Flood County Park Landscape Plan

Draft Environmental Impact Report

SCH#2016112040

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Executive Summary

This section summarizes the characteristics of the project as well as the environmental impacts, mitigation measures, and residual impacts associated with implementation of the project.

Project Synopsis

Project Applicant

County of San Mateo Parks Department
455 County Center – Fourth Floor
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Project Location

The project site consists of the 24.5-acre Flood County Park, located in the city of Menlo Park in San Mateo County. Single-family residences primarily surround the park, and Bay Road bounds the site to the southwest. The Town of Atherton is located adjacent to and southwest of the park, across Bay Road. A San Francisco Public Utilities Commission (SFPUC) right-of-way for water pipelines crosses the site and the surrounding area.

Project Description

The proposed project entails a Landscape Plan for the long-term redevelopment of San Mateo County's Flood County Park in the city of Menlo Park. This plan is intended to optimize preservation of large oak and bay trees, increase offerings of sports, and provide a variety of active and passive uses for a range of user groups. It is anticipated that the proposed recreational facilities would be developed within ten years. The largest recreational facilities would be sited in the northern portion of the park, where the existing ballfield would be reconstructed and a soccer/lacrosse field would be installed at the northeast corner, replacing the existing pétanque court and a portion of the existing tennis courts. A promenade would run eastward across the center of the park from the parking lot. Picnic areas clustered in the southern half of the park would be reconstructed. The Parks Department would preserve existing adobe buildings on-site, with the exception of demolishing the adobe Restroom D located west of the existing tennis courts. The adobe administrative building in the southwest part of the park would be rehabilitated for seismic stability.

More detail about the proposed project is included in Section 2, *Project Description.*

Areas of Controversy

Primary areas of controversy known to the lead agency include noise from athletic and other park events, loss of visual quality, impacts to historic adobe structures, air pollution, loss of mature trees, traffic congestion, traffic safety, and parking availability on local streets. A summary of comments received during the scoping process is included in Table 2.

Project Objectives

The objectives of the proposed project are to:

- To repair and update park features and core infrastructure components
- To meet demand for active recreation facilities in San Mateo County by increasing offerings of sports
- To provide a variety of uses for a range of user groups, including youth
- To optimize preservation of oak woodland

Alternatives

Pursuant to Section 15126.6 of the CEQA Guidelines, the County considered the following alternatives to the proposed project:

- Alternative 1: No Project (no change to existing conditions)
- Alternative 2: Reduced Athletic Programming
- Alternative 3: Multi-Use Field

The No Project Alternative assumes that the proposed Landscape Plan is not implemented and that the County continues operating and maintaining Flood County Park in its current condition. The Reduced Athletic Programming Alternative would introduce the same new recreational facilities as planned for in the Landscape Plan, and in the same phases of construction, but would prohibit the organized use of proposed athletic fields on weekdays during afternoon peak hours (4-6 P.M.). The Multi-Use Field Alternative would introduce a new multi-use athletic field in the location of the existing ballfield, while eliminating the Landscape Plan's proposed soccer/lacrosse field.

Among the park redevelopment options, the Reduced Athletic Programming Alternative would be the most environmentally superior relative to the proposed project. This alternative would substantially reduce vehicle trips associated with athletic activity, avoiding a significant and unavoidable impact on traffic congestion at the intersection of Bay Road and Ringwood Avenue during weekday P.M. peak hours under existing plus project traffic conditions. However, this impact would still be significant and unavoidable under cumulative traffic scenarios. The Multi-Use Field Alternative also would be environmentally preferable to the proposed project, yet it would not avoid the project's significant and unavoidable impact on traffic congestion. Although the No Project Alternative would be the environmentally superior alternative, CEQA requires that the environmentally superior alternative be chosen from among the development alternatives (CEQA Guidelines Section 15126.6(e)(2)).

Refer to Chapter 7, *Alternatives*, for the complete alternatives analysis.

Summary of Impacts and Mitigation Measures

Table 1 includes a brief description of the environmental issues relative to the proposed project, the identified environmental impacts, proposed mitigation measures, and residual impacts. Impacts are categorized by significance. Significant and unavoidable impacts require a statement of overriding considerations to be issued per CEQA Guidelines Section 15093 if the project is approved. Impacts that are less than significant after mitigation can be feasibly mitigated to less than significant levels and require findings to be made under CEQA Guidelines Section 15091. Less than significant impacts would not exceed significance thresholds and therefore would not require mitigation.

The summary table lists impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hydrology and water quality, noise, transportation and circulation, and tribal cultural resources. Impacts related to other resource areas were determined to be less than significant in Section 5, *Effects Found Not to Be Significant*, and are discussed there.

Table 1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure	Residual Impact
Aesthetics		
Impact AES-1: The Landscape Plan would not affect scenic vistas or corridors; however, it would alter views from existing residences, primarily by the removal of mature trees and installation of netting around the proposed soccer/lacrosse field. This impact would be less *than significant with mitigation* for tree replacement and appropriate netting design.	**Mitigation Measure AES-1: Athletic Netting Color.** If the County installs athletic netting around the proposed soccer/lacrosse field, this netting shall have a neutral color (e.g., forest green, black, gray) that blends in with the natural environment at Flood County Park. **Mitigation Measure BIO-2(a): Tree Replacement** (see full measure under Impact BIO-2)	Less than significant after mitigation
Impact AES-2: While the Landscape Plan would largely preserve historic adobe building, it would involve removal of mature trees that serve as scenic resources. This impact on scenic resources would be less than significant with mitigation to replant trees of suitable species and protect remaining trees from construction activity.	**Mitigation Measure BIO-2(a): Tree Replacement** (see full measure under Impact BIO-2) **Mitigation Measure BIO-2(b): Tree Avoidance and Minimization Measures** (see full measure under Impact BIO-2)	Less than significant after mitigation
Impact AES-3: The Landscape Plan would preserve the majority of scenic mature trees and adobe buildings as well as open fields for passive recreational use, maintaining the park's overall existing visual character. The impact on visual character or quality would be less than significant.	None required	Less than significant without mitigation
Air Quality		
Impact AQ-1: The project would not contribute to population growth and would be consistent with the growth assumptions in the BAAQMD 2017 Clean Air Plan. This impact would be less than significant.	None required	Less than significant without mitigation
Impact AQ-2: While Project construction would generate temporary increases in localized air pollutant emissions, These emissions would not exceed BAAQMD's significance thresholds. Therefore, this impact would be less than significant. However, implementation of BAAQMD's Basic Construction Mitigation Measures and measures to reduce NO_x emissions is recommended to further reduce	None required; however, the BAAQMD's Basic Construction Mitigation Measures are recommended to reduce fugitive dust emissions.	Less than significant without mitigation

Impact	Mitigation Measure	Residual Impact
construction emissions.		
Impact AQ-3: Operation of the proposed project would generate air pollutant emissions, but emissions would not exceed BAAQMD significance thresholds. Impacts related to operational emissions would be less than significant.	None required	Less than significant without mitigation
Impact AQ-4: The project would not expose sensitive receptors to substantial pollutant concentrations associated with construction dust, CO hotspots, or toxic air contaminants. Impacts related to these localized pollutants would be less than significant.	None required	Less than significant without mitigation
Biological Resources		
Impact BIO-1: The Landscape Plan may result in direct and indirect impacts to listed special-status species. Impacts would be less than significant with mitigation to protect nesting birds and roosting bats.	**Mitigation Measure BIO-1(a): Bird Protection Measures.** This mitigation measure shall apply to all proposed Phase I, II, and III recreational elements. a. If possible, trees and shrubs that would be impacted by construction activities shall be removed during the non-nesting season (typically between September 1 and January 31). b. If trees and shrubs are removed during the nesting season (February 1 to August 31), all suitable nesting habitat within the limits of work shall be surveyed by a qualified biologist prior to initiating construction-related activities. A pre-construction survey shall be conducted within five days prior to the start of work. If no nests are observed, construction activities shall be initiated within five days. If more than five days pass and construction has not been initiated, another survey will be required. c. If, during the nesting season, an active nest is discovered in trees or shrubs to be removed, the vegetation shall be protected using orange construction fence or the equivalent. The protective fencing shall be placed around the vegetation at the following distance(s) depending on species and upon recommendation from a qualified biologist: 100-250 feet from the drip line of the vegetation for passerines and non-raptors; and 300-500 feet from the drip line of the vegetation for raptors. No parking, storage of materials, or work would be allowed within this area until the end of the nesting season or until the young have fledged, as determined by a qualified biologist. **Mitigation Measure BIO-1(b): Bat Protection Measures.** This mitigation measure shall apply to	Less than significant after mitigation

Impact	Mitigation Measure	Residual Impact
	construction under the Landscape Plan that involves tree removal. a. A qualified biologist shall conduct a pre-construction survey for roosting bats at least two weeks prior to, but not more than 30 days prior to, the start of construction. The pallid bat could potentially roost in hollow trees. The survey shall be conducted within 200 feet of all planned construction activities within two weeks prior to any removal of trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). b. A buffer zone of 100 feet that excludes construction activities or other disturbances shall be established around active bat roosts. c. If active maternity roosts or non-breeding bat hibernacula are found in trees scheduled to be removed, relocation or other measures shall be determined in consultation with the County of San Mateo and/or CDFW, as appropriate, and a qualified biologist.	
Impact BIO-2: Construction of proposed recreational improvements may directly or indirectly affect heritage trees protected by San Mateo County. The impact on protected trees would be less than significant with mitigation to replace protected trees that are removed and to protect remaining trees during construction.	**Mitigation Measure BIO-2(a): Tree Replacement.** The County shall replace protected trees that are removed from Flood County Park at 1:1 ratio. Suitable replacement trees shall be those species specified as heritage trees. Where mature trees are removed within 25 feet of residential property lines, the County shall plant replacement trees that upon maturation would be sufficient to restore the pre-existing level of privacy of adjacent residents. **Mitigation Measure BIO-2(b): Tree Avoidance and Minimization Measures.** The following measures to avoid and protect trees shall apply to individual recreational elements of all proposed Phase I, II, and III improvements: a. The County shall monitor heritage trees with CRZs impacted by construction activities (canopies and roots) during construction for signs of distress. The CRZ is defined as the area of soil around a tree trunk where roots are located that provide stability and uptake of water and minerals required for tree survival by the ISA's Best Management Practices – Managing Trees During Construction handbook. b. Excavation/Trenching shall avoid CRZs to the greatest extent feasible. The following measures shall be applied when excavation and trenching occurs near heritage trees: ▪ Where appropriate tunneling shall be used to preserve roots two inches in diameter, and wherever possible underground lines shall occupy common trenches. ▪ When root cutting occurs, exposed major roots (greater than two inches in diameter	Less than significant after mitigation

Impact	Mitigation Measure	Residual Impact
	or within five feet of the trunk) shall not be ripped by construction equipment. Roots shall be cleanly cut and made at right angles to the roots. ▪ A Certified Arborist shall be present if more than 30 percent of the root zone is impacted or roots greater than two inches or within five feet of the trunk will be cut, to document impacts to the CRZ. ▪ Absorbent tarp or heavy cloth fabric shall cover new grade cuts and be overlain by compost or woodchip mulch. c. The County shall stage construction equipment outside of the CRZs and apply precautions, such as steel traffic plates and fencing, to protect sensitive root zones. d. The County shall install protective fencing around heritage trees prior to any earthwork and remain until all work is complete, or until adjacent construction activity no longer threatens tree health. Fencing shall be six foot high chain link fencing (or comparable material) and installed at the outermost edge of the CRZ, or eight feet from the trunk of the heritage tree, whichever is greatest. Signs stating "Tree Protection Zone – Keep Out" shall be posted on the fence. e. Pruning for clearance, if needed, shall be done to prevent damage to branches with large equipment. All above-ground pruning shall be in accordance with the Tree Pruning Guidelines (International Society of Arboriculture) and/or the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1. Pruning cuts or damaged bark shall be cut clean to heal. No tree seal or paint shall be used after pruning.	
Cultural Resources		
Impact CUL-1: The Landscape Plan would preserve existing adobe buildings that contribute to Flood County Park's eligibility as an historical resource, except for the proposed demolition of the Restroom D building. By documenting historical resources for archival purposes and adhering to the Secretary of the Interior's Standards for rehabilitation of the administrative office building, the project would have a less that significant impact on historical resources with mitigation incorporated.	**Mitigation Measure CUL-1(a): Historic Documentation Package.** Prior to issuance of demolition permits, the County shall ensure that documentation of the buildings proposed for demolition is completed in the form of a Historic American Building Survey (HABS)-like documentation that shall comply with the Secretary of the Interior's *Standards for Architectural and Engineering Documentation* (National Park Service [NPS] 1990). The documentation shall generally follow the HABS Level III requirements and include digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian	Less than significant after mitigation

Impact	Mitigation Measure	Residual Impact
	who meets the Secretary of the Interior's *Professional Qualification Standards for History and/or Architectural History* (NPS 1983). The original archival-quality documentation shall be offered as donated material to the County of San Mateo Parks Department where it would be available for current and future generations. Archival copies of the documentation also shall be submitted to the City of San Mateo Library and the San Mateo County History Museum where they would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the lead agency. **Mitigation Measure CUL-1(b): Standards of Review.** The seismic retrofit of the adobe administrative office building shall be consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Standards), thereby avoiding significant adverse direct or indirect impacts to historical resources. An architectural historian or historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall be retained to prior to the start of the seismic retrofit to review proposed plans and provide input to the County to avoid any direct or indirect physical changes to the building. The findings and recommendations of the architectural historian or historic architect shall be documented in a Standards Project Review Memorandum, at the schematic design phase. This memorandum shall analyze all project components for compliance with the Standards. Should design modifications be necessary to bring projects into compliance with the Standards, the memorandum shall document those recommendations. The document shall be subsequently submitted to County of San Mateo Parks Department for review and comment.	
Impact CUL-2: Ground-disturbing activities under the Landscape Plan could result in damage to or destruction of unanticipated archaeological resources or human remains. Impacts would be less than significant with mitigation incorporated.	**Mitigation Measure CUL-2(a): Archaeological Resources.** If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the proposed project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources. **Mitigation Measure CUL-2(b): Unanticipated**	Less than significant after mitigation

Impact	Mitigation Measure	Residual Impact
	Discovery of Human Remains. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	
Impact CUL-3: Ground-disturbing activities associated with development under the Landscape Plan could result in damage to or destruction of potential fossil resources within rock units or geologic features. This impact would be less than significant with mitigation incorporated.	**Mitigation Measure CUL-3: Unanticipated Discovery of Paleontological Resources.** In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. The qualified paleontologist shall be an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year (SVP 2010). If the qualified paleontologist determines that the fossil(s) is (are) scientifically significant, the find shall be recovered under his/her supervision. The paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the project paleontologist.	Less than significant after mitigation
Geology and Soils		
Impact GEO-1: The Landscape Plan would reconstruct or rehabilitate some existing recreational facilities and on-site structures and would add new recreational facilities. Redevelopment of Flood County Park would result in an incremental increase in recreational users	None required	Less than significant without mitigation

Impact	Mitigation Measure	Residual Impact
at the park, which would slightly increase the number of people at the project site that could be exposed to strong ground shaking. However, redevelopment of the park would not include construction of habitable structures and impacts related to strong ground shaking would be less than significant.		
Impact GEO-2: Flood County Park is located in a mapped Liquefaction Zone and redevelopment of the park could result in damage to reconstructed or rehabilitated structures due to seismically induced liquefaction. However, redevelopment of the park would not include the construction of habitable structures and adherence to California Building Codes would minimize the potential for damage of uninhabited structures from liquefaction. Impacts related to seismically induced liquefaction would be less than significant.	None required	Less than significant without mitigation
Impact GEO-3: Implementation of the Landscape Plan would involve soil disturbance that could result in soil erosion or the loss of topsoil. However, compliance with existing regulations, including the NPDES Construction General Permit, would ensure that disturbed soil is properly managed to minimize the potential for erosion. Impacts related to soil erosion or the loss of topsoil would be less than significant.	None required	Less than significant without mitigation
Impact GEO-4: The Landscape Plan would involve the rehabilitation or reconstruction of structures that could be located on expansive soils. However, soils would be evaluated for their expansive potential during grading and would be removed and replaced with non-expansive soils as necessary. Also, the Landscape Plan would not include construction of habitable structures and therefore would not place people at risk to safety hazards from expansive soils. Adherence to California Building Codes would ensure that impacts related to expansive soils would be less than significant.	None required	Less than significant without mitigation
Greenhouse Gas Emissions		
Impact GHG-1: Construction and operation of the proposed recreational facilities in the Landscape Plan would generate GHG emissions. These emissions would not hinder or delay achievement of state GHG reduction targets established	None required	Less than significant without mitigation

Impact	Mitigation Measure	Residual Impact
by AB 32 or SB 32. Therefore, the project's impact to climate change would be less than significant.		
Impact GHG-2: Construction and operation of the proposed recreational facilities in the Landscape Plan would be consistent with the San Mateo County Energy Efficiency Climate Action Plan. Therefore, the project's impact related to consistency with plans to address climate change would be less than significant.	None required	Less than significant without mitigation
Hydrology and Water Quality		
Impact HWQ-1: Construction and operation of the proposed recreational facilities could result in storm water runoff of pollutants such as sediment and nutrients. However, compliance with NPDES permit requirements and County landscaping standards would control sediment flow and maintain water quality. The project would have a less than significant impact on water quality.	None required	Less than significant without mitigation
Impact HWQ-2: The proposed recreational improvements would incrementally increase the area of impervious surface at Flood County Park but to the extent that groundwater recharge would be reduced. The project also would not draw its water supply from groundwater. Therefore, the Impact to groundwater supply and recharge would be less than significant.	None required	Less than significant without mitigation
Impact HWQ-3: The Landscape Plan would alter existing drainage patterns by grading activity and the addition of impervious surfaces. However, compliance with NPDES requirements would minimize erosion and avoid a substantial increase in surface runoff. Impacts would be less than significant.	None required	Less than significant without mitigation
Noise		
Impact N-1: Construction of proposed recreational facilities would generate high noise levels on and adjacent to the project site. However, construction noise would be temporary, and adherence to the County's allowed hours of construction would prevent noise disturbance during sensitive evening and nighttime hours. Therefore, the impact from construction noise would be less than significant.	None required	Less than significant without mitigation

