacent to the Project boundaries. A significant amount of the Project site has been graded and contains a variety of shrubs, grasses and trees. No cultural resources have been identified on the Project site or within the adjacent area. Individual Project impacts from foreseeable projects in the vicinity are evaluated and mitigated on a project-by-project basis.</td>
<td>Project development in combination with other cumulative projects would not significantly alter any regional or cumulative cultural, scientific or historic resources. No known archaeological or paleontological resources have been found on the Project site. No cumulative impacts to cultural resources will occur.</td>
</tr>
<tr>
<td>Geology and Soils</td>
<td>Soils and geology impacts are site specific and the Project is not in close proximity to projects identified as having the potential for cumulative impacts. The site is not within an area with a high potential for landslides or liquefaction. Erosion will be controlled via mitigation. Mitigation has been included to prevent significant impacts due to construction activities and all other potential geologic impacts are reduced through mitigation and recommendations in the Geotechnical Report.</td>
<td>The Project, as proposed, will not result in a cumulatively considerable impact when combined with other proposed projects in the vicinity. There will be no significant cumulative impacts due to the implementation of the Project as proposed.</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>The primary source of the temporary GHG emissions generated by construction activities is from use of diesel-powered construction equipment.</td>
<td>Long-term operational conditions will result in GHG threshold exceedance. Therefore, the Project will contribute cumulatively to GHG emissions.</td>
</tr>
<tr>
<td>Environmental Issue/Topic</td>
<td>Project Specific Impact</td>
<td>Conclusion Regarding Cumulative Impacts</td>
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<tr>
<td></td>
<td>The Project will include site preparation, grading, construction of the hotel, winery and office buildings, paving and painting. No construction emissions exceed thresholds. The primary sources of GHG emissions generated by the operational phase of the Project include day-to-day operation and maintenance, use of consumer products, natural gas use, and vehicle trips associated with employees, visitors and hotel guests. GHG operational emissions will exceed the BAAQMD threshold of 1,100 MTCO$_2$e by 1,058 MTCO$_2$e.</td>
<td>Emissions when combined with the cumulative projects identified herein. Mitigation has been included to reduce GHG emissions; however, the mitigated emissions will still exceed the adopted thresholds and the impact will remain cumulatively significant and unavoidable.</td>
</tr>
<tr>
<td>Hazards and Hazardous Materials</td>
<td>The proposed Project, when combined with other projects in the vicinity, will not result in significant cumulative impacts related to hazards and hazardous materials. Individually, all hazards and hazards materials impacts due to Project implementation are less than significant with mitigation.</td>
<td>Because no known or suspected hazards exist on the Project site, and no uses will be conducted on the site that will include hazardous materials, there will be no cumulative impacts due to Project implementation.</td>
</tr>
<tr>
<td>Hydrology and Water Quality</td>
<td>Cumulative development in the Project area could result in alterations to the drainage pattern and flow rates in the Project vicinity. Impacts will be mitigated on a project-by-project basis by construction of project-specific drainage improvements. Storm drain improvements for the proposed Project and other projects in the area will be designed to provide projected levels required by the City.</td>
<td>The proposed Project will not generate a substantial increase in runoff from the Project site thereby contributing to a cumulative increase. The additional proposed projects within the Project vicinity are adequately separated distance-wise to prevent cumulative impacts due to erosion, water runoff and water quality. The Project includes an underground storage vault to detain the differential volume of storm water runoff. Therefore, the proposed Project, when considered with other potential projects, will not result in significant cumulative impacts.</td>
</tr>
<tr>
<td>Land Use and Planning</td>
<td>Additional projects proposed in the Project vicinity will add 2,580 residences, approximately 40,000 square feet of retail/restaurant, 50,000 square feet of office, 15,000 square feet of commercial, 140,000 square feet of industrial and 150 hotel suites. As these proposed uses are also consistent with local regulations, there will be no cumulative impacts with the addition of the proposed Project.</td>
<td>The proposed Project is consistent with applicable general plan goals and policies and zoning regulations. The City’s General Plan envisioned the buildout of the Napa Valley Commons corporate park with uses as proposed by the Project. There will be no cumulative impacts related to land use and planning.</td>
</tr>
<tr>
<td>Noise</td>
<td>The proposed Project is located south of the Napa Pipe project and east of the Meritage Commons project. Locationally, all are separated by adequate distance. Individual on-site operational noise impacts have been analyzed and mitigation has been provided. Traffic generated by each project will contribute to the ambient noise levels generally.</td>
<td>The cumulative projects will not be built concurrently and construction noise from each project will not result in a cumulative exceedance of noise thresholds. Operational noise from each project will not contribute to a cumulatively significant impact due to distance. Therefore, cumulative impacts will be less than significant.</td>
</tr>
<tr>
<td>Population and Housing</td>
<td>The proposed Project does not include construction of housing. Population increases will be due to employees relocating to Napa to fill news jobs resulting from Project implementation. The Napa Pipe project will result in 2,580 new residences and</td>
<td>The proposed Project has the potential to increase the population and need for housing in the City of Napa through the relocation of potential employees. Mitigation includes the payment of fees to fund housing programs to assist lower income residents. With mitigation,</td>
</tr>
<tr>
<td>Environmental Issue/Topic</td>
<td>Project Specific Impact</td>
<td>Conclusion Regarding Cumulative Impacts</td>
</tr>
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<tr>
<td>Public Services</td>
<td>The proposed Project, along with the Napa Pipe and Meritage Commons projects, will be required to provide fees for new and/or expanded services. The proposed Project will have minimal impacts on public services.</td>
<td>The proposed Project, Napa Pipe and Meritage Commons have been required to provide fees for new or expanded services as required by the individual projects. With mitigation, cumulative impacts will be less than significant.</td>
</tr>
<tr>
<td>Transportation and Traffic</td>
<td>The DEIR identified two projects in the vicinity of the proposed Project that, when taken together, could potentially result in a cumulatively significant impact. Each project will generate new traffic which was added to the opening year volumes to determine if the cumulative projects will add to traffic congestion and create an impact.</td>
<td>Analysis shows that the proposed Project, in combination with the two cumulative projects, will result in traffic impacts. Implementation of planned and fully funded roadway improvements, plus additional mitigation identified for each individual project, will result in less than significant cumulative impacts.</td>
</tr>
<tr>
<td>Tribal Cultural Resources</td>
<td>The proposed Project site does not contain any known tribal cultural resources. Impacts for cumulative projects will be confined to on-site presence of such resources with site-specific mitigation.</td>
<td>Individual project impacts are evaluated and mitigated on a project-by-project basis. The Project will not contribute cumulatively to an impact to tribal cultural resources and there will be no impact due to Project implementation.</td>
</tr>
<tr>
<td>Utilities and Service Systems</td>
<td>Gas and electric service are available throughout the corporate park. Napa Pipe and Meritage Commons have been analyzed for impacts and to ensure that adequate capacity exists to serve the projects. Future developments will be required to secure service on a project-by-project basis for utilities and service systems.</td>
<td>Cumulative impacts will result in an increase in the demand for utility and service systems for new development in the area. Mitigation has been included in the proposed Project, Napa Pipe and Meritage Commons to ensure adequate coordination and provision of services and to ensure cumulative impacts will be less than significant.</td>
</tr>
</tbody>
</table>
8. Growth Inducing Impacts