Impact	Mitigation Measure	Residual Impact
Impact N-2: Grading activity would temporarily generate groundborne vibration on and adjacent to Flood County Park. Because construction of proposed recreational elements would occur inside the hours allowed in the County Code of Ordinances, it would not generate vibration when people normally sleep. Construction vibration would not exceed levels that may cause structural damage to historic adobe buildings on-site. The Landscape Plan would have a less than significant vibration impact.	None required	Less than significant without mitigation
Impact N-3: The Landscape Plan would add new sources of on-site operational noise from organized practices and games at the proposed athletic fields and performances at the proposed gathering meadow. Noise from whistles, sound amplification equipment, or air horns could disturb nearby residents. The impact from on-site operational noise would be less than significant with mitigation to prohibit the loudest equipment and restrict the timing of athletic events.	**Mitigation Measure N-3(a): Prohibit Sound Amplification Equipment and Air Horns.** The County shall only allow the use of sound amplification equipment and air horns at organized athletic games and practices and at the gathering meadow with the procurement of a special event permit in accordance with City of Menlo Park procedures. The County shall notify all groups using the proposed soccer/lacrosse field, ballfield, and gathering meadow of this requirement. County staff shall periodically patrol the park during organized athletic events and performances to verify that park users are not operating such equipment without an approved special event permit. **Mitigation Measure N-3(b): Timing of Athletic Events.** To minimize noise that may disturb neighbors of Flood County Park, the County shall restrict athletic practices and games at the park to the hours of 9 A.M. to 8 P.M.	Less than significant after mitigation
Impact N-4: Vehicle trips associated with operation of the proposed recreational elements would increase traffic volumes on nearby roadways, resulting in greater traffic noise audible to existing noise-sensitive residences. However, the increase of vehicle trips from the project relative to existing traffic would be incremental and would not exceed the applicable FTA standard of 1 dBA Leq. Therefore, traffic noise impacts would be less than significant.	None required	Less than significant without mitigation
Transportation and Circulation		
Impact T-1: Traffic generated by the project would cause traffic delay exceeding the City of Menlo Park's standards at the intersection of Bay Road and Ringwood Avenue under all modeled traffic scenarios. Queuing of vehicles at the park's entrance gate also would cause temporary traffic delay on Bay Road. Although new parking fee collection	The installation of a northbound left-turn lane at the intersection of Bay Road and Ringwood Avenue would improve traffic conditions during PM peak hours from LOS D to B under existing plus project conditions, from LOS E to C under near-term 2021 plus project conditions, and from LOS F to D under cumulative 2040 plus project conditions. However, physical constraints at the affected intersection could make implementation of such a measure	It may be infeasible to reconfigure the intersection of Bay Road and Ringwood Avenue to avoid a significant impact from traffic congestion. Therefore, the

Impact	Mitigation Measure	Residual Impact
practices would minimize queuing, mitigation measures at the affected intersection would be infeasible. Therefore, the project would have a significant and unavoidable impact on traffic under existing plus project conditions.	infeasible. To minimize queuing on Bay Road, Mitigation Measure T-1 would be required. **Mitigation Measure T-1: Parking Fee Collection Practices.** The County shall implement parking fee collection practices to avoid the back up of vehicles entering Flood County Park onto local streets. These practices may include automated fee machines, paying upon exiting the park, or a combination of both to move the queues associated with fee collection off of City streets and on-site.	Landscape Plan would have a significant and unavoidable impact.
Impact T-2: Project-generated traffic would have a negligible effect on vehicle miles traveled in San Mateo County. Therefore, the Landscape Plan would have a less than significant impact related to vehicle miles traveled.	None required	Less than significant without mitigation
Impact T-3: Vehicle trips generated by implementation of the Landscape Plan would not adversely affect roadways designated under the Congestion Management Plan for San Mateo County. Therefore, the project would have a less than significant impact related to conflicts with this plan.	None required	Less than significant without mitigation
Impact T-4: The project would not introduce design features that increase traffic hazards. No impact would occur.	None required	Less than significant without mitigation
Impact T-5: The project would not decrease the performance of existing or planned transit, bicycle, or pedestrian facilities. However, the lack of bicycle storage on-site and a sidewalk gap on Bay Road could result in unsafe conditions for bicyclists and pedestrians accessing the park. Impacts to transit, bicycle, and pedestrian systems would be less than significant with mitigation to install bicycle storage and pedestrian signage.	**Mitigation Measure T-5(a): Bicycle Storage.** The County shall install a minimum of six bicycle racks near the proposed gathering plaza. **Mitigation Measure T-5(b): Pedestrian Signage.** The County shall coordinate with the City of Menlo Park to install signage along the north side of Bay Road between Del Norte Avenue and Ringwood Avenue, informing motorists and bicyclists of pedestrians walking along the should and in the bike lane.	Less than significant after mitigation
Impact T-6: While the proposed on-site parking supply would be adequate based on standard parking demand rates for parks, the Landscape Plan could result in increased parking on local residential streets. The impact on parking capacity would be less than significant impact with mitigation measures to facilitate on-site parking and discourage on-street parking by visitors to Flood County Park.	**Mitigation Measure T-1: Parking Fee Collection Practices** (see full measure under Impact T-1) **Mitigation Measure T-6: Parking Education and Enforcement.** The County shall develop a mechanism to inform park visitors of on-street parking restrictions on nearby residential streets and shall post this information in a clearly visible location on-site. The County also shall coordinate with the City of Menlo Park to encourage increased random enforcement of on-street parking restrictions.	Less than significant after mitigation

Impact	Mitigation Measure	Residual Impact
Tribal Cultural Resources		
Impact TCR-1: Construction of recreational improvements proposed in the Landscape Plan would involve surface excavation, which has the potential to impact previously unidentified tribal cultural resources. Impacts would be less than significant with mitigation to protect such resources in the event of their discovery.	**Mitigation Measure TCR-1: Protection of Tribal Cultural Resources.** In the event that archaeological resources of Native American origin are identified during construction of recreational improvements proposed in the Landscape Plan, the qualified archaeologist will consult with the County to begin or continue Native American consultation procedures. If, in consultation with the County, a discovery is determined to be a tribal cultural resource and thus significant under CEQA, the County shall avoid the resource if feasible. If the resource cannot be avoided, the County shall prepare and implement a mitigation plan in accordance with State guidelines and in consultation with Native American groups.	Less than significant after mitigation

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1 Introduction

This document is an Environmental Impact Report (EIR) for the proposed Flood County Park Landscape Plan (the "Project"). The Project site is located northeast of Bay Road in the city of Menlo Park in San Mateo County. It is regionally accessible from U.S. Highway 101 (U.S. 101) and locally accessible from Bay Road. The proposed project consists of a Landscape Plan for the long-term redevelopment of San Mateo County's Flood County Park. Under the Landscape Plan, the County Parks Department would develop new recreational facilities in three phases over an anticipated ten-year period. Improvements would include a variety of active and passive recreation features. The Project is described in greater detail in Section 2, *Project Description*. This section discusses:

(1) The environmental impact report background;

(2) The legal basis for preparing an EIR;

(3) The scope and content of the EIR;

(4) Lead, responsible, and trustee agencies; and

(5) The environmental review process required under the California Environmental Quality Act (CEQA).

1.1 Environmental Impact Report Background

A Notice of Preparation (NOP) of an environmental impact report was prepared for the Project and distributed for agency and public review for a 30-day review period that began on November 17, 2016. The NOP and responses are presented in Appendix A to the EIR. The County received 20 comment letters responding to the NOP. The County also received oral comments from the public at an EIR Scoping Meeting on December 6, 2016. Table 2 summarizes the contents of letters and oral comments as relevant to the CEQA analysis.

Table 2 Notice of Preparation Comments and Environmental Impact Report Response

Topic	Comment/Request	Where Addressed in EIR
Aesthetics	Multiple commenters expressed concern about aesthetics, including the visual effects of safety netting for athletic fields, the loss of privacy from tree removal, and nighttime lighting.	See Section 4.1, *Aesthetics*, of this EIR for analysis of potential impacts associated with visual character and light and glare.
Air Quality	Commenters expressed concern about the loss of pollution-cleansing trees, dust from use of leaf blowers, and emissions from artificial turf on sports fields.	See Section 4.2, *Air Quality*, for analysis of impacts related to air quality.
Biological Resources	Multiple commenters expressed concern about biological resources, including site surveys, noise and lighting impacts on species, water-wise landscaping, tree replacement, and the health of preserved trees.	See Section 4.3, *Biological Resources*, for analysis of impacts on biological resources.

Topic	Comment/Request	Where Addressed in EIR
Cultural Resources	Commenters expressed a desire to preserve adobe structures.	See Section 2, *Project Description*, for a discussion of the County's revised plans for adobe preservation. See Section 4.4, *Cultural Resources*, for analysis of impacts to historic adobes.
Land Use	One commenter expressed concern that tree removal would conflict with policy in the Flood Park Master Plan.	See Section 5, *Effects Found Not to Be Significant*, for analysis of the Project's consistency with Master Plan policy.
Noise	Many commenters expressed concern about noise impacts from use of the proposed soccer/lacrosse field, in addition to noise from the loss of buffering redwood trees, leaf blowers, simultaneous events, and about noise that disturbs sleep. Commenters also suggested mitigation for noise impacts.	See Section 4.8, *Noise*, for analysis of noise impacts and mitigation measures where applicable.
Transportation/ Traffic	Several commenters expressed concern about traffic impacts, including cumulative traffic from other Menlo Park projects, vehicle miles traveled, traffic safety, and parking supply. Comments suggested mitigation measures for traffic.	See Section 4.10, *Traffic*, for analysis of traffic impacts and mitigation measures where applicable.
Utilities	A commenter expressed concern about water demand by athletic fields.	See Section 5, *Effects Found Not to Be Significant*, for analysis of water supply impacts.
Alternatives	Many commenters suggested alternative site layouts to the proposed Landscape Plan.	See Section 7, *Alternatives*, for an analysis of several alternatives.

1.2 Purpose and Legal Authority

The Project requires the discretionary approval of the County. Therefore, it is subject to the requirements of the California Environmental Quality Act (CEQA). In accordance with Section 15121 of the *State of California Environmental Quality Act (CEQA) Guidelines,* the purpose of this EIR is to serve as an informational document that:

> *...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This EIR has been prepared as a Project EIR (although limited in scope pursuant to CEQA, as discussed further below) pursuant to Section 15161. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines* in Section 15161*:*

This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.

This limited scope EIR includes the analysis of the environmental impacts, mitigation measures, and project alternatives addressing the impacts.

This EIR is to serve as an informational document for the public and County decision-makers. The process will culminate with a County hearing to consider certification of a Final EIR and approval of the Project.

1.3 Scope and Content

This EIR addresses the following ten environmental issues that the County has determined to be potentially significant:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Noise
- Traffic
- Tribal Cultural Resources

The EIR addresses the Project's potentially significant site-specific and cumulative effects in these areas, in accordance with the *CEQA Guidelines*. It recommends feasible mitigation measures, where needed and possible, that would eliminate or reduce adverse environmental effects. Issues found to be less than significant are discussed in Section 5, *Effects Found Not to be Significant*.

In preparing the EIR, pertinent local policies and guidelines, and other background documents were used. A full reference list is contained in Section 8, *References and Preparers*.

The Alternatives section of the EIR was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the Alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA required "No Project" Alternative and two project alternatives.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. The *Guidelines* state:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure. (Section 15151)

1.4 Lead, Responsible, and Trustee Agencies

The CEQA Guidelines require the identification of "lead," "responsible," and "trustee" agencies. The County is the "lead agency" for the proposed project because it has the principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no responsible or trustee agencies for the project.

1.5 Standards of Review

As a distinct governmental entity and lead agency for this project, the County has immunity from local standards upheld by the City of Menlo Park and the Town of Atherton. Furthermore, the County has discretion as to which standards to apply to this project when reviewing its environmental impacts. In general, this EIR applies relevant standards from the County of San Mateo's General Plan (1986) and the San Mateo County Code of Ordinances. For example, Section 4.8, *Noise*, analyzes the Landscape Plan's impact on sensitive land uses from construction noise based on consistency with the County's noise ordinance. Nevertheless, the County recognizes that local standards from affected jurisdictions are routinely applied in the project vicinity. Therefore, the County has elected to apply City standards where applicable in this EIR. In Section 4.9, *Transportation and Circulation*, the County applies City of Menlo Park standards for traffic congestion because vehicle trips associated with park use would affect intersections managed by the City.

1.6 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1. The steps are presented in sequential order.

1 **Notice of Preparation (NOP) Distributed**. Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency.

2 **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.

3 **Public Notice and Review.** The lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.

4 **Notice of Completion.** The lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.

5 **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.

6 **Certification of Final EIR.** The lead agency shall certify: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).

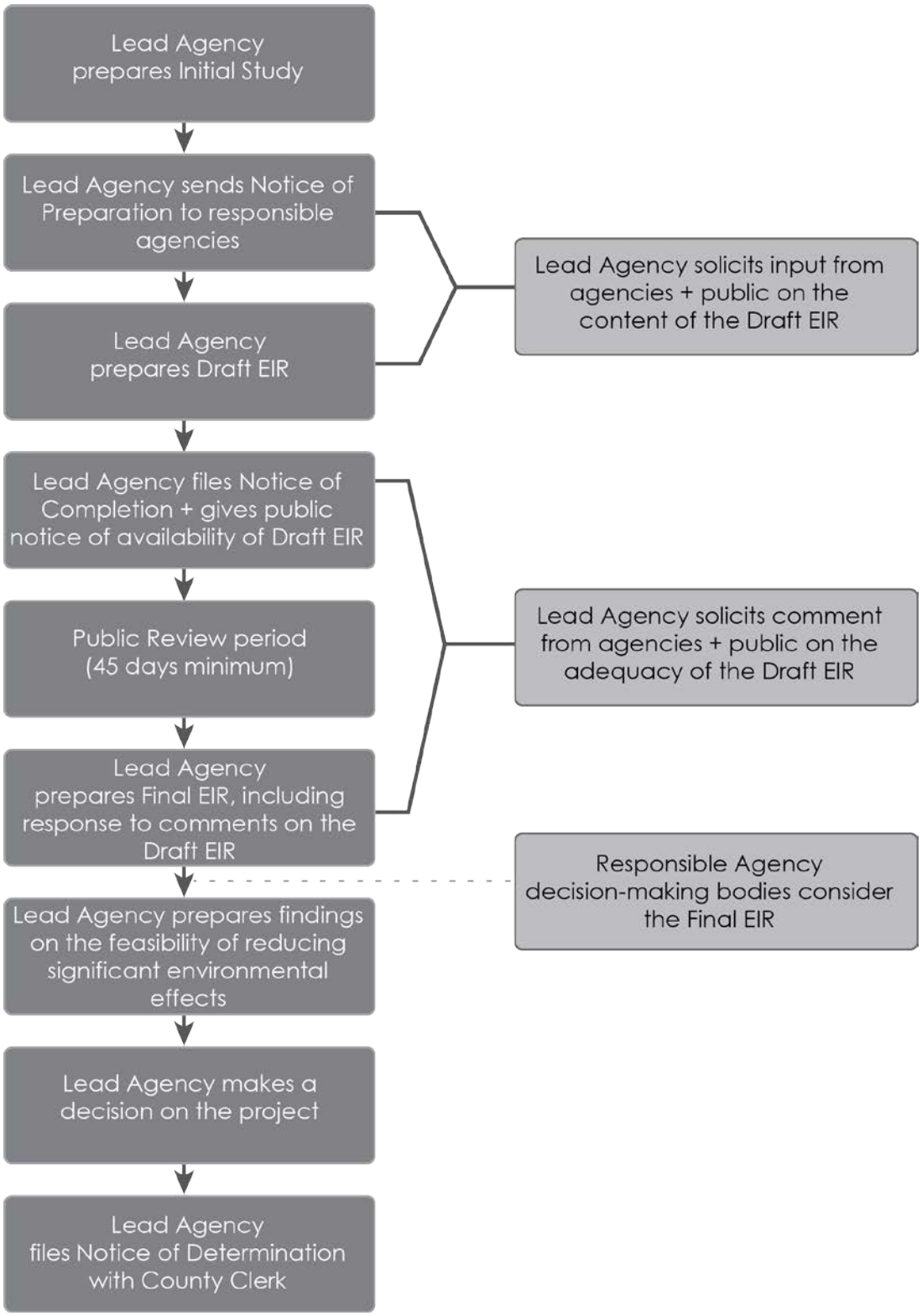
7 **Lead Agency Project Decision.** The lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).

8 **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.

9 **Mitigation Monitoring/Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.

10 **Notice of Determination.** The lead agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges (Public Resources Code Section 21167[c]).

Figure 1 Environmental Review Process



2 Project Description

This section provides a description of the project, including information regarding the applicant, the location and characteristics of the project site, major project features, preliminary phasing plan, project objectives, and discretionary approvals needed.

2.1 Project Applicant

County of San Mateo Parks Department
455 County Center – Fourth Floor
Redwood City, California 94063

2.2 Project Location

The project site consists of the 24.5-acre Flood County Park, located in the city of Menlo Park in San Mateo County. Figure 2 shows the regional location of Flood County Park, which is about 20 miles southeast of San Francisco. The project site is regionally accessible from U.S. Highway 101 (U.S. 101) and locally accessible from Bay Road. Figure 3, Project Location, shows an aerial view of the project site, the San Francisco Public Utilities Commission (SFPUC) right-of-way for water pipelines that crosses the site, and the surrounding area. The Town of Atherton is located adjacent to and southwest of the park, across Bay Road.

The 24.5-acre project site includes four parcels as shown in Table 3. This table further identifies each Assessor's Parcel Numbers, ownership, and acreage.

Table 3 Parcels within the Project Site

Assessor's Parcel Number	Ownership	Acreage
055-311-010	County of San Mateo	5.0
055-312-010	County of San Mateo	16.3
093-551-020	City & County of San Francisco	1.9
093-551-030	City & County of San Francisco	1.4
Total		24.5

Note: The individual parcel acreages may not sum to 100% of the total because of rounding.

As shown in Table 3, Flood County Park includes two parcels owned by the City & County of San Francisco. Through the SFPUC, San Francisco owns these linear parcels as part of approximately 3.3 acres of real property in fee that cross the park for the Hetch Hetchy Regional Water System. The 80-foot-wide SFPUC right-of-way bisects the park in an east-to-west alignment through the existing baseball field and parking lot. The primary purpose of this right-of-way is to serve as a utility corridor with three large subsurface water transmission pipelines. This utility corridor provides dedicated land accommodating the water pipelines to enable the reliable delivery of water to the SFPUC's 2.6 million customers. The County currently holds a five-year Revocable License (#3631B), issued by SFPUC in June 2015, for the recreational use of this on-site right-of-way.