CEQA requires the consideration of growth-inducing impacts resulting from new development. Pursuant to CEQA Guidelines §15126.2(d), such impacts are ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included are projects that would remove obstacles to growth. In addition, growth-inducing impacts could be realized if the Project would encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Potential growth-inducing impacts have been discussed throughout this DEIR, but are brought to focus in this section. The proposed Project site is within the setting of an existing corporate park and the site is currently vacant. The proposed uses, which include a hotel, office and winery, will potentially provide employment for between 238 and 329 worker households based on the uses proposed and as analyzed in the Review of Housing Impacts report. However, it is anticipated that the actual number of employees will be approximately 190. New employment for the Project will range from hotel and grounds maintenance to typical management level jobs in the hotel, winery and office building. While the Project could draw from people currently residing in the Napa area, the potential exists for workers to relocate to Napa if they are employed as part of the Project workforce. The Census Bureau’s American Community Survey shows that the average number of workers per working household in the City of Napa is 1.43.

The Review of Housing Impacts report prepared for the Project, which is fully discussed and analyzed in Section 5.11 – Population and Housing – notes that regional wages in the Napa area exceed national averages across nearly all occupation categories. This factor could be an incentive to people outside the region to seek both employment and housing due to Project development. However, housing costs in the area are high and there is a limited supply of housing affordable for very low and low-income workers.

The City of Napa Zoning Code (Chapter 15.94) requires new development to provide a fee towards the provision of housing and programs that will enable low income families to locate in the area closer to their place of employment. The proposed Project does not include construction of new housing. The estimated fee for the proposed Project is $1,131,158 and mitigation has been included herein to require payment of the fee prior to issuance of building permits.

The Project Traffic Analysis concluded that with mitigation, all traffic related impacts would be reduced to less than significant. Mitigation includes payment of fair share fees towards improvements at specific intersections, some of which are currently operating at inadequate levels of service even without the addition of Project-related traffic. The proposed fees will result in the implementation of operational improvements at the impacted intersections.

The business park infrastructure was designed to accommodate a fully operational built-out condition and no additional facilities are required to support the proposed Project.
Coordination with service providers to identify the location of all underground connections to existing utilities is required through mitigation herein. The proposed on-site utility improvements will not foster population growth beyond the Project and no infrastructure improvements will be extended into adjacent areas outside of the Project boundaries.

Because the Project is consistent with the City's land use designations and buildout vision for the business park, potential impacts were identified and analyzed in the General Plan. Consistency with the General Plan will not result in growth inducing impacts beyond what was analyzed.

The proposed Project will result in additional job demand within the greater Napa job market area for land uses within Napa Valley Corporate Park envisioned by the City of Napa General Plan. As noted, the availability of jobs could induce a certain percentage of potential employees to relocate to the City of Napa to fill the anticipated jobs for the hotel(s), winery and office. The mitigation fee discussed herein will provide resources to assist lower income households to find affordable housing. No additional growth-inducing impacts will occur. The City envisioned a fully operational business park, including the Project site, which is currently vacant and underutilized.
# 9. Inventory of Mitigation Measures

## 9.1 Aesthetics

| MM AE-1 | Low-level lighting shall be utilized in any parking area(s) as opposed to elevated high-level intensity light standards. |
| MM AE-2 | All new utilities shall be placed underground. |
| MM AE-3 | The developer shall comply with the following: |
| | a. The plans submitted for the Project improvements or building permit, whichever comes first, shall include a final landscape and irrigation plan designed and signed by a licensed landscape architect or landscape contractor. The final landscape plans shall specify that 1) all plant materials be certified by the Napa County Agricultural Commissioner inspection program for freedom from the glassy winged sharpshooter or other pests identified by the Agricultural Commissioner and 2) the Agricultural Commissioner’s Office shall be notified of all impending deliveries of live plants with points of origin outside of Napa County so that inspection can be arranged. No improvement plans shall be approved nor building permit issued until the Planning Department approves the landscape and irrigation plan. Prior to occupancy, the licensed professional who signed the final landscape and irrigation plan shall certify in writing to the Planning Director that he/she has inspected and approved the installation of landscaping and irrigation and has found them to be consistent with the approved plans including, but not limited to, the certifications and inspections by the Agricultural Commissioner as well as that the systems are in working order. A substitution of an alternate licensed professional may be allowed by the Planning Director upon a showing of good cause. |
| | b. Prior to occupancy, Developer shall execute and record the City’s Landscape Maintenance Agreement. (Forms are available from the Planning Department.) |
| MM AE-4 | The Developer shall secure separate architectural review approval for any signage for the Project. |

## 9.2 Air Quality

| MM AQ-1 | During project construction, the applicant shall ensure that best management practices for dust control as set forth in the BAAQMD CEQA Air Quality Guidelines are implemented. These include: |

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 miles per hour (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.

### 9.3 Biological Resources

<table>
<thead>
<tr>
<th>MM Bio-1</th>
<th>Prior to issuance of grading permits, the Project Applicant shall provide a tree risk assessment for the three valley oaks proposed to be preserved in place to determine their health and stability. Recommendations in the tree risk assessment shall be enforced to protect trees determined healthy enough for preservation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM Bio-2</td>
<td>Prior to issuance of grading permits the Applicant shall submit to the City grading/site preparation plans that reflect that the roots of the oak trees to be protected are severed around the entire perimeter of the tree protection zones to ensure subsequent construction can proceed outside the tree protection zone without further impacting the trees.</td>
</tr>
<tr>
<td>MM Bio-3</td>
<td>Prior to issuance of building permits, the Applicant shall ensure that the construction documents depict that Silva Cells are to be installed in three locations beneath the new hardscape areas to provide a dedicated zone for</td>
</tr>
</tbody>
</table>
oak tree root growth, consistent with the locations identified on the Silva Cell Location Diagram on page 5.3-45 herein.

### MM Bio-4
Prior to issuance of a grading permit, the Applicant shall ensure that the grading plans and relevant construction documents incorporate the Tree Protection and Maintenance Guidelines set forth in the Arborist’s report, included on pages 15 through 30 of Appendix F.

### MM Bio-5
Prior to issuance of a grading permit, the Applicant shall ensure that vegetation clearing outside of the nesting season (February 1 through August 31) for all vegetation alliances or land-cover types on the site is conducted. If vegetation clearing is not feasible outside of the nesting season, the Project Applicant shall submit a nesting bird survey, prepared by a qualified biologist, within three days prior to any disturbance of the site, including disking, demolition activities and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests consisting of as much as 500 feet for raptors and 300 feet for non-raptors, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

### MM Bio-6
Prior to issuance of a grading permit, the Applicant shall ensure that dry-season and wet-season protocol surveys are completed to determine whether the potential seasonal wetland features observed on the site support listed fairy shrimp, including the vernal pool fairy shrimp.

### MM Bio-7
Prior to the issuance of grading permit, the Applicant shall provide to the City or its biologist for review, the fairy shrimp protocol surveys to determine presence or absence of fairy shrimp. If listed fairy shrimp are detected within any of the potential seasonal wetland features, impacts to occupied habitat shall be mitigated at a 2:1 ratio. Fee payment shall be made through an approved mitigation bank that covers the vernal pool fairy shrimp. The mitigation bank shall be located within the service area that covers the Project site. Alternate mitigation may be approved by USFWS, to the satisfaction of the City of Napa.

### MM Bio-8
Prior to issuance of a grading permit, the Applicant shall ensure the completion of a formal wetland determination demonstrating whether or not the potential seasonal wetlands features meet the minimum threshold for wetlands. If the wetland determination does not meet the minimum threshold for wetlands no additional mitigation would be required. If the wetland determination meets the minimum threshold for wetlands, the Applicant shall be required to mitigate at a 2:1 ratio for any freshwater wetlands dominated by pale spikerush. The mitigation may be satisfied through purchase of credits in an approved mitigation bank with a service area that covers the Project site, or in an acceptable manner to the City, so long as the 2:1 ratio is met.
### 9.4 Cultural Resources

| MM CR-1 | During site preparation and grading activities, the Project applicant shall ensure that, if any archaeological materials or objects are unearthed during Project construction, all work in the vicinity shall be immediately halted until a qualified archaeologist is retained by the City to evaluate the finds. The Project applicant shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds. |
| MM CR-2 | During the construction phase, the Project applicant shall ensure that if any human remains are uncovered, work shall be halted within the immediate vicinity of the discovery and state law shall be followed, which includes immediately contacting the County Coroner’s office and a representative of the Yocha Dehe Wintun Nation. |
| MM CR-3 | During the construction phase, the Project applicant ensure that if any unidentified cultural materials are encountered on or below the surface, archaeological consultation should be sought immediately. |