Figure 2 Regional Location

Imagery provided by ESRI and its licensors © 2016.

Project Site

N

Fig 1 Reg Locn_8x11Portrait

Figure 3 Project Location

Imagery provided by Google and its licensors © 2017.

2.3 Existing Site Characteristics

The current characteristics of Flood County Park are summarized in Table 4 and in the discussion that follows.

Table 4 Characteristics of the Project Site and Vicinity

Project Site	
Existing Use	County Park
Land Use Designation	Parks and Recreation (City of Menlo Park General Plan)[1]
Zoning Designation	Open Space and Conservation District
Built Features	▪ Adobe structures (administrative office, ranger residence, maintenance and electrical buildings, restrooms, wall) ▪ Ballfield (closed for renovation) ▪ Softball field ▪ Group picnic areas ▪ Individual picnic areas ▪ Tennis courts (4) ▪ Pétanque court ▪ Playground ▪ Surface parking lot ▪ Entrance gate ▪ Sand volleyball courts (3) ▪ Asphalt trails ▪ Water fountains
Vicinity	
Surrounding Land Uses	Northeast: vacant school site, Haven Family House Southeast: single-family residences, Iris Lane Southwest: Bay Road, single-family residences Northwest: single-family residences
Surrounding Land Use Designations	Northeast: Low Density Residential (City of Menlo Park) Southeast: Low Density Residential (City of Menlo Park) Southwest: Low Density Single Family Residential (Town of Atherton) Northwest: Low Density Residential (City of Menlo Park)
Surrounding Zoning Designations	Northeast: Single Family Urban Residential District, R-1-U (City of Menlo Park) Southeast: Single Family Urban Residential District, R-1-U (City of Menlo Park) Southwest: Residential District, R-1A (Town of Atherton) Northwest: Single Family Urban Residential District, R-1-U (City of Menlo Park)

[1] The San Mateo County General Plan (1986) also recognizes the project site as a County Park.
Sources: City of Menlo Park, Zoning Map and General Plan Land Use Diagram, Sheet 5, April 2015; Town of Atherton, General Plan, November 2002; Town of Atherton, Zoning Map, December 2011.

The project site is a neighborhood park located in a single-family residential neighborhood in the city of Menlo Park. Flood County Park originally opened in the early 1930s, and existing adobe structures on-site were constructed during that era as Works Progress Administration (WPA) projects. These adobe structures include an administrative office, a ranger residence, maintenance and electrical buildings, restrooms, and remaining fragments of an adobe wall adjacent to Bay Road. The adobe administrative office is uninhabited but used occasionally for storage.

The park has a mixture of passive recreational facilities, such as group and individual picnic areas and trails, and active recreation facilities like a ballfield, tennis courts, a playground, sand volleyball courts, and a gravel pétanque court. An asphalt trail loops eastward from the central playground through picnic areas in the southern part of the park back to the western parking lot. Chain-link fencing approximately five to nine feet tall encloses the park in all directions.

Flood County Park has an open, spacious visual character with large patches of woodland, especially in its southern half. Prominent heritage trees of the following species abound at the park:

- *Quercus agrifolia* (coast live oak)
- *Quercus lobata* (valley oak)
- *Quercus ilex* (holly oak)
- *Sequoia sempervirens* (coast redwood)
- *Umbellularia californica* (California bay laurel)
- *Ulmus genus* (elm)
- *Platanus x acerifolia* (London plane tree)
- *Pyrus calleryana* (Callery pear)
- *Fraxinus genus* (ash)
- *Acacia melanoxylon* (Australian blackwood)
- *Callitris* genus (pine)

A 2015 assessment of the property revealed that many park features and core infrastructure components are in need of major repair or replacement. The ballfield, for example, is currently in disrepair and was last used in 2010. Current visitorship is lower than its peak from the late 1990s and early 2000s; however, the number of visitors has been steadily rebounding following the park's 2011 reopening after a year-long closure for replacement of the Hetch Hetchy water pipeline in the SFPUC right-of-way.

Lands immediately surrounding the project site are occupied primarily by single-family residences with the exception of a vacant former school site and the Haven Family House to the northeast. The Haven Family House consists of two-story buildings that provide transitional housing to homeless people. The vacant school is in a deferred maintenance condition, with broken windows and graffiti. Nearby residences range from one to two stories in height. Trees and shrubs near the property lines partially obstruct views of Flood County Park from adjacent residences. U.S. 101 is approximately 275 feet northeast of the park.

2.4 Project Features

The proposed project entails a Landscape Plan for the long-term redevelopment of San Mateo County's Flood County Park in the city of Menlo Park. The planning process for development of the Landscape Plan took place between May and December 2015. On April 7, 2016, the County Parks and Recreation Commission voted to approve this plan as the Draft Preferred Alternative for

improving Flood County Park. The Landscape Plan was refined through a series of community outreach efforts structured to identify community values, preferred uses, and site layout preferences. In response to public comment, the County has refined the proposed plan to optimize preservation of large oak and bay trees, increase offerings of sports, and provide a variety of active and passive uses for a range of user groups.

Table 5 lists the proposed recreational facilities in the Landscape Plan and their anticipated phasing.

Table 5 Proposed Recreational Facilities and Phasing

Phase	Improvements
Phase I	Baseball field replacement and bathroom
	Soccer/lacrosse field
	Two tennis courts
	Sand volleyball court replacement
	Basketball court
	Pump track
	Asphalt paths
	Adobe bathroom renovation
	Tree-lined promenade
	Drop off at playground area
	New utilities: water, electric, gas, greywater piping[1]
Phase II	Restrooms
	Demonstration gardens
	Playground replacement
	Individual picnic area renovations
	Gathering meadow (performance space)
Phase III	Rehabilitation of adobe administrative building[2]
	Group picnic area renovations with shade shelters
	Completion of all pathways with exercise stations
	Gathering plazas
	Focal element (may incorporate existing water pump feature)

[1] Purple piping may be installed for the future use of greywater.

[2] The adobe administrative building would be rehabilitated for seismic stability and use by park visitors.

Because the Landscape Plan is a high-level plan intended to guide the long-term redevelopment of the park and would not directly involve the construction of recreational facilities listed in Table 5, this EIR evaluates the environmental impacts of Phase II and III improvements at a programmatic level. However, the EIR evaluates proposed Phase I improvements at a more detailed, project-specific level to the extent feasible, as they would be constructed in the near term and their scope of physical disturbance and their construction schedule are more defined.

Figure 4 shows the layout of recreational facilities in the proposed Landscape Plan. The largest recreational facilities would be sited in the northern portion of the park, where the existing ballfield would be reconstructed and the soccer/lacrosse field would be installed at the northeast corner, replacing the existing pétanque court and a portion of the existing tennis courts. The promenade would run eastward across the center of the park from the parking lot. Picnic areas clustered in the

southern half of the park would be reconstructed. A demonstration garden would be established in the western part of the park, near the parking lot entrance off Bay Road. In addition, the following recreational facilities would be located within the SFPUC right-of-way outlined in Figure 4: a ballfield, soccer/lacrosse field, basketball court, and promenade. The Parks Department would preserve existing adobe buildings on-site, with the exception of demolishing the adobe Restroom D located west of the existing tennis courts. The adobe administrative building in the southwest part of the park would be rehabilitated for seismic stability.

Fencing and/or netting would be installed around the proposed athletic fields. The reconstructed ballfield would be bordered by chain-link fencing of similar height and placement to the existing field. Based on the industry standard for soccer and lacrosse fields, it is assumed that fencing four to six feet in height would ring the soccer/lacrosse field (Sprecher 2012). Netting would likely be installed to contain soccer and lacrosse balls within this field. This netting is often set at a 20-foot height at the ends of the field or encircling the field (Sprecher 2012). This analysis conservatively assumes the installation of 20 to 30-foot-tall netting that encircles the soccer/lacrosse field.

Table 6 compares recent historical recreational use of Flood County Park to projected future use under implementation of the Landscape Plan. The recent historical data in Table 6 dates from 2009 to 2010, when the existing ballfield was last in use. This data serves as a point of comparison to projected future use with a reconstructed ballfield at the park. Nevertheless, because the ballfield has been inactive for a period of more than five years, existing use of the park is the most reasonable baseline against which to evaluate the Landscape Plan's environmental impacts from future use. As shown in the table below, the projected use of athletic field improvements under the Landscape Plan (i.e., a reconstructed ballfield and new soccer/lacrosse field) would generally be highest during the summer, when the Menlo Park Legends or other athletic groups would be most active at the reconstructed ballfield. It is anticipated that organized activities at the athletic fields would occur no earlier than 9 am and no later than 8 pm. No additional lighting that would enable nighttime use of athletic facilities is proposed as part of the Landscape Plan, although path lights that could be manually turned on and off for special events may be installed. The park's existing hours of use would not change.

Grading and Construction

It is anticipated that implementation of the Landscape Plan would occur in three phases: Phase I, Phase II, and Phase III, The Phase I improvements are expected to be completed in approximately the first two years. The County anticipates initiating the improvements identified under Phase I within one to two years after issuance of the EIR, with construction estimated to take from a year to eighteen months. During this construction period, the portion of the park to be improved would be closed to public access. Phases II and III would be implemented subsequent to Phase I, as funding permits and after project-level CEQA is prepared. While precise timeframes are uncertain, the County's goal would be to implement Phase II within five to seven years and Phase III within seven to ten years so that the revitalization of Flood County Park is completed within ten years of issuance of the EIR.

During Phase I, the northern portion of the park stretching from the proposed central promenade to the north and east would be graded. The area of grading in this phase would total approximately nine acres, including 3.4 acres at the ballfield and 1.6 acres at the soccer/lacrosse field. Grading activity would be required primarily to raise the ground surface above the SFPUC pipelines; reconstruct the ballfield; install a soccer/lacrosse field, pump track, and new underground utilities; demolish the existing playground, the adobe restroom next to the existing tennis courts, and asphalt

Figure 4 Proposed Landscape Plan

The Flood Park Preferred Plan reflects the community feedback received on the three alternatives. The plan provides a wide range of uses, both active and passive, for a variety of user groups. Fields sports (soccer and lacrosse) have been added, as wella number elements targeted to youth (basketball, pump track, adventure play).

Based on community feedback, uses have been located to minimize the removal of large Oak and Bay trees.

Table 6 Comparison of Historical and Anticipated Future Use of Athletic Fields at Flood County Park

	Month													
Activity/Group	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Daily Use**	**# Users**
Historical Use														
Summit High School		8	7	5	3								1 game/day	N/A
Everest High School		8	7	5	3								1 game/day	N/A
Bay Area Men's Senior League						2	4	2					2 games/day	N/A
Palo Alto Babe Ruth			4	7	11	6							1 game/day	N/A
SF National Adult			2	4	6	10	10	19	5				2 games/day	N/A
BAMSBL			4	8	4	6		4	6				2 games/day	N/A
Little League													1 game/day	N/A
Total	**0**	**16**	**24**	**29**	**27**	**24**	**14**	**25**	**11**	**0**	**0**	**0**		
Projected Use[1]														
Baseball	1	19	13	17		46	46	42	10	5	3	5	9am-8pm[2]	14-60
Soccer	24	24	24	24	24				24	24	24	24	4-6pm/ 11am-2pm	24-72
Total	**25**	**43**	**37**	**41**	**24**	**46**	**46**	**42**	**34**	**29**	**27**	**29**		

N/A = not available at this time

[1] Data from the Menlo Park Legends (baseball) and Sheriff's Activity League (soccer) were used to estimate potential future use of the proposed athletic fields. These numbers reflected desired levels of use and were used as a predictor of potential maximum field usage. Use of these numbers for the purposes of this environmental analysis does not indicate that the County has committed to a particular level of use or to use of the athletic fields by any specific entity.

[2] This is a conservative assumption for the timing of daily ballfield use. It is anticipated that baseball events would occur no earlier than 9 am and no later than 8 pm.

paths; remove the foundations at the existing tennis courts; and reuse base rock from the existing pétanque court.

It is assumed that up to eight inches of existing soil would be excavated and exported offsite to prepare for construction of the ballfield and soccer/lacrosse field, and two feet of excavation would be required for the new sand volleyball courts. Soil export during construction would total an estimated 5,630 cubic yards. Based on February 2015 potholing in the SFPUC right-of-way at the ballfield, the ground surface at the reconstructed ballfield and the new soccer/lacrosse field would need to be raised by approximately six inches to provide adequate soil cover over the water pipelines. It is conservatively estimated that soil import to provide six inches of additional soil cover at the ballfield and soccer/lacrosse field, and to provide a two-foot base for the sand volleyball courts, would total 4,370 cubic yards.

SFPUC's Land Engineering Requirements would restrict the type of construction activity allowed within 20 feet of the centerline of its pipelines. No mechanical excavation is allowed within 24 inches of SFPUC pipelines, and digging within 24 inches of pipeline must be done with hand tool. In addition, vibratory compaction equipment is prohibited within the right-of-way except with written approval from the Commission. SFPUC also restricts the weight class of vehicles in its right-of-way to no greater than the American Association of State Highway and Transportation Officials (AASHTO) Standard H-10 Loading.

As documented in the Tree Report prepared by Gates + Associates for the Landscape Plan in July 2016, ground disturbance for the proposed recreational facilities would involve removal of an estimated 78 trees from the Flood County Park. The Parks Department would plant or replant trees for accenting, screening, or other purposes as space allows, with a preference for native trees.

Site Access

The Landscape Plan would not involve changes to parking and access. Flood County Park's existing vehicular access from Bay Road, via the entrance gate at the southwest corner of the park, would be retained, as would the existing asphalt parking lot on the western edge of the site. Pedestrians also would retain access to the park through gaps in a chain-link fence along Bay Road and at the northeast gate from Iris Lane.

2.5 Project Objectives

The applicant's objectives for the proposed Landscape Plan are as follows:

- To repair and update park features and core infrastructure components
- To meet demand for active recreation facilities in San Mateo County by increasing offerings of sports
- To provide a variety of uses for a range of user groups, including youth
- To optimize preservation of oak woodland

2.6 Required Approvals

The proposed project would require the discretionary approval of the County of San Mateo, who holds approval authority with respect to the Landscape Plan and EIR certification. In addition, the project may require approval by SFPUC of an updated Revocable License for secondary recreational use of its pipeline right-of-way.

3 Environmental Setting

This section provides a general overview of the environmental setting for the project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located within the corporate boundary of the City of Menlo Park on the San Francisco Peninsula (refer to Figure 2, Regional Location, and Figure 3, Project Location, in Section 2, *Project Description*). Menlo Park is located within San Mateo County, which is bordered by City and County of San Francisco to the north, Santa Clara and Santa Cruz counties to the south, the Pacific Ocean to the west, and San Francisco Bay to the east. The Santa Cruz Mountains extend down the center of the peninsula, with elevations above 2,000 feet at the southern end of the peninsula, decreasing to 500 feet around South San Francisco. The primary roadways in San Mateo County near Menlo Park are U.S. 101, State Route 82 (El Camino Real), and Interstate 280 (I-280). These routes provide major connections between communities on the peninsula.

The regional climate is Mediterranean and accordingly varies by season. While winters are moderately wet, summers are typically dry (Menlo Park 2016). Winter rains (November through March) account for about 75 percent of the average annual rainfall. Total annual rainfall can reach 40 inches in the mountains but is often less than 16 inches in sheltered valleys. Temperature variation depends on differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient in temperate often arises between the coast and the Central Valley, and small-scale local gradients often occur along the shorelines of the ocean and bays. Coastal towns experience cool, foggy weather during the summer, while cities along the southeastern part of the peninsula experience warmer temperatures and fewer foggy days due to the ridgeline blocking the marine layer. The maximum summer temperature is in the high 70s, while the minimum winter temperature is in the high 30s and low 40s.

3.2 Project Site Setting

The project site is surrounded by suburban single-family residential neighborhoods in Menlo Park and Atherton. Residential streets adjacent to Flood County Park have well-maintained houses ranging from one to two stories in height. Flood County Park has an open, spacious visual character with a mixture of passive and active recreational uses. The topography is relatively flat, and broad expanses of grass are available for passive recreational use. The primary visual resources on-site are numerous heritage trees, especially mature deciduous and evergreen oaks and tall coast redwoods. As further discussed in Section 4.4, *Cultural Resources*, adobe buildings and structures dating from the Works Progress Administration era of the 1930s also lend a historic character to Flood County Park. The adobe ranger's house at the northwest corner of the site and fragments of an adobe entrance wall are visible from Bay Road. In addition, the adobe administrative office building in the heart of the park and serves as a prominent feature for park visitors. Individual and group picnic areas with tables and benches are located in the southern half of the park. A ballfield dominates the

northern half of the park, and sand volleyball courts, tennis courts, a children's playground, and a gravel pétanque court are scattered throughout the park. An asphalt trail loops eastward from the central playground through picnic areas in the southern part of the park back to the western parking lot.

3.3 Cumulative Development

CEQA defines cumulative impacts as two or more individual actions that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impacts analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Section 15130 of the CEQA Guidelines permits two approaches for completion of the cumulative impact analysis, the first is the "list" approach, which permits the use of a list of past, present, and probable future projects producing related or cumulative impacts, including projects both within and outside the city. The second is the "projections" approach, which allows the use of a summary of projections contained in an adopted plan or related planning document, such as a regional transportation plan, or in an EIR prepared for such a plan. The projections may be supplemented with additional information such as regional modeling. A reasonable combination of the two approaches may also be used.

Because the proposed Landscape Plan is a long-term document that would be implemented over an anticipated ten-year period, this Draft EIR primarily relies on a projections approach for cumulative impact analysis. A list approach is more appropriate for an individual project that would be implemented in the near future, at the same time as other already known approved, pending, and planned projects. However, this Draft EIR also supplements the projections approach with a list approach where appropriate.

Projections Approach

In general, the projections approach in this Draft EIR is based on anticipated long-term growth in Menlo Park and neighboring Atherton. According to the City of Menlo Park's *Menlo Park General Plan (Land Use & Circulation Elements) and M-2 Area Zoning Update EIR* (certified in November 2016), new growth in Menlo Park through the 2040 horizon year is projected at "4.1 million square feet of non-residential space, 400 hotel rooms, and 5,500 residential units, and up to 14,150 new residents and 9,900 new employees" (Menlo Park 2016). This growth projection incorporates the net increase in maximum development potential for the Bayfront Area under the updated Land Use & Circulation Elements, plus the remaining development potential under the City's preexisting General Plan. The majority of projected long-term development in Menlo Park would occur in the Bayfront Area.