### 9.5 Geology and Soils

| MM Geo-1 | All Project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications. |
| MM Geo-2 | All construction activities shall meet the Uniform Building Code regulations for seismic safety (e.g., reinforcing perimeter and/or load bearing walls, bracing parapets). |
| MM Geo-3 | Developer shall provide an erosion and sediment control plan and a schedule for implementation of approved measures to the Public Works Director for approval prior to the issuance of any grading permits. No grading and excavation shall be performed except in accordance with the approved plan and schedule. |
| MM Geo-4 | Hydroseeding of all disturbed slopes shall be completed by October 1. Developer shall provide sufficient maintenance and irrigation of the slopes such that growth is established by November 1. |
| MM Geo-5 | Prior to the issuance of building permits and grading permits, the City of Napa shall ensure the grading and building plans demonstrate compliance with the recommendations included in the Geotechnical Study Report by RGH consultants dated July 13, 2015 related to seismic design criteria for structures, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, drainage and maintenance. |
Prior to issuance of grading permits, the Applicant shall have prepared a haul route plan showing the construction materials haul routes, the number of trips per day, and the location where grading export materials will be taken.

9.6 Greenhouse Gas Emissions

Prior to the issuance of building permits, the City shall ensure that building plans reflect the following measures are to be implemented in the areas of Transportation, Energy-Efficiency, Water and Waste Consumption Measures to Reduce Project GHG Emissions.

1. Designate at least 53 clean air vehicle (i.e., electric vehicle) parking spaces;
2. Ensure that all winery-related wastewater is treated on-site and instate a program to reduce indoor and outdoor water use by at least 20%;
3. Instate a program to ensure that 2013 Title 24 energy standards (used by the CalEEMod model) for energy use and lighting are exceeded by at least 20%. Adherence to CalGreen 2016 Title 24 energy standards and other measures would be necessary including, but not limited to:
   a. Sensors shall be installed in all rooms that detect if a guest is in the room and activate the HVAC.
   b. A separate system requires the guest room key to be inserted in order for the lights to work in the hotel rooms.
   c. LED lights installed throughout
   d. All new appliances would be energy efficiency rated for the hotel;
4. Planting of at least 430 new trees on-site;
5. Instate a shuttle program which would reduce project trip generation by at least 180 trips per day;
6. Instate a recycling and compost program that would divert at least 20% of waste created on-site.

9.7 Hydrology and Water Quality

To ensure adequate drainage control, the Developer of any project that introduces new impervious surfaces (roof, driveways, patios) that will change the rate of absorption of drainage or surface run-off shall submit a drainage and grading plan designed in accordance with Policy Resolution No. 17 and the City of Napa Public Works Department Standard Specifications to the Public Works Department for its approval.

For any construction activity that results in the disturbance of 5 acres or greater total land area, or that is part of a larger common plan of development that disturbs 5 acres or greater total land area, Developer shall file a Notice of Intent with the California Regional Water Quality Control
Board (SWRCB) prior to any grading or construction activity. In the event construction activity for the Project occurs after the SWRCB has changed its General Permit for construction activity to cover disturbance(s) of 1 acre or more, this measure shall apply to any construction activity for this Project which results in the disturbance of 1 acre or greater total/and area, or is part of a larger common plan of development that disturbs 1 acre or greater total land area.

**MM H/WQ-3** The Developer shall ensure that no construction materials (e.g., cleaning fresh concrete from equipment) are conveyed into the storm drain system. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.

**MM H/WQ-4** All materials that could cause water pollution (e.g., motor oil, fuels, paints) shall be stored and used in a manner that will not cause any pollution. All discarded material and any accidental spills shall be removed and disposed of at an approved disposal site.