For the Town of Atherton, this Draft EIR assumes long-term growth based on the Association of Bay Area Government's *Building Momentum Bay Area Plan Projections 2013*, as applied in the *Civic Center Master Plan EIR* (April 2015). Atherton's population is projected to increase to 7,700 people by the year 2035. This would represent an increase in 550 people over the town's estimated population of 7,150 as of January 2016 (California Department of Finance 2016).

Section 4.9, *Transportation and Circulation*, of the Draft EIR uses a projections approach to analyze cumulative traffic in the year 2040. As further discussed in Section 4.9, this traffic analysis assumes a growth rate to account for growth in regional traffic, in addition to traffic generated by approved and pending near-term developments.

List Approach

This Draft EIR applies a list approach to cumulative analysis in Section 4.9, *Transportation and Circulation*, for the purpose of generating more precise projections of near-term traffic conditions in the year 2021 and long-term conditions in the year 2040. The Traffic Impact Study that forms the basis for the EIR's traffic analysis includes a list of cumulative projects, including their type of land use, size, approval status, and location (W-Trans 2017; see Appendix H).

Table 7 lists these cumulative projects, which consist of approved projects from the greater Menlo Park area that are expected to add ten or more vehicle trips.

Table 7 Cumulative Projects

Project Name[2]	Location	Commercial Floor Area (Net Square Feet)	Net Dwelling Units	Net Hotel Rooms	Description
Commonwealth Corp. Center	151 Commonwealth – Sobrato; 162 & 164 Jefferson Drive	22,062	0	0	Demolition of office, warehouse, manufacturing space; construction of offices
Mermaid Inn	727 El Camino Real	3,497	0	8	Construction of hotel rooms
Police/City Service Center	1283 Willow Road	8,896	0	0	Construction of office and retail space
Anton Menlo	3639 Haven Avenue	-77,308	394	0	Demolition of manufacturing and warehouse space; residential construction
Greanheart	777 Hamilton Avenue	-47,999	195	0	Demolition of manufacturing space; residential construction
Greystar	3645 Haven Avenue	-15,000	146	0	Demolition of warehouse space; residential construction
Sequoia Belle Haven – MidPen	1221 Willow Road	0	42	0	Demolition of existing residences; construction of new residences
Facebook Building 23	300 Constitution Drive	-4,330	0	0	Demolition of warehouse space; construction of offices
Laurel Upper School	275 Elliott Drive	0	0	0	Construction of public school facilities
Menlo Gateway	100-190 Independence Drive	194,640	0	250	Demolition of office space; construction of office/R&D, health club, and hotel uses
Menlo Gateway	100-155 Constitution Drive	360974	0	0	Demolition of office space; construction of office and restaurant uses

Project Name[2]	Location	Commercial Floor Area (Net Square Feet)	Net Dwelling Units	Net Hotel Rooms	Description
1283-1295 El Camino Real		-4,474	15	0	Demolition of office, retail, service space; construction of residences, office, retail, service space
Roger Reynolds	133 Encinal Avenue	-6,166	24	0	Demolition of retail; residential construction
1010-1026 Alma Street		15,208	0	0	Demolition of retail; construction of offices, retail
1315 O'Brien Drive		-30,522	0	0	Demolition of offices, warehouses; construction of R&D, warehouse, manufacturing space
Pollock Group	1400 El Camino Real	31,725	0	61	Demolition of gas station; construction of hotel
Minkoff Group	650-660 Live Oak Avenue	10,858	15	0	Demolition of residences, offices; construction of new residences, offices
1275 El Camino Real		9,923	3	0	Construction of residences, offices, retail
Facebook Expansion Project	301-309 Constitution Drive	625,513	0	200	Demolition of manufacturing, R&D, offices; construction of offices, hotel
Facebook TE Campus	307-309 Constitution Drive	-324,151	0	0	Demolition of offices, R&D, manufacturing
Stanford	500 El Camino Real	83,355	215	0	Demolition of temporary art gallery, auto dealership; construction of residences, office, retail
SRI	333 Ravenswood Avenue	0[2]	0	0	Long-term redevelopment of existing campus
New Magnet High School	150 Jefferson Drive	-43,986	0	0	Demolition of 43,986 sf light industrial space; construction of 40,000 sf school

Project Name[2]	Location	Commercial Floor Area (Net Square Feet)	Net Dwelling Units	Net Hotel Rooms	Description
Greenheart	1300 El Camino Real	207,000	202	0	Demolition of dance studio, fast food restaurant, hardware storage; construction of residences, offices, retail
840 Menlo Avenue		6,662	3	0	Construction of residences, office
Stanford	2111-2121 Sand Hill Road	39,010	0	0	Construction of new offices
1008 O'Brien Drive		8,586	0	0	Demolition of offices; construction of R&D, offices
Hampton Inn	1704 El Camino Real	29,284	0	42	Demolition and construction of hotel space
706-716 Santa Cruz Avenue		19,371	4	0	Demolition of retail, restaurant, bank; construction of residences, offices, retail
	Cumulative Total	**1,122,628**	**1,258**	**561**	

Source: W-Trans 2017; see Appendix H.

1. Table includes all projects in Menlo Park that have filed a complete development application for five or more net new residential units or 5,000 sf or more of net new commercial floor area.

2. The redevelopment of SRI International's Menlo Park Campus involves building replacement with no net new square footage, although the number of employees would increase to a maximum of 3,000 (Menlo Park 2013).

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the project for the issue areas that were identified through the NOP process as having the potential to experience significant impacts. "Significant effect" is defined by the CEQA Guidelines §15382 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The assessment of environmental effects contained in each issue area begins with a discussion of the setting. Following the setting is a discussion of the project's impacts. Within the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria used for this analysis to determine whether potential impacts are significant. The next subsection describes the impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. The significance of the project's environmental impacts was identified based on the following classifications:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved.
- **Less than Significant with Mitigation.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **Beneficial.** An impact that would reduce existing environmental problems or hazards.

The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

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4.1 Aesthetics

This section evaluates the project's potential impact to scenic vistas, scenic resources, visual character and quality, and light and glare conditions.

Environmental Setting

Visual Character

The project site is surrounded by suburban single-family residential neighborhoods in Menlo Park and Atherton. Bay Road, which borders Flood County Park to the southwest, has a bucolic appearance with mature trees overhanging and shading the two-lane roadway. Roadways with prominent overhanging trees are typical of the town of Atherton southwest of the park. Residential streets adjacent to Flood County Park have well-maintained houses ranging from one to two stories in height. Trees and shrubs near the property lines partially obstruct views of the park from adjacent residences. Tucked away between the northeast boundary of the park and U.S. 101 is a vacant former school site with deferred-maintenance buildings, broken windows, and graffiti.

While neighborhood parks often have a highly organized layout with defined areas of use, Flood County Park has an open, spacious visual character with a mixture of passive and active recreational uses. The topography is relatively flat, and broad expanses of grass are available for passive recreational use. The primary visual resources on-site are numerous heritage trees, especially mature deciduous and evergreen oaks and tall coast redwoods. As further discussed in Section 4.4, *Cultural Resources*, adobe buildings and structures dating from the Works Progress Administration era of the 1930s also lend a historic character to Flood County Park. The adobe ranger's house at the northwest corner of the site and fragments of an adobe entrance wall (both circa 1938) are visible from Bay Road. In addition, the adobe administrative office building (circa 1938) is located in the heart of the park and serves as a prominent feature for park visitors. Individual and group picnic areas with tables and benches are located in the southern half of the park. A ballfield closed for renovation, surrounded by chain-link fencing, dominates the northern half of the park. Smaller active recreational facilities including sand volleyball courts, two tennis courts, a children's playground, and a gravel pétanque court are scattered throughout the park. An asphalt trail loops eastward from the central playground through picnic areas in the southern part of the park back to the western parking lot.

Scenic Vistas and Resources

Features with scenic qualities in the Menlo Park area include open space, open water on San Francisco Bay, sloughs, marshes, and the riparian corridors of San Francisquito and Atherton creeks (Menlo Park 1994, 2013). The neighborhood park on-site neither has these scenic resources nor affords offsite views of such resources. The nearest State-designated or eligible scenic highway to Flood County Park is I-280, located approximately 4.6 miles to the southeast (Caltrans 2017). From this distance, intervening hills and vegetation obstructs views of the project site from this distance. The project site also is not located near any County-designated scenic routes (San Mateo County 1986). However, as discussed above, heritage trees and adobe structures at Flood County Park serve as important visual resources internal to the site. These natural and built features serve as scenic resources to recreational users and neighbors.

Existing Light and Glare Conditions

Flood County Park lacks existing sources of nighttime light and glare. During daytime hours of public use, the headlights of motor vehicles accessing the on-site parking lot and sunlight reflecting off car windows generate glare. Offsite sources, including streetlights and exterior light fixtures at nearby residences, also contribute to lighting at the park.

Regulatory Setting

Local

The San Mateo County Code of Ordinances does not include standards for visual quality that pertain to the project site.

Impact Analysis

Methodology and Significance Thresholds

In accordance with San Mateo County's *Initial Study Environmental Evaluation Checklist*, the proposed project would result in potentially significant aesthetic impacts if it would:

1 Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads;

2 Significantly damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

3 Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline;

4 Create a new source of significant light or glare that would adversely affect day or nighttime views in the area;

5 Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor;

6 If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions; or

7 Visually intrude into an area having natural scenic qualities.

Because the Landscape Plan would not add new lighting and is not located in a Design Review District, Criteria 4 and 6 are discussed in Section 5, *Effects Found Not to Be Significant*.

The assessment of impacts to scenic vistas, scenic resources, and visual character involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Visual or aesthetic resources generally are defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur. This evaluation measures the existing visual resource against the proposed project. The project site was observed and photographically documented in its surrounding context.

Views may be characterized in terms of foreground, middleground, and background views. Foreground views are those immediately presented to the viewer, and include objects at close range. Middleground views occupy the center of the viewshed, and tend to include objects that dominate the viewshed in normal circumstances. Background views include distant objects and other objects that make up the horizon.

Although CEQA distinguishes between public and private views, and focuses on whether a project would affect the public environment rather than of particular individuals, this analysis considers both public views and private views from residences. Private viewpoints may include backyards, front yards, and interior living spaces.

Project Impacts and Mitigation Measures

Thresholds 1, 5, and 7

Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads;

Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor; and

Visually intrude into an area having natural scenic qualities.

Impact AES-1	The Landscape Plan would not affect scenic vistas or corridors; however, it would alter views from existing residences, primarily by the removal of mature trees and installation of netting around the proposed soccer/lacrosse field. This impact would be less than significant with mitigation for tree replacement and appropriate netting design.

Phase I

Flood County Park is not visible from the nearest State-designated or eligible scenic highway, I-280, which is located approximately 4.6 miles to the southeast. No County-designated scenic routes are located near the project site. The park also lacks scenic natural resources such as water bodies, marshes, or riparian corridors. Therefore, the proposed Landscape Plan would not affect scenic vistas or corridors. While Bay Road is not a designated scenic route, its segment adjacent to Flood County Park does have a scenic character because of mature overhanging trees and northward views of open space and mature trees on the park. The Landscape Plan would preserve almost all trees along Bay Road, as well as the scenic, fragmented adobe wall at the property line. Therefore, Phase I would not adversely affect scenic views from Bay Road.

The park is visible from some adjacent residences. Next to the emergency access gate to the park on Iris Lane, residences have views through chain-link fencing at the eastern property line. The two-story Haven Family House also has views of the park, partially filtered by chain-link fencing and trees at the property line. In addition, residences on the western side of Del Norte Avenue and the eastern side of Hedge Road, particularly two-story houses, have partially obstructed views of the park over fencing and trees at the property lines. Currently, residents have views of existing athletic facilities at the park, such as tennis and pétanque courts and the ballfield, as well as mature trees.

During implementation of Phase I, the construction and development of recreational facilities in the northern portion of Flood County Park would affect private views from adjacent residences. The grading of approximately nine acres would expose residents to disturbed soils and construction equipment; however, this adverse effect on residential views would be temporary and limited to the initial grading period. The removal of evergreen redwood trees near the existing tennis courts could

open up views of the park from several adjacent residences on Del Norte Avenue. As documented in the Tree Report prepared for the project by Gates + Associates in July 2016, the County may preserve eight of 11 mature trees located between the tennis courts and adjacent residences, which would protect existing residential views and privacy (see Appendix D). However, construction of the proposed soccer/lacrosse field may entail the removal of additional trees. In addition, this analysis conservatively assumes that 20-to-30-foot netting would encircle the proposed soccer/lacrosse field to retain balls on the field and protect the safety of adjacent residents. Because of its height, this netting would be a prominent feature from the perspective of residents. Tree removal and netting would have a potentially significant impact on residential views.

Phases II and III

Whereas Phase I would involve the construction of large-scale athletic facilities, the later phases of the Landscape Plan would focus on smaller-scale facilities, such as restrooms, a new playground, and gathering plazas. Proposed improvements would be clustered in the west-central portion of the park, farthest from adjacent residences. Phases II and III would not involve substantial tree removal near residential property lines or the installation of obtrusive features like tall athletic netting. Therefore, the impact on residential or scenic roadway views of the park during these phases would be less than significant.

MITIGATION MEASURES

As discussed in Section 4.3, *Biological Resources*, Mitigation Measure BIO-2(a) would minimize adverse effects on residential views by requiring the replacement of removed mature trees along residential property lines. The replacement trees would, upon maturation, be sufficient to restore the pre-existing level of privacy of adjacent residents. Mitigation Measure AES-1 would reduce the prominence of netting around the proposed soccer/lacrosse field.

MM AES- 1 ATHLETIC NETTING COLOR

If the County installs athletic netting around the proposed soccer/lacrosse field, this netting shall have a neutral color (e.g., forest green, black, gray) that blends in with the natural environment at Flood County Park.

SIGNIFICANCE AFTER MITIGATION

As required by Mitigation Measure BIO-2(a), the replanting of mature trees along residential property lines would, over the long term, preserve residential views and privacy. In addition, the installation of neutral-colored netting would minimize this feature's obtrusiveness to neighbors. These measures would reduce impacts on residential views to less than significant.

Threshold 2

Significantly damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Impact AES-2	While the Landscape Plan would largely preserve historic adobe building, it would involve removal of mature trees that serve as scenic resources. This impact on scenic resources would be less than significant with mitigation to replant trees of suitable species and protect remaining trees from construction activity.

Phase I

Site preparation for proposed recreational facilities in Phase I would involve the removal of mature trees that serve as scenic resources for visitors to Flood County Park. Based on the Tree Report prepared by Gates + Associates (2016), it is estimated that 50 trees would be removed during Phase I. Although the County would preserve the largest signature oak trees at the park, tree removal would include a grove of large redwood trees at the proposed soccer/lacrosse field, several oak trees at the proposed volleyball courts, and a row of mature Ligustrum (privet) trees at the edge of the proposed reconstructed ballfield. Ground disturbance during construction also could encroach on the root zone of remaining mature trees, impairing their health.

Phase I activities also would affect scenic historic features in the built environment. Demolition of the Restroom D building adjacent to the existing tennis courts would remove a small historic adobe structure that dates to the Works Progress Administration program of the 1930s. However, this building is only one of several extant adobe structures that serve as scenic resources at Flood County Park, and the Landscape Plan would preserve the remaining adobes. The most prominent adobe structure, the administrative office building at the heart of the park, would be preserved. Therefore, Phase I would not have a substantial adverse effect on scenic features in the built environment.

Phase I would have a potentially significant impact on scenic resources due to the loss of mature trees.

Phases II and III

Phases II and III would involve the removal of trees at a lesser scale than in Phase I, for the construction of recreational facilities in the southern portion of the park. The primary scenic natural features in this area, mature oak trees, would be preserved. However, as for Phase I, construction could impinge on the root zone of remaining mature trees. With respect to the built environment, the County would not demolish any scenic adobe structures during these phases. In fact, Phase III would enhance the accessibility of the adobe administrative office building by making it seismically safe for public use. However, Phases II and III would have a potential significant impact on scenic resources from the loss of mature trees.

MITIGATION MEASURES

As discussed in Section 4.3, *Biological Resources*, Mitigation Measure BIO-2(a) would require the replacement of removed trees at a 1:1 ratio. Heritage trees under the County of San Mateo Ordinance Code would be replaced with suitable trees that the County recognizes as heritage species. In addition, Mitigation Measure BIO-2(b) would ensure avoidance of the root zone of heritage trees during construction.

SIGNIFICANCE AFTER MITIGATION

Although implementation of the Landscape Plan would result in the loss of clusters of scenic trees, Mitigation Measures BIO-2(a) and BIO-2(b) would minimize adverse effects by replanting of mature scenic trees and avoidance of such trees during construction. These measures would preserve the park's collection of scenic trees over the long term. Therefore, the project would have a less than significant impact on scenic resources after mitigation.

Threshold 3

Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline.

Impact AES-3	The Landscape Plan would preserve the majority of scenic mature trees and adobe buildings as well as open fields for passive recreational use, maintaining the park's overall existing visual character. The impact on visual character or quality would be less than significant.

Phase I

The construction of recreational facilities in Phase I would temporarily degrade visual quality at Flood County Park. Grading activity would disturb approximately nine acres in the northern portion of the park. Construction equipment such as bulldozers and backhoes also may be visible to visitors in the remainder of the park and to neighbors. However, these visual effects would be limited to the duration of construction. The site's topography also would remain relatively flat, with the minor exception of small ridges and jumps installed at a new pump track.

The improvements proposed in Phase I would largely maintain Flood County Park's existing open, spacious visual character with a mixture of passive and active recreational uses. Currently, active recreational facilities including a ballfield, pétanque court, and tennis courts predominate in the northern portion of the park. Under Phase I, similar recreational facilities would be built in the same area: the ballfield would be reconstructed, the tennis courts replaced, and a new soccer/lacrosse field added in the eastern corner of the site. The addition of a soccer/lacrosse field would incrementally increase the acreage of athletic fields and reduce the natural character of the park by removing a grove of redwood trees. Twenty-to-thirty foot netting around the soccer/lacrosse field would also add a prominent artificial feature. Nevertheless, these new recreational elements would not substantially modify the overall visual character of the 24.5-acre park. The park would still have an open, spacious character that preserves the majority of scenic mature trees and adobe buildings as well as open fields for passive recreational use. Therefore, Phase I would have a less than significant impact on visual character or quality.

Phases II and III

As discussed in Impact AES-1, the later phases of the Landscape Plan would focus on smaller-scale recreational facilities, such as restrooms, a new playground, and gathering plazas. Phases II and III would not involve substantial tree removal near residential property lines or the installation of obtrusive features like tall athletic netting. The County would rehabilitate the adobe administrative building for public use, preserving this scenic structure as a central element of the built environment. Therefore, these phases would have a less than significant impact on visual character or quality.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Cumulative Impacts

The geographic extent for this cumulative impact analysis includes Flood County Park and surrounding residential neighborhoods with views to and from the park. This geographic extent is appropriate for the issue of aesthetics because the Landscape Plan's aesthetic impacts are fairly localized and site-specific. Because Flood County Park is surrounded by settled single-family residential neighborhoods that are fully built out, construction of other major cumulative projects would not occur sufficiently close to the park or its neighbors to result in a cumulative impact. Any redevelopment in the vicinity of the park would visually compatible with existing single-family residential development, consistent with zoning requirements of the City of Menlo Park and Town of Atherton. Therefore, any impacts to visual character, quality, or scenic resources would be less than significant, and the Landscape Plan would not have any cumulatively considerable contribution to any such impact.

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4.2 Air Quality

This section discusses the Landscape Plan's potential impacts to regional and local air quality. Both temporary impacts related to construction and long-term impacts associated with the project are discussed. Traffic projections used in emissions estimates are based on the Traffic Impact Study for the Flood County Park Landscape Plan prepared by W-Trans (May 2017). The traffic study is included as Appendix H to this EIR.

Setting

Regional Climate and Meteorology

The project site is in San Mateo County, which is located on the peninsula region of the San Francisco Bay Area Air Basin (SFBAAB). The Santa Cruz Mountains extend to the center of the peninsula, with elevations above 2,000 feet at the southern end of the peninsula, decreasing to 500 feet around South San Francisco. Coastal towns experience cool, foggy weather during the summer, while cities along the southeastern part of the peninsula experience warmer temperatures and fewer foggy days due to the ridgeline blocking the marine layer. The maximum summer temperature is in the high 70s, while the minimum winter temperature is in the high 30s and low 40s. The winds also play a large role in controlling the climate in the area, and annual average winds range between five and ten miles per hour in this region (BAAQMD 2017a).

Air pollutant emissions within the SFBAAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include sources such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

Air Pollutants of Primary Concern

The federal and State Clean Air Acts mandate the control and reduction of certain air pollutants. Under these Acts, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for certain "criteria" pollutants. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, as well as by the climatic and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide and suspended particulate matter) is proximity to major sources. Ambient CO levels in particular usually closely follow the spatial and temporal distributions of vehicular traffic. A discussion of primary criteria pollutants is provided below.

Ozone

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen (NO_X). ROG (the organic compound fraction relevant to ozone formation, and sufficiently equivalent for the purposes of this analysis to volatile organic compounds, or VOC) is composed of non-methane hydrocarbons (with some specific exclusions). NO_X is made of different chemical combinations of nitrogen and oxygen, mainly NO and NO_2. A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_X levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State CO standard are generally associated with major roadway intersections during peak hour traffic conditions. Localized carbon monoxide “hotspots” can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal Ambient Air Quality Standards (AAQS) of 35.0 parts per million (ppm) or the State AAQS of 20.0 ppm.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. NO_2 absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulates

PM_{10} is small particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. They are a by-product of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate

matter is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial sources. As a result of the phase-out of leaded gasoline, as discussed below, metal processing currently is the primary source of lead emissions. The highest level of lead in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

In the early 1970s, the U.S. EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The U.S. EPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the U.S. EPA's regulatory efforts to remove lead from gasoline, lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part as a result of national emissions standards for hazardous air pollutants (U.S. EPA 2013).

Current Ambient Air Quality

CARB and the U.S. EPA established ambient air quality standards for major pollutants, including ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and fine particulates (PM_{10} and $PM_{2.5}$). Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except for lead and the eight-hour average for CO.

Local air districts and CARB monitor ambient air quality to assure that air quality standards are met and, if they are not met, to also develop strategies to meet the standards. Air quality monitoring stations measure pollutant ground-level concentrations (typically, ten feet above ground level). Depending on whether the standards are met or exceeded, the local air basin is classified as in "attainment" or "non-attainment." Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. Table 8 summarizes the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS) for each of these pollutants as well as the attainment status of the SFBAAB, which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD).

Table 8 Ambient Air Quality Standards & Basin Attainment Status

		California Standards		National Standards	
Pollutant	Averaging Time	Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 Hour	0.070 ppm	N	0.070 ppm	N
	1 Hour	0.09 ppm	N		
Carbon Monoxide	8 Hour	9.0 ppm	A	9 ppm	A
	1 Hour	20 ppm	A	35 ppm	A
Nitrogen Dioxide	1 Hour	0.18 ppm	A	0.100 ppm	U
	Annual Arithmetic Mean	0.030 ppm		0.053 ppm	A
Sulfur Dioxide	24 Hour	0.04 ppm	A	0.14 ppm	A
	1 Hour	0.25 ppm	A	0.075 ppm	A
	Annual Arithmetic Mean			0.030 ppm	A
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	N		
	24 Hour	50 µg/m^3	N	150 µg/m^3	U
Particulate Matter - Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	N	12 µg/m^3	U/A
	24 Hour			35 µg/m^3	N
Sulfates	24 Hour	25 µg/m^3	A		
Lead	Calendar Quarter			1.5 µg/m^3	A
	Rolling 3 Month Average			0.15 µg/m^3	
	30 Day Average	1.5 µg/m^3)			A
Hydrogen Sulfide	1 Hour	0.03 ppm	U		
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm	No information available		
Visibility Reducing particles	8 Hour(10:00 to18:00 PST)		U		

A=Attainment; N=Nonattainment; U=Unclassified; mg/m^3=milligrams per cubic meter; ppm=parts per million; µg/m^3=micrograms per cubic meter

Source: BAAQMD 2017, http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status

As shown in Table 8, the SFBAAB is in nonattainment for the federal standards for ozone and $PM_{2.5}$. The SFBAAB is also in nonattainment for the State standard for ozone as well as PM_{10} and $PM_{2.5}$.

The Redwood City Monitoring Station is the only BAAQMD-operated monitoring station located in San Mateo County and is approximately 1.7 miles southeast of the project site. Table 9 summarizes the representative annual air quality data for the project site between the years 2014 and 2016 at the Redwood City Monitoring Station for all criteria pollutants, except PM10 since it was unavailable. Data for PM10 was obtained from the next closest station, the San Jose-Jackson Street Monitoring Station, which is located approximately 17.7 miles southeast of the project site. As shown in Table 9, 8-hour ozone exceeded State and federal thresholds once in 2013 and once in 2015. $PM_{2.5}$ exceeded the federal threshold three times in 2013.

Table 9 Ambient Air Quality Data

Pollutant	2014	2015	2016
Ozone (ppm), Worst 1-Hour	0.086	0.086	0.075
Number of days of State exceedances (>0.09 ppm)	0	0	0
Ozone (ppm), 8-Hour Average	0.065	0.071	0.060
Number of days of State exceedances (>0.07 ppm)	0	1	0
Number of days of Federal exceedances (>0.07 ppm)	0	1	0
Carbon Monoxide (ppm), Highest 8-Hour Average	*	*	*
Number of days of above State or Federal standard (>9.0 ppm)	*	*	*
Particulate Matter <10 microns, μg/m3, Worst 24 Hours	56.4	58.8	32.2
Number of days above State standard (>50 $\mu g/m^3$)	1	1	0
Number of days above Federal standard (>150 $\mu g/m^3$)	0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$, Worst 24 Hours	35.0	34.6	19.5
Number of days above Federal standard (>35 $\mu g/m^3$)	0	0	0

Source: CARB Top 4 Summary, https://www.arb.ca.gov/adam/topfour/topfour1.php

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

* There was insufficient (or no) data available to determine the value.

Redwood City Monitoring Station was used for all pollutants except PM_{10}, which used data from the San Jose-Jackson Street Monitoring Station.

Regulatory Setting

The Federal Clean Air Act (CAA) governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. These laws are administered by the CARB at the State level and by the Air Quality Management Districts at the regional and local levels. The BAAQMD regulates air quality at the regional level, which includes the nine-county Bay Area.

Federal

The U.S. EPA is responsible for enforcing the federal CAA. The U.S. EPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are required under the 1977 CAA and subsequent amendments. The EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g. beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by the CARB.

State

In California, the CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the State requirements of the federal CAA, administering the California CAA, and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal

standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. The CARB regulates mobile air pollution sources, such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. The CARB established passenger vehicle fuel specifications, which became effective on March 1996. The CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Regional

The BAAQMD is primarily responsible for assuring that the federal and State ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

The BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) on April 19, 2017 as an update to the 2010 Clean Air Plan. The 2017 Plan, which focuses on protecting public health and the climate, defines an integrated, multi-pollutant control strategy that includes all feasible measures to reduce emissions of ozone precursors (including transport of ozone and its precursors to neighboring air basins), fine particulate matter (PM), and toxic air contaminants (TACs). To protect public health, the control strategy will decrease population exposure to PM and TACs in communities that are most impacted by air pollution with the goal of eliminating disparities in exposure to air pollution between communities. The control strategy will protect the climate by reducing greenhouse gas emissions and developing a long-range vision of how the Bay Area could look and function in a year 2050 post-carbon economy (BAAQMD 2017b).

Sensitive Receptors

Certain population groups are more sensitive to air pollution than the general population; in particular, children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases, are considered sensitive receptors. Sensitive receptors that are in proximity to localized sources of particulate matter, toxics, and carbon monoxide are of particular concern. According to BAAQMD, sensitive receptors include residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities (BAAQMD 2017a). Since the project is a park in a residential neighborhood, sensitive receptors would be located at the park as well as the surrounding residences.

Impact Analysis

Methodology and Significance Thresholds

This analysis uses the BAAQMD's May 2017 CEQA Air Quality Guidelines to evaluate air quality. The May 2017 CEQA Air Quality Guidelines include revisions made to the 2010 Guidelines, addressing the California Supreme Court's 2015 opinion in the *Cal. Bldg. Indus. Ass'n vs. Bay Area Air Quality Mgmt. Dist., 62 Cal. 4th 369* (BAAQMD 2017a).

Significance Thresholds

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts related to air quality from the proposed project would be significant if the project would:

1 Conflict with or obstruct implementation of the applicable air quality plan;

2 Violate any air quality standard or contribute significantly to an existing or projected air quality violation;

3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

4 Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD;

5 Create objectionable odors affecting a significant number of people; and/or

6 Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area.

Because the project would not add new sources of odors, expose people to any existing sources of odors, or generate industrial pollutants, Thresholds 5 and 6 are discussed in Section 5, *Effects Found Not to Be Significant*.

The BAAQMD CEQA Air Quality Guidelines quantify air quality thresholds with defined numeric values and evaluation criteria for pollutant emissions. Although plan-level thresholds would be most appropriate for the proposed long-term Landscape Plan, the BAAQMD CEQA Air Quality Guidelines have no plan-level significance thresholds; instead, this analysis compares expected emissions from recreational elements in the Landscape Plan to quantitative project-level thresholds in the Air Quality Guidelines. These project-level thresholds, listed below, represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions.

Construction Emissions

Impacts related to the project's construction emissions would be significant if these emissions exceeded the following thresholds:

- 54 pounds per day reactive organic gases (ROG)
- 54 pounds per day oxides of nitrogen (NO_X)
- 82 pounds per day PM_{10} (exhaust only)
- 54 pounds per day $PM_{2.5}$ (exhaust only)

Operational Emissions

Impacts from the project's direct and/or indirect operational emissions would be significant if they exceeded the following thresholds:

- 54 pounds per day reactive organic gases (ROG)
- 54 pounds per day oxides of nitrogen (NO_X)
- 82 pounds per day PM_{10}
- 54 pounds per day $PM_{2.5}$

Direct emissions are emitted on a site and include emissions from stationary sources and on-site mobile equipment, if applicable. Examples of land uses and activities that generate direct emissions are industrial operations and sources subject to an operating permit by the BAAQMD. Indirect emissions come from mobile sources that access the project site, but generally are emitted off-site. For many types of land development projects, the principal source of air pollutant emissions is the motor vehicle trips generated by the project.

Localized Carbon Monoxide Concentrations

A project's indirect CO emissions would be significant if they contribute to a violation of the State standards for CO (9.0 ppm averaged over 8 hours and 20 ppm over 1 hour).

Toxic Air Contaminant Emissions

Toxic air contaminants (TACs), including fine diesel particulates ($PM_{2.5}$), can have significant health impacts on local communities. The BAAQMD's CEQA Air Quality Guidelines sets thresholds applicable to projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TAC or $PM_{2.5}$ emissions. If impacts due to emissions of TACs or $PM_{2.5}$ from any individual source would exceed any of the thresholds listed below, the project would result in a significant impact:

- Non-compliance with a Community Risk Reduction Plan
- An excess cancer risk level of more than 10 in one million (10E-06), or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 from any individual source would be a significant cumulatively considerable contribution
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) annual average $PM_{2.5}$ from any individual source would be a significant cumulatively considerable contribution

Methodology

The significance thresholds described in the previous section represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. All proposed recreational improvements in the Landscape Plan would result in temporary construction-related and long-term operational emissions. At this time, only the Phase I improvements are defined to an extent that would warrant project-level analysis. This phase is analyzed on a project-level basis. However, the proposed Phase II and III improvements are not defined to a level that would warrant project-level analysis and thus it would be speculative to include project-level impacts as part of this analysis. Rather, impacts for Phases II and III are discussed qualitatively. Because Phase I includes the most substantial recreational improvements in the Landscape Plan, the elements in following phases are assumed to result in similar or fewer emissions.

Construction Emissions

Emissions from construction activity during Phase I were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1. Construction was modeled to begin in November 2017 and end in February 2019. Phase I would involve demolition of structures including the existing playground, tennis courts, adobe Restroom D building, asphalt paths, and concrete, which total approximately 54,000 square feet in surface area. Demolition would occur first, followed by site preparation, grading, construction of recreational facilities, and paving. Since approximately nine

acres would be graded during Phase I, the grading phase was extended to 60 days based on the number of hauling trips required to account for approximately 4,370 cubic yards imported to the site and approximately 5,630 cubic yards exported from the site. Average daily emissions from project construction were calculated using CalEEMod, including both on-site and off-site activities. On-site activities would consist of the operation of off-road construction equipment, as well as on-site truck travel (e.g., haul trucks, water trucks, dump trucks, and concrete trucks), whereas off-site sources would be emissions from construction vehicle trips.

Operational Emissions

CalEEMod was used to estimate emissions from the long-term operation of Phase I improvements. Operational emissions included mobile source emissions, area source emissions, and emissions from energy use. Mobile source emissions would be generated by the increase in motor vehicle trips to and from the project site associated with operation of the project. This analysis used projections of daily project-generated vehicle trips from the Traffic Impact Study prepared by W-Trans in May 2017 (see Appendix H). Area source emissions are generated by landscape maintenance including pesticide and fertilizer use. Emissions attributed to energy use include natural gas consumption for space and water heating.

Localized Carbon Monoxide Concentrations

The BAAQMD recommends CO "hotspot" analysis for a project if the addition of project traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. According to the Traffic Impact Study prepared by W-Trans, no intersections affected by the project would handle more than 44,000 vehicles per hour; therefore, no intersection-specific CO modeling is required.

Toxic Air Contaminant Emissions

Local community risk and hazard impacts are associated with toxic air contaminants (TACs) and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level. BAAQMD's CEQA Air Quality Guidelines include risk and hazard thresholds that are intended to apply to projects that would site new permitted or non-permitted sources in proximity to receptors and for projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TAC or $PM_{2.5}$ emissions. According to CARB, parks are considered land uses where sensitive individuals are most likely to spend time. The main source of TACs at the project site is U.S. 101, which is located approximately 410 feet northeast of the project boundary.

Project Impacts

Threshold 1

Conflict with or obstruct implementation of the applicable air quality plan.

Impact AQ-1 : The project would not contribute to population growth and would be consistent with the growth assumptions in the BAAQMD 2017 Clean Air Plan. This impact would be less than significant.

To be consistent with an air quality management plan (AQMP), a project must conform to the local General Plan and must not result in or contribute to an exceedance of the local jurisdiction's forecasted future population. A project may be inconsistent with the AQMP if it would generate

population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Population growth would lead to increased vehicle use, energy consumption, and associated air pollutant emissions.

As discussed in Section 5, *Effects Found Not to Be Significant*, the Landscape Plan would not involve the construction of infrastructure that could induce substantial population growth, such as new or increased capacity sewer or water lines, or the construction of new streets and roads. While the proposed improvements to Flood County Park would make the area more attractive to tourists and possibly future residents, the improvements in the Landscape Plan would not be a substantial growth-inducing effect in San Mateo County. Therefore, no phases of the Landscape Plan would result in or contribute to an exceedance of San Mateo County's forecasted population, housing, or employment, and the project would thereby be consistent with the BAAQMD's 2017 Plan.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Thresholds 2, 3, 6

Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area.

Impact AQ-2 : WHILE PROJECT CONSTRUCTION WOULD GENERATE TEMPORARY INCREASES IN LOCALIZED AIR POLLUTANT EMISSIONS, THESE EMISSIONS WOULD NOT EXCEED BAAQMD'S SIGNIFICANCE THRESHOLDS. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT. HOWEVER, IMPLEMENTATION OF BAAQMD'S BASIC CONSTRUCTION MITIGATION MEASURES AND MEASURES TO REDUCE NO_X EMISSIONS IS RECOMMENDED TO FURTHER REDUCE CONSTRUCTION EMISSIONS.

Phase I

The construction of proposed recreational improvements during Phase I would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, and dump trucks); ground disturbance during clearing and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances. The extent of daily emissions, particularly reactive organic gases (ROGs) and nitrogen oxide (NO_X) emissions, generated by construction equipment, would depend on the quantity of equipment used and the hours of operation for each project. The extent of fugitive dust ($PM_{2.5}$ and PM_{10}) emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary.

Construction activities would result in temporary air quality impacts that may vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Construction equipment that would generate criteria air pollutants includes excavators and graders. It is assumed that all construction equipment used would be diesel-powered. Electrically-powered equipment would not result in criteria pollutant or ozone precursor emissions. Therefore, the assumption that equipment would be diesel-powered represents a worst-case assumption for project construction activity.

Table 10 summarizes the estimated maximum daily construction emissions that would occur during Phase I.