**MM H/WQ-5** All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.

**MM H/WQ-6** Developer shall meet the requirements of discharging to a public storm drainage system as required to ensure compliance by the City with all state and federal laws and regulations related to storm water as stipulated in the Clean Water Act. Developer shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit in effect prior to completion of Project construction for storm water discharges from the municipal storm water system operated by the City of Napa. Developer shall comply with the Storm Water Pollution Mitigation Plan (SWPMP) submitted by Developer as part of its application as (modified and) approved by the Director of Public Works.

**MM H/WQ-7** Developer shall mark all new storm drain inlets with permanent markings, which state “No Dumping-Flows to River.” This work shall be shown on improvement plans.

**MM H/WQ-8** Developer shall record a plan for long-term private maintenance acceptable to the Director of Public Works and the City Attorney for any structural storm water pollution removal devices or treatment control BMP incorporated as part of the Project. The plan shall comply with City and SWRCB requirements including, but not limited to, a detailed description of responsible parties, inspections, maintenance procedures for the detention system, including monitoring and documentation of annual report to the Public Works Department and procedures for enforcement. Appropriate easements or other arrangements satisfactory to the Public Works Director and City Attorney necessary or convenient to ensure the feasibility of the scheme and
fulfillment of maintenance responsibilities shall be secured and recorded prior to approval of the final/parcel map or issuance of a building permit, whichever comes first.

**MM H/WQ-9**  
Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance under California’s General Permit for Storm Water Discharges Associated with Construction Activity. The Project Applicant shall prepare and submit to the City a Storm Water Pollution Prevention Plan that describes erosion and sediment control BMPs and BMPs that will be used during the construction of the Project.

**MM H/WQ-10**  
Prior to issuance of building permits, the City of Napa shall ensure the building plans demonstrate that properly designed and sized LiD features have been incorporated into the Project.

### 9.8 Land Use and Planning

| MM LU-1 | Developer shall comply with all requirements of federal, state and local laws and regulations applicable to Project construction and issuance of building permits. |
| MM LU-2 | Developer shall comply with the monitoring/reporting checklists for development pursuant to the City of Napa Resolution 96-153 regarding CEQA implementation procedures for both standard and Project specific mitigation measures. |
| MM LU-3 | Developer shall notify all employees and agents of the mitigation measures and conditions applicable to the Project and shall ensure compliance with such measures and conditions. Developer shall also notify all assigns and transferees of the same. |
| MM LU-4 | Prior to issuance of building permits, the Project Applicant shall provide evidence to the City of a deed restriction identifying the combined square footage for The Meritage Resort, Meritage Commons, and the Trinitas Mixed Use Project and the resultant averaging of FAR as permitted to maintain consistency with the General Plan FAR allowance. The deed restriction shall restrict the “donor” parcels (The Meritage Resort and Meritage Commons) to a maximum of 689,316 square feet consistent with the combined average in order to prevent overbuilding of square footage on those parcels. |
| MM LU-5 | Prior to issuance of building permits, the Project Applicant shall memorialize a shared parking agreement per a Planned Development Overlay to allow a total of 441 shared parking spaces for use between the hotel and winery. The shared parking agreement shall provide three parking spaces for evening use of the hotel. The shared parking agreement shall be in full force and effect throughout the life of the project and will be binding upon any future owners of the property. |
9.9 Noise

**MM N-1**
During the construction phase, the Project Applicant shall ensure that all construction activities shall comply with all requirements in Section 8.08.025 of the Napa Municipal Code, including limiting hours of construction to 7:00 a.m. to 7:00 p.m. Monday through Friday on weekdays and 8:00 a.m. to 4:00 p.m. on weekends or legal holidays unless a permit shall first have been secured from the City Manager.

**MM N-2**
Prior to issuance of building permits, Project Applicant shall ensure that mechanical equipment associated with the winery component of the Project shall be selected and designed to reduce impacts on surrounding uses to meet the City's General Plan noise level thresholds for industrial land uses. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the noise performance standard. Noise reduction measures could include but are not limited to, selection of equipment that emits low noise levels and installation of noise barriers such as enclosures to block the line of sight between the noise source and the nearest receptors.

**MM N-3**
Prior to commencement of construction activities, Project Applicant shall notify adjacent building occupants of scheduled construction activities and schedule such activities during hours with the least potential to affect nearby occupants to the extent feasible.

**MM N-4**
During special events, the Project Applicant shall ensure all public address or sound amplification systems are operated consistent with the provisions of Sections 17.52.310 and Section 8.08.010 of the Municipal Code including the conditions of the Project use permit.

9.10 Population and Housing

**MM P/H-1**
Prior to the issuance of a building permit, Applicant shall pay the City the affordable housing impact fee as calculated by the Chief Building Official and based on the methodology identified by the City Council for non-residential development.

9.11 Public Services

**MM PS-1**
Developer shall pay the required fire and paramedic fees for new development in accordance with Napa Municipal Code Chapter 15.78. The fee for each unit of development within a development project shall be paid in full prior to the issuance of the building permit required for that unit of
development. Such fees shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in the ordinance and Resolution 94-106 are incorporated herein. The City further finds that calculation of the fee pursuant to the formula set forth therein demonstrates that there is a reasonable relationship between the fees imposed and the cost of improvements attributable to this Project.

**MM PS-2**
Developer shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and PWD Standard Specifications and the Fire Department “Standard Requirements for Commercial/Residential Projects,” including, without limitation, the requirements for access, new construction, smoke detectors, fire extinguishers, and fire hydrants. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications.

**MM PS-3**
All newly constructed buildings must have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which installation permit must be obtained from Fire Prevention. In multi-building complexes, or in buildings with three or more stories, special monitoring conditions will be required. Existing habitable buildings, which are retained, shall be retrofitted.

**MM PS-4**
The Developer of any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards, or are classified by the Uniform Building Code as an H (hazardous) occupancy.

### 9.12 Transportation and Traffic

**MM T-1**
All required public frontage and street improvements shall be designed and built in accordance with City of Napa ordinances and the PWD Standard Specifications. Unless waived by the Public Works Director, street improvements shall include curbs, gutter, sidewalk, planting, streetlights, and street trees. Any additional right-of-way necessary to accommodate these improvements shall be dedicated to the City.

**MM T-2**
During non-working hours, open trenches shall be provided with appropriate signage, flashers and barricades approved by the Street Superintendent to warn oncoming motorists, bicyclists and pedestrians of potential safety hazards.

**MM T-3**
All road surfaces shall be restored to pre-Project conditions after completion of any Project-related pipeline installation activities.

**MM T-4**
To mitigate the cumulative impact of the traffic generated by the subject Project on the City’s arterial and collective street system, the Developer shall pay a Street Improvement Fee in accordance with Napa Municipal Code Chapter 15.84 and implementing resolutions to pay for the traffic.
improvements identified therein. Such fee shall be payable at the rate in effect at the time of payment. The findings set forth in the ordinance and implementing resolutions are incorporated herein. The City further finds that the calculation of the fees in accordance with the trip generation capacity of development demonstrates there is a reasonable relationship between the amount of the fees imposed and the cost of the street improvements attributable to this Project.