Table 10 Construction Emissions – Phase I

Pollutant	Maximum Daily Emissions (pounds per day)	Significance Threshold (pounds per day)	Significant Impact?
ROG	5.0	54	No
NO_x	52.3	54	No
PM_{10} (exhaust)	2.9	82	No
PM_{10} (total)	21.1	N/A	N/A
$PM_{2.5}$ (exhaust)	2.6	54	No
$PM_{2.5}$ (total)	12.6	N/A	N/A

See Appendix B for CalEEMod worksheets. For a conservative estimate, winter emissions were used.

As shown in Table 10, construction emissions during Phase I would not exceed BAAQMD project-level thresholds for construction. Furthermore, the maximum daily construction emissions provide a conservative estimate because grading for all Phase I improvements were modeled over a continuous 60-day period. Construction activities would not generate substantial amounts of pollutants such as hydrocarbons, thermal odor, dust or smoke particulates, or radiation. Therefore, Phase I would have a less than significant impact from construction emissions.

Phases II and III

The construction of recreational improvements during Phases II and III of the Landscape Plan would generate short-term emissions. Specific details of each improvement are not known at this time, except for Phase I, and thus emissions from Phases II and III cannot be estimated. Phase I would involve the most intensive development under the Landscape Plan, including grading of nine acres within an estimated 60 days and construction of new sports fields. Phases II and III would involve smaller-scale improvement projects such as picnic area renovations and pathways. Projects during Phases II and III would involve far less grading and would be more distributed over time, as the County plans to implement Phase II within five to seven years and Phase III within seven to ten years. Because of the smaller scale of remaining recreational improvements, it is anticipated that they would generate fewer emissions than those shown in Table 10 for Phase I. Therefore, Phases II and III would also have a less than significant impact from construction emissions.

MITIGATION MEASURES

Although no mitigation is required, BAAQMD recommends that all projects implement the following Basic Construction Mitigation Measures to meet the best management practices threshold for fugitive dust (BAAQMD 2017a):

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

In addition, the following BAAQMD measure suggested is recommended to reduce NO_x emissions from off-road equipment because these emissions would be near the threshold of 54 pounds per day (BAAQMD 2017a):

- The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation. Nonetheless, implementation of measures recommended by BAAQMD for fugitive dust and NO_x would further reduce this less than significant impact.

Thresholds 2, 3

Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Impact AQ-3 Operation of the proposed project would generate air pollutant emissions, but emissions would not exceed BAAQMD significance thresholds. Impacts related to operational emissions would be less than significant.

Phase I

Operational emissions primarily include mobile source emissions, which are generated by the increase in motor vehicle trips to and from the project site. Operational emissions would also result from area sources, which would increase due to landscaping maintenance (pesticide and fertilizer use). To determine whether a regional air quality impact would occur, operational emissions were compared with the BAAQMD's project-level thresholds.

Table 11 summarizes the estimated daily operational emissions that would occur during Phase I of the Landscape Plan.

Table 11 Operational Emissions – Phase I

Pollutant	Maximum Daily Emissions (pounds per day)	Significance Threshold (pounds per day)	Significant Impact?
ROG	0.5	54	No
NO_x	1.5	54	No
PM_{10}	1.4	82	No
$PM_{2.5}$	0.4	54	No

See Appendix B for CalEEMod worksheets. For a conservative estimate, winter emissions were used.

Because maximum daily operational emissions would not exceed the BAAQMD's project-level thresholds, Phase I would have a less than significant impact from operational emissions.

Phases II and III

As discussed above, the specific details of recreational improvements proposed for Phases II and III are not known at this time. The operation of Phase I improvements would generate the most vehicle trips and associated mobile emissions because of organized activities at the proposed athletic fields In comparison, the smaller passive recreational facilities proposed in Phases II and III, such as picnic areas and a new playground, would generate fewer vehicle trips and mobile emissions. Thus, Phases II and III are anticipated to generate fewer operational emissions as compared to the Phase I emissions shown in Table 11. Therefore, operation of Phases II and III would not have an individually or cumulatively significant impact on air quality.

Mitigation Measure

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 4

Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD.

Impact AQ-4 : THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS ASSOCIATED WITH CONSTRUCTION DUST, CO HOTSPOTS, OR TOXIC AIR CONTAMINANTS. IMPACTS RELATED TO THESE LOCALIZED POLLUTANTS WOULD BE LESS THAN SIGNIFICANT.

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Construction-related emissions such as dust could result in adverse health risks to nearby sensitive receptors; however, emissions during Phase I as shown in Table 10 would not exceed BAAQMD thresholds, and emissions during Phases II and III would not exceed those of Phase I. Adherence to BAAQMD's Basic Construction Mitigation Measures, as recommended in Impact AQ-2, would further reduce exposure to construction dust.

Since the project would add athletic facilities and improve existing park features, an increase in attendance at the park would be expected. Increased attendance could lead to an increase in traffic at congested roadways or intersections. The BAAQMD recommends a CO "hotspot" analysis for a project if the addition of project traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hours. However, the project would not handle more than 44,000 vehicles per hour, according to the Traffic Impact Study prepared by W-Trans. Thus, the project does not require intersection-specific CO modeling and would not generate localized carbon monoxide concentrations.

The main source of toxic air contaminants (TACs) at the project site is U.S. 101, which runs approximately 410 feet northwest of the project boundary. Since an increase in public use would be expected, new users may be exposed to TACs near the project site. However, it is expected that, at a maximum, park users would only visit for a couple of hours per day (or even per week). Due to this low duration of exposure, park users would not be exposed to TACs for long periods of time that would affect health.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Cumulative Impacts

The SFBAAB is in nonattainment for the federal and state standards for ozone, as well as the state standard for particulate matter (PM_{10} and $PM_{2.5}$) and the federal standard for 24-hour concentrations of $PM_{2.5}$. Any growth within the SFBAAB would contribute to existing exceedances of ambient air quality standards when taken as a whole with existing development. However, the project would not result in an increase in regional population or other growth that is not anticipated under the 2017 Clean Air Plan; therefore, implementation of the Clean Air Plan. In addition,

according to BAAQMD Air Quality CEQA Guidelines, “if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region’s existing air quality conditions.” As described above in this section, all air pollutant emissions would be below BAAQMD thresholds. Therefore, the project’s contribution to cumulative regional air quality impacts would not be cumulatively considerable.

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4.3 Biological Resources

This section evaluates the Landscape Plan's potential direct and indirect impacts to regulated waterways and wetlands, sensitive habitats and mature native trees, sensitive plants and animals, and wildlife movement corridors. The analysis in this section is based on a Biological Resources Assessment (BRA) prepared for the project by Rincon Consultants, Inc. (Rincon) in May 2017 and Tree Report prepared for the project by Gates + Associates in July 2016. The full studies are provided in Appendices C and D.

Environmental Setting

Habitat and Vegetation

The habitat throughout Flood County Park is ruderal and characterized by an extensive area of lawn with non-native grasses and native and non-native trees; compacted soils characteristic of sports fields; and paved parking lots, walking paths, and tennis courts. Despite the presence of trees, no vegetation associations that indicate the presence of intact natural communities occur on-site (Rincon 2016). Therefore, no sensitive natural communities or habitats, including wetlands or riparian areas, were observed within the project site during a site survey on October 31, 2016 (Rincon 2016). The following ornamental native plants were observed during this survey:

- California buckeye (Aesculus californica)
- Catalina cherry *(Prunus lyonii)*
- Douglas fir (Pseudotsuga menziesii)
- Engelmann oak (Quercus engelmannii)
- Giant sequoia (Sequoiadendron giganteum)
- Ponderosa pine (Pinus ponderosa)
- Holly leaf cherry (Prunus illicifolia)
- Incense cedar (Libocedrus decurrens)
- Monterey pine (Pinus radiata)
- Pacific madrone *(Arbutus menziesii)*
- Toyon (Heteromeles arbutifolia)

Dominant native trees observed at the park included old growth valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), California bay laurel (*Umbellularia californica*), and coast redwood (*Sequoia sempervirens*).

Special-Status Resources

The term special-status biological resources includes those plants, animals, vegetation communities, jurisdictional drainages and other sensitive biological resources that are governed under federal, State, and local laws and regulations.

Federal, State, and local authorities under a variety of legislative acts share regulatory authority over biological resources. The California Department of Fish and Wildlife (CDFW) has direct jurisdiction over biological resources through the State Fish and Game Code and under the California Endangered Species Act. The federal Endangered Species Act also provides direct regulatory authority over specially designated organisms and their habitats to the U.S. Fish and

Wildlife Service (USFWS). These acts specifically regulate listed and candidate endangered and threatened species, which are defined as:

- **Endangered Species**: any species that is in danger of extinction throughout all or a significant portion of its range.
- **Threatened Species**: any species that is likely to become an endangered species within the foreseeable future throughout all or a significant part of its range

Special Status Plants

Special-status plant species are either listed as endangered or threatened under the federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies and the scientific community. CDFW and local governmental agencies may also recognize special listings developed by focal groups (i.e., Audubon Society Blue List; California Native Plant Society (CNPS) Rare and Endangered Plants; U.S. Forest Service regional lists). No special-status plant species were observed at Flood County Park during the October 31, 2016 field survey (Rincon 2016). The park is considerably disturbed and does not provide suitable habitat for any special-status plant species.

Special-Status Wildlife

No special-status wildlife species were observed at the park. The high level of disturbance combined with the history of recreational use of the project site substantially reduces the potential of the park to be used by special-status wildlife. Nonetheless, abundant areas for nesting birds, such as trees, shrubs, lawns and buildings, are present throughout the project site and provide opportunity for nesting, which generally occurs from early February through late August. Additionally, roosting areas for bat species are present in the project site in the form of trees and buildings. No bats or bat signs were detected during the field survey, but bats could be present and roost and/or forage within the park generally during the months of April through August. Special-status wildlife species that have the potential to occur on-site include the Cooper's hawk (*Accipiter cooperii*), which is on the State watch list; short-earned owl (*Asio otus*), which is a species of special concern; white-tailed kite (*Elanus leucurus*), which is fully protected by the State; American peregrine falcon (*Falco peregrinus anatum*), which is fully protected by the State; pallid bat (Antrozous pallidus), which is a species of special concern (Rincon 2016).

Wildlife Corridors

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return.

The park is not located within any known regional wildlife movement corridors and the surrounding urban development reduces the potential for implementation of the landscape plan from having any effect on wildlife movement.

Regulatory Setting

The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local level. Agencies with responsibility for protection of biological resources within the plan area include:

- U.S. Fish and Wildlife Service (USFWS; federally listed species and migratory birds)
- California Department Fish and Wildlife (CDFW; waters of the State, state listed and fully-protected species, and other sensitive plants and wildlife)
- U.S. Army Corps of Engineers (USACE; wetlands and other waters of the United States)
- Regional Water Quality Control Board (RWQCB; waters of the State)
- County of San Mateo Codes of Ordinances (Significant and Heritage Trees)

Federal

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 United States Code (USC) Section 668). USFWS and the National Oceanic and Atmospheric Administration (also called NOAA Fisheries) share responsibility for implementing the Federal Endangered Species Act (FESA; 16 USC § 153 *et seq*). USFWS generally implements the FESA for land and freshwater species, while NOAA Fisheries implements the FESA for marine and anadromous species. Projects that would result in take of any federally listed threatened or endangered species are required to obtain permits from the USFWS or NOAA Fisheries through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting or funding the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

Take under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA; however, the USFWS and NOAA Fisheries advise project applicants that they could be elevated to listed status at any time.

The *Migratory Bird Treaty Act* of 1918 (MBTA), as amended in 1972, protects nesting migratory birds by making it unlawful to "take" (kill, harm, harass, etc.) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many other species.

The federal *Endangered Species Act* (FESA), which is administered and enforced by the USFWS and the National Marine Fisheries Service, would also prohibit any activity that kills or injures fish or wildlife, and emphasizes that such activities may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

State and Regional

California Department of Fish and Wildlife

The CDFW derives its authority from the Fish and Game Code of California Species listed under the California Endangered Species Act (CESA; Fish and Game Code Section 2050 *et seq*,), which prohibits

take of listed threatened or endangered species. Take under CESA is restricted to direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.

Fish and Game Code Sections 3503, 3503.5, and 3511 describe unlawful take, possession, or needless destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (CSC) is a category used by CDFW for those species considered to be indicators of regional habitat changes or considered to be potential future protected species. Species of Special Concern do not have any special legal status except that afforded by the Fish and Game Code. The CSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

CDFW also has authority to administer the Native Plant Protection Act (Fish and Game Code Section 1900 *et seq*). The Act requires CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Act, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of the plant.

Perennial and intermittent streams also fall under the jurisdiction of CDFW. Sections 1600 et. seq. of the Fish and Game Code (Streambed Alteration Agreements) gives CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act, the USACE has authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. Perennial and intermittent creeks and adjacent wetlands are considered waters of the United States and are within the regulatory jurisdiction of the USACE. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres. In achieving the goals of the Clean Water Act, the Corps seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of waters of the U.S. would require a permit from the Corps prior to the start of work. Typically, permits issued by USACE are a condition of a project as mitigation to offset unavoidable impacts on wetlands and other waters of the U.S. in a manner that achieves the goal of no net loss of wetland acres or values.

Regional Water Quality Control Board

The protection of water quality in the watercourses of Menlo Park is under the jurisdiction of the San Francisco Bay Region Water Quality Control Board (RWQCB). The RWQCB establishes requirements prescribing discharge limits and establishes water quality objectives through the San Francisco Bay Region Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit. The Standard Urban Storm Water Mitigation Plan (SUSMP), which is part of the NPDES Permit, addresses specific storm water pollution requirements for new developments such

as those that may be carried out under the proposed project. As co-permittee, the City of Menlo Park is responsible for assuring that new developments are in compliance with the SUSMP.

Local

County of San Mateo

Flood County Park is operated by the County of San Mateo Parks Department; as such it is not subject to the County's protected tree ordinances, and the County is not applying them to this project; however, these ordinances are summarized below for informational purposes.

San Mateo County Heritage Tree Ordinance

The San Mateo County Regulation of the Removal and Trimming of Heritage Trees on Public and Private Property (Ordinance 2727, April 5, 1977) protects the removal of heritage trees (San Mateo County 1977, 2016). A tree permit is required from the San Mateo County Planning Department for the removal of a heritage tree. Heritage trees include the following trees:

- Any tree or grove of trees so designated after Board inspection, advertised public hearing and resolution by the Board of Supervisors.
- Bigleaf maple (*Acer macrophyllum*) of more than 36 inches in diameter at breast height (dbh) west of Skyline Boulevard or 28 inches east of Skyline Boulevard.
- Madrone (*Arbutus menziesii*) with a single stem or multiple stems touching each other 4 1/2 feet above the ground of more than 48 inches in DBH, or clumps visibly connected above ground with a basal area greater than 20 square feet measured 4 1/2 feet above average ground level.
- Golden chinquapin (*Chrysolepis chrysophylla*) of more than 20 inches in dbh
- All Santa Cruz cypress (*Cupressus abramsiana*).
- Oregon ash (*Fraxinus latifolia*) of more than 12 inches in dbh
- Tan Oak (*Lithocarpus densiflorus*) of more than 48 inches in dbh
- Douglas fir (*Pseudotsuga menziesii*) of more than 60 inches in DBH east of Skyline Boulevard and north of Highway 92.
- Coast live oak (*Quercus agrifolia*) of more than 48 inches in dbh
- Canyon live oak (*Quercus chrysolepis*) of more than 40 inches in dbh
- All Oregon white oak (*Quercus garryana*)
- Black oak (*Quercus kellogii*) of more than 32 inches in dbh
- Interior live oak (*Quercus wislizenii*) of more than 40 inches in dbh
- Valley oak (*Quercus lobata*) of more than 48 inches in dbh
- Blue oak (*Quercus douglasii*) of more than 30 inches in dbh
- California bay (*Umbellularia californica*) with a single stem or multiple stems touching each other 4 1/2 feet above the ground of more than 48 inches in dbh, or clumps visibly connected above ground with a basal area of 20 square feet measured 4 1/2 feet above average ground level.

- California nutmeg (*Torreya californica*) of more than 30 inches in dbh
- Redwood (*Sequoia sempervirens*) of more than 84 inches in dbh west of Skyline Boulevard or 72 inches dbh east of Skyline Boulevard.

San Mateo County Significant Tree Ordinance

The San Mateo County Significant Tree Ordinance requires a permit for the removal of any native or non-native tree with a circumference of 38 inches (12.1 inches in diameter) as measured at breast height or immediately below the lowest branch, whichever is lower, and having the inherent capacity of naturally producing one main axis continuing to grow more vigorously than the lateral axes (San Mateo County 2010). A permit is also required for the removal of part of a community of trees, which is defined as a group of trees of any size that are ecologically or aesthetically related to each other such that loss of several of them would cause a significant ecological, aesthetic, or environmental impact in the immediate area. Permitting under this ordinance is required for the removal of significant trees from private property. Because the project site is a public park operated by the County, this ordinance would not apply to the proposed project.

Impact Analysis

Methodology and Significance Thresholds

The impact analysis is based on available literature regarding the existing biological resources within the project site as well as the Biological Resources Assessment prepared by Rincon Consultants, Inc. (2016) and Tree Report prepared by Gates + Associates (2016).

CEQA, Chapter 1, Section 21001 (c) states that it is the policy of the State of California to "prevent the elimination of fish and 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." A project's impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened, or endangered species. This project assesses biological impacts using San Mateo County's *Initial Study Environmental Evaluation Checklist*. Impacts to biological resources would be significant if the project would:

1 Have a significant 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;

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

3 Have a significant 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;

4 Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances);

6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan;

7 Be located inside or within 200 feet of a marine or wildlife reserve; or

8 Result in loss of oak woodlands or other non-timber woodlands.

Impacts to sensitive natural communities (Threshold 2), wetlands (Threshold 3), wildlife corridors (Threshold 4), and natural community or conservation plans, Thresholds 6 and 7, are discussed in Section 5, *Effects Found Not to Be Significant*.

Project Impacts

Threshold 1

Have a significant 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.

Impact BIO-1 : The Landscape Plan may result in direct and indirect impacts to listed special-status species. Impacts would be less than significant with mitigation to protect nesting birds and roosting bats.

As indicated in the Setting, the project site is mostly disturbed containing buildings, parking lots, sports facilities, and an extensive area of park lawn with non-native grasses, native old growth oak and bay trees and non-native trees. There is no potential for special-status plant species to occur on-site because there is no suitable habitat. Special-status plant species typically have very specific habitat requirements that are not available on the project site. Therefore, these species are not expected to occur on-site or otherwise be potentially subject to impacts (Rincon 2016).