<table>
<thead>
<tr>
<th>MMT-6</th>
<th>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 3.43% fair share contribution to the following improvement: provide additional northbound and southbound through lanes and optimization of signal timing at the intersection of SR 221/Napa Valley Corporate Way.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMT-7</td>
<td>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.12% fair share contribution to the following improvement: replace the existing signal by constructing a fully grade-separated interchange or roundabout at the intersection of SR 12-SR 29/SR 221.</td>
</tr>
<tr>
<td>MMT-8</td>
<td>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay an 11.20% fair share contribution to the following improvement: restripe westbound approach to one left-turn lane, one shared through/left-turn lane, and one right-turn lane at the intersection of Napa Valley Corporate Drive/Napa Valley Corporate Way.</td>
</tr>
<tr>
<td>MMT-9</td>
<td>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay 100% of the cost of the following cumulative impact improvement: installation of a traffic signal or a roundabout at the intersection of Napa Valley Corporate Way/Bordeaux Way.</td>
</tr>
<tr>
<td>MMT-10</td>
<td>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 2.09% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound direction and optimization of signal timing at the intersection of SR 221/Streblow Drive.</td>
</tr>
<tr>
<td>MMT-11</td>
<td>Prior to issuance of Certificates of Occupancy, the Project Applicant shall pay a 1.73% fair share contribution to the following improvement: provide an additional through lane in the northbound and southbound and optimization of signal timing at the intersection of SR 221/Magnolia Drive.</td>
</tr>
<tr>
<td>MMT-12</td>
<td>Prior to issuance of Certificates of Occupancy, at the intersection of Soscol Avenue (SR 221)/Imola Avenue (SR 121) under Existing plus Project conditions, the Project Applicant shall pay a 1.39% fair share contribution to the following improvement: optimization of signal timing. Under Cumulative Plus Project conditions, the Project Applicant shall pay a 1.68% fair share contribution for an additional through lane in the northbound and southbound direction and signal timing optimization.</td>
</tr>
</tbody>
</table>
### 9.13 Utilities and Service Systems

| MM U-1 | Prior to trenching within existing roadway areas, the Developer’s engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems. |
| MM U-2 | Water and energy conservation measures shall be incorporated into Project design and construction in accordance with applicable codes and ordinances. |
| MM U-3 | The Project shall be connected to the Napa Sanitation District for sanitary sewer service. If the subject property is currently served by individual sewage disposal systems, the septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction and after connection to the District, the existing septic tank(s) shall be properly destroyed. |
| MM U-4 | The Project shall be connected to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well-destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water District’s specifications. |
| MM U-5 | The Project shall be designed and built in accordance with the PWD Standard Specification regarding the adequate conveyance of storm waters.. |
| MM U-6 | All faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute. |
| MM U-7 | All showerheads shall be of a design to limit the maximum flow to 2.5 gallons per minute. |
| MM U-8 | The Developer shall completely offset the water requirements of this Project by complying with the retrofit requirements of Napa Municipal Code Chapter 13.09. |
| MM U-9 | During the construction/demolition/renovation period of the Project, Developer shall use the franchised garbage hauler for the service area in which the Project is located to remove all wastes generated during Project development, unless Developer transports Project waste. If the Developer transports the Project’s waste, Developer must use the appropriate landfill for the service area in which the Project is located. |
| MM U-10 | Developer shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the Developer transports such wood waste to a location where wood waste is recycled. |
| MM U-11 | A recycling/solid waste enclosure shall be provided in accordance with Chapter 17.102, et seq. of the Napa Municipal Code for all commercial, industrial, and multi-family projects with common solid waste facilities. |
10. Inventory of Unavoidable Adverse Impacts

Greenhouse Gas Emissions

Mitigation has been incorporated into the DEIR to reduce potential GHG emissions impacts. However, the Project’s operational emissions with mitigation will remain above the BAAQMD thresholds and will, therefore, result in an unavoidable and adverse impact.
11. Organizations Affiliated with the Project

The City of Napa is the Lead Agency for the proposed Project. Contact persons for the Project are:

**City of Napa**

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Contact Person: Victor Carniglia

**Project Applicant**

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Kory Kramer

**Project Architect**

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Mark Yoshizaki

**Environmental Consultant**

CAA Planning, Inc.  
30900 Rancho Viejo Road, Suite 285  
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(949) 581-2888  
Shawna L. Schaffner

**Other Organizations Affiliated with the Project**

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Joshua D. Carman

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   (530) 680-610
   Sean Jensen

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   Keith S. Gregory

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   Kathy Hugens

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   Michael S. Thill

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   (887) 439-2582
   Gregory Tan

Population and Housing
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   Los Angeles, CA 90015
   (213) 489-3808
   Michelle Chung

Transportation/Traffic
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   4637 Chabot Drive, Suite 300
   Pleasanton, CA 94588
   (925) 398-4871
   Ben Huie