The high level of disturbance combined with the history of recreational use of Flood County Park substantially reduces the potential of the project site to be used by special-status wildlife. Such wildlife species typically have very specific habitat requirements and the project site has limited habitat for these species. Nonetheless, abundant areas for nesting birds, such as trees, shrubs, lawns and buildings, are present throughout the park and provide opportunity for nesting, which generally occurs from early February through late August. Additionally, roosting areas for bat species are present in the form of trees and buildings. No bats or bat signs were detected during the field survey, but bats could be present and roost and/or forage at the park generally during the months of April through August. Special-status wildlife species with the potential to occur at Flood County Park include Cooper's hawk, short-earned owl, white-tailed kite, American peregrine falcon, and pallid bat.

The construction of proposed recreational improvements could affect these special-status bird and bat species because of the removal of trees and buildings. With the exception of special-status bird and bat species, no special-status species are expected to occur on-site or otherwise be subject to impacts because of the lack of no suitable habitat. Impacts to special-status bird and bat species during each phase of the Landscape Plan are described below.

Phase I

The following proposed recreational elements in Phase I would require removal of trees and shrubs: baseball field replacement and bathroom, soccer/lacrosse field, tennis courts, asphalt paths, tree-lined promenade, and drop off playground area. In addition, the adobe Restroom D building would be demolished. The removal of trees, shrubs, and structures for the construction of recreational improvements could result in direct impacts to nesting birds, including special-status birds, if birds are nesting in the park or its immediate vicinity during construction activities. Tree removal could directly affect roosting bats if present, while increased noise could indirectly affect roosting bats. Phase I would have a potentially significant impact on nesting birds and roosting bats.

Phases II and III

As for Phase I, habitat removal and increased noise during construction of recreational elements in Phases II and III could result in direct and indirect impacts to nesting birds and roosting bats, if present during tree removal. Any new recreational facilities that would extend into previously undisturbed or undeveloped areas, such as restrooms and gathering plazas, would have the potential to temporarily or permanently disturb or remove habitat, such as trees or shrubs, if present. Therefore, Phases II and III would have a potentially significant impact on nesting birds and roosting bats.

MITIGATION MEASURES

MM BIO-1(A) BIRD PROTECTION MEASURES

This mitigation measure shall apply to all proposed Phase I, II, and III recreational elements.

a. If possible, trees and shrubs that would be impacted by construction activities shall be removed during the non-nesting season (typically between September 1 and January 31).

b. If trees and shrubs are removed during the nesting season (February 1 to August 31), all suitable nesting habitat within the limits of work shall be surveyed by a qualified biologist prior to initiating construction-related activities. A pre-construction survey shall be conducted within five days prior to the start of work. If no nests are observed, construction activities shall be initiated within five days. If more than five days pass and construction has not been initiated, another survey will be required.

c. If, during the nesting season, an active nest is discovered in trees or shrubs to be removed, the vegetation shall be protected using orange construction fence or the equivalent. The protective fencing shall be placed around the vegetation at the following distance(s) depending on species and upon recommendation from a qualified biologist: 100-250 feet from the drip line of the vegetation for passerines and non-raptors; and 300-500 feet from the drip line of the vegetation for raptors. No parking, storage of materials, or work would be allowed within this area until the end of the nesting season or until the young have fledged, as determined by a qualified biologist.

MM BIO-1(B) BAT PROTECTION MEASURES

This mitigation measure shall apply to construction under the Landscape Plan that involves tree removal.

a. A qualified biologist shall conduct a pre-construction survey for roosting bats at least two weeks prior to, but not more than 30 days prior to, the start of construction. The pallid bat could

potentially roost in hollow trees. The survey shall be conducted within 200 feet of all planned construction activities within two weeks prior to any removal of trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities).

b. A buffer zone of 100 feet that excludes construction activities or other disturbances shall be established around active bat roosts.

c. If active maternity roosts or non-breeding bat hibernacula are found in trees scheduled to be removed, relocation or other measures shall be determined in consultation with the County of San Mateo and/or CDFW, as appropriate, and a qualified biologist.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures BIO-1(a) and BIO-1(b) during all phases of the Landscape Plan would reduce potential impacts to special-status species to a less-than-significant level by protecting nesting birds and roosting birds that may occur on-site.

Thresholds 5 and 8

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances).

Result in loss of oak woodlands or other non-timber woodlands.

Impact BIO-2 : CONSTRUCTION OF PROPOSED RECREATIONAL IMPROVEMENTS MAY DIRECTLY OR INDIRECTLY AFFECT HERITAGE TREES PROTECTED BY SAN MATEO COUNTY. THE IMPACT ON PROTECTED TREES WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION TO REPLACE PROTECTED TREES THAT ARE REMOVED AND TO PROTECT REMAINING TREES DURING CONSTRUCTION.

Phase I

The construction of Phase I improvements would require the removal of protected trees, primarily in the northern section of the park where athletic fields would be built. Based on the Tree Report prepared for the project site by Gates + Associates (2016), approximately 50 trees would be removed during Phase I. Once landscape plans for individual recreational improvements in Phase I are finalized, the exact number, types, and locations of trees to be removed from Flood County Park can be determined. Based on the proposed Landscape Plan, however, Phase I would result in a loss of protected trees.

Construction of Phase I improvements also could have indirect adverse effects on heritage trees not planned for removal. Disturbance of greater than 30 percent of the critical root zone (CRZ) may affect the tree's long-term health and structural stability. Trees with canopies and/or CRZ that are impacted by more than 30 percent may require replacement. Therefore, Phase I would have a potentially significant impact from the removal of protected trees and disturbance of remaining protected trees during construction.

Phases II and III

Based on the Tree Report prepared for the project site by Gates + Associates (2016), it is estimated that the construction of Phase II and III improvements would involve the removal of 30 trees. Similar to Phase I, once landscape plans for individual recreational improvements are finalized for Phases II and III, the exact number, types, and locations of trees to be removed within the project site can be determined. However, implementation of Phases II and III would result in the further loss of

protected trees. Therefore, Phases II and III would have a potentially significant impact from the removal of protected trees and disturbance of remaining protected trees during construction.

MITIGATION MEASURES

MM BIO-2(A) TREE REPLACEMENT

The County shall replace protected trees that are removed from Flood County Park at 1:1 ratio. Suitable replacement trees shall be those species specified as heritage trees. Where mature trees are removed within 25 feet of residential property lines, the County shall plant replacement trees that upon maturation would be sufficient to restore the pre-existing level of privacy of adjacent residents.

MM BIO-2(B) TREE AVOIDANCE AND MINIMIZATION MEASURES

The following measures to avoid and protect trees shall apply to individual recreational elements of all proposed Phase I, II, and III improvements:

a. The County shall monitor heritage trees with CRZs impacted by construction activities (canopies and roots) during construction for signs of distress. The CRZ is defined as the area of soil around a tree trunk where roots are located that provide stability and uptake of water and minerals required for tree survival by the ISA's Best Management Practices – Managing Trees During Construction handbook.

b. Excavation/Trenching shall avoid CRZs to the greatest extent feasible. The following measures shall be applied when excavation and trenching occurs near heritage trees:

   - Where appropriate tunneling shall be used to preserve roots two inches in diameter, and wherever possible underground lines shall occupy common trenches.
   - When root cutting occurs, exposed major roots (greater than two inches in diameter or within five feet of the trunk) shall not be ripped by construction equipment. Roots shall be cleanly cut and made at right angles to the roots.
   - A Certified Arborist shall be present if more than 30 percent of the root zone is impacted or roots greater than two inches or within five feet of the trunk will be cut, to document impacts to the CRZ.
   - Absorbent tarp or heavy cloth fabric shall cover new grade cuts and be overlain by compost or woodchip mulch.

c. The County shall stage construction equipment outside of the CRZs and apply precautions, such as steel traffic plates and fencing, to protect sensitive root zones.

d. The County shall install protective fencing around heritage trees prior to any earthwork and remain until all work is complete, or until adjacent construction activity no longer threatens tree health. Fencing shall be six foot high chain link fencing (or comparable material) and installed at the outermost edge of the CRZ, or eight feet from the trunk of the heritage tree, whichever is greatest. Signs stating "Tree Protection Zone – Keep Out" shall be posted on the fence.

e. Pruning for clearance, if needed, shall be done to prevent damage to branches with large equipment. All above-ground pruning shall be in accordance with the Tree Pruning Guidelines (International Society of Arboriculture) and/or the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI

Z133.1. Pruning cuts or damaged bark shall be cut clean to heal. No tree seal or paint shall be used after pruning.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures BIO-2a and BIO-2b would reduce impacts to a less-than-significant level.

Cumulative Impacts

The following factors are considered with respect to analyzing cumulative impacts to biological resources:

- The cumulative contribution of other approved and proposed projects to fragmentation of open space in the project vicinity;
- The loss of sensitive habitats and species;
- Contribution of the project to urban expansion into natural areas; and
- Isolation of open space within the vicinity by proposed/future projects.

Cumulative impacts depend on the proximity of cumulative projects to the project site, as well as impacts from past projects in the vicinity. The areas surrounding the project site are already built out with residential uses. As such, no additional loss of habitats or sensitive species or habitat fragmentation is expected in the vicinity of Flood County Park. Furthermore, because the Project site lacks riparian or wetland habitat, the project would not contribute to a cumulative impact on these sensitive habitats. The project would result in removal of trees for the proposed recreational elements; however, compliance with local regulations and mitigation measures listed above would prevent impacts from the loss of trees. Considering this information, the project would not contribute considerably to a cumulatively significant loss of protected biological resources.

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4.4 Cultural Resources

This section analyzes the potential impacts of the proposed project on cultural (pre-historic archaeological and historic) and paleontological resources. The analysis in this section is based on a Cultural Resources Study prepared for the project by Rincon Consultants, Inc. in June 2017 and a Preliminary Seismic Assessment Report prepared by Melvyn Green & Associates, Inc. in April 2016. The full studies are provided in Appendices E and F.

Cultural and Paleontological Setting

Regional Setting

Prehistoric Background

The prehistoric cultural chronology for the San Francisco Bay Area can be generally divided into five periods: the Early Holocene (8,000-3,500 B.C.), Early (3,500-500 B.C.), Lower Middle (500 B.C. to A.D. 430), the Upper Middle (A.D. 430-1050), and the Late Period (A.D. 1050-Contact) (Milliken et al. 2007). The Early Holocene in this region is characterized by a mobile forager pattern and the presence of millingslabs, handstones, and a variety of leaf-shaped projectile points, though evidence for this period is limited. The Early Period saw a shift to a sedentary or semi-sedentary lifestyle, marked by the prevalence of mortars and pestles, ornamental grave associations, and shell mounds. In the Lower Middle Period, artifacts indicate the advent of coiled basketry. Cultural resources characteristic of the Upper Middle Period include elaborate decorative blades, fishtail charmstones, and mica ornaments. The Late Period saw an increase in social complexity, indicated by differences in burials, and an increased level of sedentary lifestyles relative to preceding periods. Small, finely worked projectile points associated with bow and arrow technology appear around A.D. 1250.

Ethnography

The project site is situated within a region historically occupied by the Costanoan (also known as the Ohlone) people (Kroeber 1925). The Costanoan were organized into numerous tribelets. Each tribelet's territory contained a main village and smaller satellite villages. The villages were typically situated along a river or stream for easy access to water (Levy 1978). The tribelets functioned as political units that were structured by similarities in language and ethnicity, each holding claim to a designated portion of territory. In general, Costanoan territory extended between the Carquinez Strait and San Pablo Bay on the north, southward along the coast beyond Monterey Bay to Carmel Valley, and inland to the coast range (Levy 1978).

Costanoan groups came into contact with European culture at the beginning of Spain's land exploration and settlement of Alta California in A.D. 1769. During the late 1700's and early 1800's, traditional lifeways were drastically altered when the Spanish placed their capital at Monterey, built forts at Monterey and San Francisco, and established seven Franciscan missions built with Indian labor to convert native peoples to Christianity and the European way of life. The Costanoan population was estimated at 1,400 during the Mission period. However, few people from this cultural remained after 41 years of contact with the Spanish. This primary cause of population decline was the austere living and working conditions imposed by force on the Costanoan people, although disease epidemics also swept through the mission population and remaining Costanoan villages (Milliken 1995).

Historic Background

Post-European contact history for California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). In the Spanish Period, Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. During this period, Spain also deeded ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period (Engelhardt 1927).

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2006). About 22 land grants (ranchos) were located in San Mateo County. The City of Menlo Park and the project site are located on the Rancho de las Pulgas land grant originally given to Jose Dario Arguello in 1795 and then to Maria Soledad Ortega de Arguello in 1835 (Hoffman 1862).

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, which included California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of southern California continued to increase during the early American Period. Many ranchos in the county were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns. The discovery of gold in northern California in 1848 led to the California Gold Rush (Guinn 1977; Workman 1935) and California's population grew exponentially. During this time, San Francisco became California's first true city, growing from a population of 812 to 25,000 in only a few years (Rolle 2003).

Local Setting

City of Menlo Park

In 1854, Dennis J. Oliver and D. C. McGlynn purchased a 1,700-acre area and began to develop what would become Menlo Park (Menlo Park Chamber of Commerce 2014). A railroad official chose the name Menlo Park for the local station and today this station is a California State Landmark No. 955 and the oldest California station in continuous operation.

After San Mateo County became independent from San Francisco County in 1856, a road was laid between the two counties that opened the area to settlement. Several large tracts in the area were subsequently sold to notable San Francisco businessmen looking to establish summer country homes, including Faxon Atherton, James C. Flood, John B. Felton, and Mark Hopkins Jr. (Menlo Park Chamber of Commerce 2014). The Hopkins' estate extended into Menlo Park and several structures were built including a general merchandise store, saloons, and working-man hotels. In 1874, Menlo Park became the second incorporated city in San Mateo County. However, Menlo Park was

unincorporated two years later as a result of slow population growth (Menlo Park Chamber of Commerce 2014).

The area remained mostly agrarian until World War I, when almost overnight 43,000 soldiers began training at Camp Fremont located in Palo Alto and Menlo Park. Construction on the camp began in July 1917 in preparation for possible entry into World War I. The camp however was only functional until 1919 and was completely abandoned in 1920 with several buildings being sold at auction. During this boom in population, the first roads were constructed in Menlo Park by the 8th Division engineers and several new business and gas stations developed as a result of Camp Fremont (Kazak n.d.). Growth during this time prompted officials to reincorporate Menlo Park in 1927.

World War II and the decades that followed sparked major development in Menlo Park. Under the direction of city councilman Charles P. Burgess, the downtown area was revitalized through the widening and improvement of Santa Cruz Avenue and development of off-street parking lot programs along with residential development sparked city growth (Kreuz 1974). Growth continued into the early 1970s and it was around this time, that the growth of technological industry and what would be known as Silicon Valley extended to include Menlo Park. Today, the area is well known as a hub for several technical industries including Facebook. The company recently opened a new facility in Menlo Park and is the largest employer in the area.

Flood County Park

Historical Background

The land that would eventually be developed into Flood County Park was initially part of the massive estate of silver magnate, James C. Flood. Flood purchased a 600-acre tract of land in the area known known as Menlo Park and set to developing an elaborate country estate. Completed in 1878 after three years of construction Flood named his mansion Linden Towers (Cady 1948).

The mansion and the hundreds of acres surrounding it were left to Flood's daughter Jennie Flood after his death in 1889. Finding the property too large for her needs, she gifted the property to the University of California, which for similar reasons soon sold the property to Flood's son James L. Flood (Cady 1948). Following the death of the younger Flood in 1926, his descendants formed the Flood Estate Company and subsequently began to subdivide and sell the family's land holdings. The population of Menlo Park rapidly grew in the following years, resulting in the further subdivision of the former estate and the demolition of the mansion in 1934.

Two years later, San Mateo County began discussions with the Flood Estate Company to acquire a portion of the former Flood estate along Bay Road. The land, which was previously an undeveloped grain field, was envisioned and championed by San Mateo County Planning Director Ronald Campbell as an urban recreational park for the south San Mateo County residents (Svanevik and Burgett 2001). In 1937, the County purchased the land with the understanding that the future project would be named in honor of James L. Flood (The Times 1937).

Adobe buildings constructed in 1938 as part of the initial development of the park included an administrative office building, caretaker's cottage, and restrooms. Inspired by the contemporaneous California ranch homes of famed Ranch-style architect Cliff May, the buildings were all single-story and featured low profiles, hipped roofs, and overhanging eaves with exposed redwood rafters (Svanevik and Burgett 2001). This design and materials at Flood County Park were also consistent with the rustic style architecture which was widely used for New Deal agency-sponsored park buildings and called for the use of native materials and indigenous construction methods (Jones

2012). In addition to the buildings, initial development of the park included construction of 7,400 feet of trails, picnic tables, barbeque pits, and basketball and volleyball courts (The Times 1938). Similar to the adobe buildings, the barbeque pits were also designed in a rustic style, featuring stone construction and other features that were consistent with the guidance of New Deal agencies for camp stove design (Taylor 1937).

This first phase of the park was completed in 1939 and officially dedicated on July 4 that year (The Times 1939). The park was an immediate success and by 1940 plans were underway for the development of additional facilities, most notably a pool and adjacent bathhouse (Svanevik and Burgett 2001). These facilities were located between the administrative office building and the current playground. Other facilities constructed in phases through the 1940s included tennis courts, baseball fields, and other athletic fields.

While the park remained one of the most popular recreation spots in south San Mateo County in the decades after World War II, by the 1970s some of its facilities were in poor condition and outdated. In 1974, the pool was closed due to the high cost of maintenance and in its inability to compete with other more modern public pools nearby (The Times 1974). The pool and bathhouse were demolished.

More notable changes to Flood County Park would occur in the late 1980s. The new improvements included new restrooms, water fountains, benches, and paths that could safely accommodate wheelchairs. Other improvements during the 1980s included the construction of new picnic areas and the play area, and the relocation of the pétanque court. Flood County Park has remained operational since this time and has been minimally altered through the construction of two new restroom buildings.

Surveyed Cultural Resources

A search of the California Historical Resources Information System at the Northwest Information Center (NWIC) in October 2016 identified a previous evaluation of Flood County Park for historic significance in 1990. At that time, the park was described to appear largely as it does today and found to be locally significant as one of the few remnants of open, public land from the period of the Flood estate and as the only built structure by the Works Progress Administration (WPA) program in the Menlo Park area (Wickert 1990). Included in the NWIC file for is California Departments of Recreation documentation for Flood County Park, identifying the resource as a California Point of Historical Interest. The property was officially designated in 1986 and found significant as an outstanding example of financial, material, and human resources during the Great Depression. To document existing historic conditions at the project site, an intensive architectural field survey was conducted in November 2016. This field survey consisted of a visual inspection of all features in the built environment on the property, including buildings, structures, and associated features to assess their overall condition and integrity, and to identify and document any potential character-defining features.

No evidence of prehistoric or historic archaeological materials was identified during an NWIC search in October 2016 or an intensive archaeological field survey of the project site in November 2016.

Paleontological Resources

The project site lies within the flats ringing the Bay, which are separated from the main mass of the Coast Ranges by the San Andreas Fault, located west of the project area (Dibblee and Minch 2007). One sedimentary geologic unit is mapped within the project site (Dibblee and Minch 2007):

Holocene-aged alluvial sediments (Qa.1). This unit consists of gravel, sand, and silt and occurs in areas of upper alluvial fan surfaces and at slope bases (Dibblee and Minch 2007). Because this unit is Holocene in age, it is unlikely to contain fossils at the surface, though this may not hold true for undisturbed subsurface sediments, which may date to the Pleistocene. In addition, the discovery of Pleistocene-aged fossils in some near-bayshore sediments within Silicon Valley (Santa Clara County) and vicinity mapped as Holocene indicates these sediments are, in fact, Pleistocene in age, both at the surface and at shallow depths (Maguire and Holroyd 2016). A wide range of Pleistocene megafauna, such as mammoth, ground sloth, horse, and bison have been recovered from Santa Clara County (Maguire and Holroyd 2016), establishing that these Pleistocene alluvial sediments have high paleontological sensitivity, as defined by the Society of Vertebrate Paleontology (SVP) (2010). Any project- related excavations within Flood Park, especially utilities trenching, would need to account for the relative uncertainties of the geologic mappings, and the possibility that sediments with high paleontological sensitivity may, in fact, be present at the surface in the project area.

Regulatory Setting

Federal

Projects that involve federal funding or permitting (i.e., have a federal nexus) must comply with the provisions of the National Historic Preservation Act of 1966 (NHPA), as amended (16 United States Code [U.S.C.] 470f). The proposed project does not have a federal nexus and therefore compliance with the NHPA and other federal laws is not required for the proposed project.

State

As the lead agency for the proposed project, the County must comply with the provisions of CEQA, which requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5(a).

A resource shall be considered historically significant if it:

1 Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2 Is associated with the lives of persons important to our past;

3 Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4 Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]). According to PRC Section 21083.2, a unique archaeological resource is defined as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

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

2 Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

3 Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Local

Although the County does not have a historic preservation ordinance with criteria for local designation, the County General Plan (1986) includes polices relating to cultural resources and the project (County of San Mateo 1986). As presented in Chapter 5 Historical and Archaeological Resources these include:

5.11 – Recognition of Historic Resources

a. Impacts to archaeological and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-2(a) through CUL-2(c) which would require evaluation of encountered archaeological resources, Native American resources, and/or human remains

b. Establish historic districts for areas which include concentrations of historic resources found in the comprehensive inventory

5.12 – Rehabilitation of Historic Structures. Encourage the rehabilitation and recycling of historic structures

5.13 – Use of Innovative Techniques. Encourage the use of innovative techniques such as density transfer, facade easements, etc., to protect historic structures

5.14 – Registration of Significant Archaeological/Paleontological Sites. Recommend State and/or national register status for significant archaeological/paleontological sites

5.15 – Character of New Development

a. Encourage the preservation and protection of historic resources, districts and landmarks on sites which are proposed for new development

b. Ensure that new development in historic districts is compatible in bulk, height, material and design with that of the historic character and qualities of the district

c. Encourage the use of the Secretary of the Interior's guidelines and standards for rehabilitation of historic structures by: (1) those undertaking the rehabilitation of historic structures, and (2) those responsible for the architectural review and permit approval

5.16 – Demolition of Resources. Discourage the demolition of any designated historic district or landmark.

5.20 – Site Survey. Determine if sites proposed for new development contain archaeological/ paleontological resources. Prior to approval of development for these sites, require that a mitigation plan, adequate to protect the resource and prepared by a qualified professional, be reviewed and implemented as a part of the project.

5.21 – Site Treatment

a. Encourage the protection and preservation of archaeological sites.

b. Temporarily suspend construction work when archaeological/paleontological sites are discovered. Establish procedures which allow for the timely investigation and/or excavation of such sites by qualified professionals as may be appropriate.

c. Cooperate with institutions of higher learning and interested organizations to record, preserve, and excavate sites.

Eligibility of Historic Resources

Figure 5 shows the location of structures in Flood County Park's built environment. Table 12 lists these structural elements in order their corresponding number in Figure 5 as well as their date of construction.

Figure 5 Built Environment Elements of Flood County Park

Table 12 Built Environment Resources of Flood County Park

Map Reference	Built Environment Resource	Construction Date
1	Ticket Office	ca. 1960s
2	Maintenance Building	Unknown; moved ca. 1980s
3	Ranger's House	1938
4	Oak Shelter Picnic Area	ca. 1988
5	Adobe Maintenance Building	ca. 1938
6	Restroom A	ca. 1988
7	Park Administrative Office	ca. 1938
8	Electrical Building	ca. 1938
9	Play Area	ca. 1988
10	Baseball Field	ca. 1945
11	Baseball Field Restroom	2003
12	Pétanque Court	ca. 1988
13	Tennis Courts	ca. 1942
14	Softball Field	ca. 1942
15	Restroom D	ca. 1938
16	Restroom B	2003
17	Restroom C	ca. 1960s/1980s
18	Adobe Entrance Wall	ca. 1938

Extant adobe structures at the park that date to the WPA era of the 1930s include the ranger's house (#3), the adobe maintenance building (#4), the administrative office building (#7), the electrical building (#8), Restroom D (#15), and the adobe entrance wall (#18). Figures 6 through 11 present photos of existing conditions at these structures, and the Cultural Resources Study (Appendix E) details the physical form of these buildings.

The WPA was one of the largest and most ambitious programs of the New Deal and was responsible for over 1,000 public works projects across California between 1935 and 1943 (The Living New Deal 2016). Initially constructed in 1938, Flood County Park was the second WPA park project in San Mateo County and was the result of resourceful County leaders who recognized the future need for parkland in a rapidly developing area. Unlike Memorial Park (the County's first WPA park project) and many other WPA park projects, Flood County Park was unique in that it was developed as a smaller urban recreational facility. An examination of other extant WPA projects in San Mateo County and the surrounding San Francisco Bay area indicates that WPA parks of this size are a rare variation of the property type (The Living New Deal 2016). Although Flood County Park was small in

Figure 6 Ranger's House, Facing North

Figure 7 Adobe Maintenance Building, Facing West

Figure 8 Administrative Office Building, Facing Northwest

Figure 9 Electrical Building, Facing West

Figure 10 Restroom D Building, Facing Northwest

Figure 11 Section of Adobe Entrance Wall, Facing West

size compared to other park projects, it was developed using the same the design principles and construction methods utilized by its larger counterparts. The use of adobe blocks, which were handmade on-site for the park's buildings, is not only unique for northern California, but also consistent with the larger principles of Rustic Style of architecture that was promoted and adopted by the WPA and other New Deal programs. The period of significance for these associations begins in 1938 with the initial development of the park and the construction of the adobe buildings, and ends in 1943 following the dissolution of the WPA.

Many of the park's extant features are not associated with the WPA and were constructed after the period of significance, which ends in 1943 with the dissolution of the New Deal program. For this reason they do not contribute to the significance of the property and are considered non-character defining. Although the former adobe entrance wall exhibits the same materials and design principles as many of the extant adobe buildings, it is in a state of substantial disrepair and no longer retains sufficient integrity of materials, design, and workmanship to convey the reasons for Flood County Park's significance. In addition, although the tennis courts, ballfield, and softball field were possibly developed using WPA labor, they are ubiquitous property types that do not represent the design principles and design principles of the WPA and its workers, and are not considered contributing historic elements at Flood County Park.

The extant adobe buildings represent a direct association with the WPA program in San Mateo County and embody a significant architectural type and method of construction. Furthermore, they remain in their original location and have not been substantially altered. The overall park also appears largely as it has since its dedication in 1938, despite alterations that have slightly changed the overall setting. For these reasons, the property retains sufficient integrity of location, design, materials, workmanship, feeling, and association to meet the threshold for CRHR listing. Therefore, Flood County Park is recommended eligible for listing in the CRHR under Criterion 1 (Association with Significant Events) and Criterion 3 (Architectural Significance). It is considered a historical resource for the purposes of CEQA, with the following contributing elements: ranger's house, adobe maintenance building, electrical building, administrative office building, and Restroom D.

Impact Analysis

Methodology and Significance Thresholds

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts to cultural and paleontological resources would be significant if the project would:

1. Cause a significant adverse change in the significance of a historical resource as defined in CEQA Section 15064.5;
2. Cause a significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5;
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
4. Disturb any human remains, including those interred outside of formal cemeteries.

A "significant adverse change" in the significance of a historical resource is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." State *CEQA Guidelines*

Section 15064.5(b) states that the significance of an historical resource is "materially impaired" when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historical Resources
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources... or its identification in an historical resources survey..., unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA

CEQA Guidelines Section 15064.5 also states that the term "historical resources" shall include the following:

1 A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in, the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4850 et.seq.).

2 A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3 Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources (Public Resources Code Section 5024.1, Title 14 CCR, Section 4852) as follows:

   a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

   b. Is associated with the lives of persons important in our past;

   c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

   d. Has yielded, or may be likely to yield, information important in prehistory or history. (Guidelines Section 15064.5)

Project Impacts

Threshold 1

Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

Impact CUL-1 : The Landscape Plan would preserve existing adobe buildings that contribute to Flood County Park's eligibility as an historical resource, except for the proposed demolition of the Restroom D building. By documenting historical resources for archival purposes and adhering to the Secretary of the Interior's Standards for rehabilitation of the administrative office building, the project would have a less that significant impact on historical resources with mitigation incorporated.

As discussed in the Cultural Setting, Flood County Park is eligible for listing as an historical resource under the CRHR. Five extant adobe buildings serve as contributing elements to the park's status as an eligible historical resource: the ranger's house, adobe maintenance building, electrical building, administrative office building, and Restroom D. The Landscape Plan would preserve four of these five adobe buildings, while demolishing the small Restroom D building that is adjacent to the existing tennis courts. As defined in CEQA Guidelines Section 15064.5, a project would result in a significant adverse impact on the environment if it materially impaired a historical resource; that is, alter in adverse manner those characteristics that convey its historical significance. Restroom D is one of five extant buildings that contribute to Flood County Park's significance. This building does not meet modern accessibility standards under the Americans with Disabilities Act (ADA) and is not currently used as a restroom. Although demolition of Restroom D would result in the partial loss of historic characteristics at Flood County Park, the remaining four adobe buildings would be still be able to convey the park's significant associations with the WPA program and architecture.

The project also proposes to seismically retrofit the adobe administrative office building, which is centrally located at Flood County Park and a key contributing element to the park's historic significance. Although this action would ensure that the building is seismically safe and would withstand damage from earthquakes, if insensitively completed it has the potential to negatively affect significant characteristics of the building, which could result in its material impairment. Therefore, the Landscape Plan's impacts to historical structures would be potentially significant.

Mitigation Measures

MM CUL-1(A) Historic Documentation Package

Prior to issuance of demolition permits, the County shall ensure that documentation of the buildings proposed for demolition is completed in the form of a Historic American Building Survey (HABS)-like documentation that shall comply with the Secretary of the Interior's *Standards for Architectural and Engineering Documentation* (National Park Service [NPS] 1990). The documentation shall generally follow the HABS Level III requirements and include digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's *Professional Qualification Standards for History and/or Architectural History* (NPS 1983). The original archival-quality documentation shall be offered as donated material to the County of San Mateo Parks Department where it would be available for current and future generations. Archival copies of the documentation also shall be submitted to the City of San Mateo Library and

the San Mateo County History Museum where they would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the lead agency.

MM CUL-1(B) STANDARDS OF REVIEW

The seismic retrofit of the adobe administrative office building shall be consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Standards), thereby avoiding significant adverse direct or indirect impacts to historical resources. An architectural historian or historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall be retained to prior to the start of the seismic retrofit to review proposed plans and provide input to the County to avoid any direct or indirect physical changes to the building. The findings and recommendations of the architectural historian or historic architect shall be documented in a Standards Project Review Memorandum, at the schematic design phase. This memorandum shall analyze all project components for compliance with the Standards. Should design modifications be necessary to bring projects into compliance with the Standards, the memorandum shall document those recommendations. The document shall be subsequently submitted to County of San Mateo Parks Department for review and comment.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measures CUL-1(a) and CUL-1(b) would ensure historical documentation of the adobe restroom and seismic retrofitting of the office building that follows the Standards. A project that follows the Standards generally shall be considered as mitigated to a level of less than a significant impact on the historical resource (CEQA Guidelines Section 15064.5[b][3]). While the Standards present guidelines for four treatments (Preservation, Rehabilitation, Restoration, and Reconstruction), Rehabilitation is perhaps most frequently used as it provides the greatest flexibility for making alterations to a historic property in accommodating a compatible and contemporary use. Incorporation of the mitigation measures detailed above would reduce impacts to historical resources to less than significant.

Thresholds 2 and 4

Cause a substantial significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5.

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

Impact CUL-2 : GROUND-DISTURBING ACTIVITIES UNDER THE LANDSCAPE PLAN COULD RESULT IN DAMAGE TO OR DESTRUCTION OF UNANTICIPATED ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

The 24.5-acre project site has been previously developed, and the site contains buildings and infrastructure such as parking lots, pavement, and landscaping. It is likely that surface soils have been scattered across the surface of the site during previous construction, grading, and landscaping, and that the proposed recreational improvements are unlikely to occur at soil depths below those which have been previously disturbed. No archaeological resources or human remains were identified within the project site. However, it is possible that ground-disturbing activities during all project phases, such as utility connections and grading for recreational facilities, could disturb unanticipated archaeological resources or human remains. Impacts would be potentially significant.

MITIGATION MEASURES

MM CUL-2(A) ARCHAEOLOGICAL RESOURCES

If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the proposed project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.

MM CUL-2(B) UNANTICIPATED DISCOVERY OF HUMAN REMAINS

If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

SIGNIFICANCE AFTER MITIGATION

Impacts to archaeological and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-2(a) through CUL-2(c) which would require evaluation and appropriate treatment of encountered archaeological resources or human remains.

Threshold 3

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact CUL-3 : GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH DEVELOPMENT UNDER THE LANDSCAPE PLAN COULD RESULT IN DAMAGE TO OR DESTRUCTION OF POTENTIAL FOSSIL RESOURCES WITHIN ROCK UNITS OR GEOLOGIC FEATURES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction of proposed recreational improvements would involve disturbance of soils and rocks that may have paleontological sensitivity. Excavation for new utility connections during Phase I of the Landscape Plan could disturb the soil to a depth of an estimated five feet. Ground-disturbing activities in geologic units with high paleontological sensitivity (per SVP 2010) have the potential to damage or destroy paleontological resources that may be present below the ground surface. Because ground disturbance would mostly take place in fill and above the current surface grade in sediments mapped as Holocene alluvium (Dibblee and Minch 2007), disturbance of high sensitivity geologic units are unlikely. However, However, due to the documented presence of Pleistocene fossils in sediments mapped as Holocene within Silicon Valley (Santa Clara County), there is some potential for fossils to be uncovered on the project site. Therefore, construction activities would have a potentially significant impact from damage or destruction of fossils.

MITIGATION MEASURE

Mitigation Measure CUL-3 would protect paleontological resources in the event of their discovery during construction.

MM CUL-3 UNANTICIPATED DISCOVERY OF PALEONTOLOGICAL RESOURCES

In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. The qualified paleontologist shall be an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year (SVP 2010). If the qualified paleontologist determines that the fossil(s) is (are) scientifically significant, the find shall be recovered under his/her supervision. The paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the project paleontologist.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure CUL-3 would protect fossils if discovered on-site, reducing the impact to paleontological resources to a less-than-significant level.

Cumulative Impacts

The cumulative context for cultural resources analysis considers a broad regional system of which the resources are a part. The cumulative context for archaeological resources and human remains is the former territory of the Costanoan people. Costanoan territory extends from the point where the San Joaquin and Sacramento rivers issue into the San Francisco Bay southward to Point Sur, with the inland boundary most likely constituted by the interior Coast Ranges (Kroeber 1925). The cumulative context for paleontological resources is considered to be the San Francisco Peninsula.

Earth-disturbing activities during implementation of the Landscape Plan, in combination with other development in the region, could cause a substantial adverse change in the significance of a unique archaeological or paleontological resource. However, no known archaeological or paleontological resources are located within the boundaries of the project site. With the proposed mitigation measures identified herein, the project would not considerably contribute to cumulative impacts to cultural resources.

It is speculative to assume that cumulative development outside of the project site would or would not necessarily be able to avoid cultural resources. Each individual development proposal is reviewed by a jurisdiction and undergoes environmental review when it is determined that potential for significant impacts exist. In the event that future cumulative development would result in impacts to known or unknown cultural and paleontological resources, impacts to such resources would be addressed on a case-by-case basis in accordance with the requirements of the County's General Plan and CEQA. Therefore, impacts related to the incremental loss of cultural resources would not be cumulatively considerable.

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4.5 Geology and Soils

This section analyzes the project's temporary and long-term impacts on the geologic stability of the project site and the exposure of park visitors to seismic and geologic hazards. Data used to prepare this section were obtained from the California Geological Survey (CGS), the United States Geological Survey (USGS), the County of San Mateo General Plan, County of San Mateo Planning and Building Department policies, and Flood County Park redevelopment plans provided by the applicant.

Environmental Setting

Regional Geology

The City of Menlo Park is located in the Coast Range Geomorphic Province. This province is characterized by parallel northwest trending mountain ranges formed over the past 10 million years or less by active uplift related to complex tectonics of the San Andreas fault/plate boundary system (CGS 2002). The city is bordered on the northeast by the San Francisco Bay and stretches to the southwest along the generally flat alluvial plain between the San Francisco Bay and the Santa Cruz Mountains. Elevation in the city ranges from approximately 11 feet along the San Francisco Bay to approximately 350 in southwest portion of the city, at the base of the foothills of the Santa Cruz Mountains (USGS, 2017). Geologic units in Menlo Park consist primarily of late Holocene mud deposits near the San Francisco Bay, and Holocene alluvium and Pleistocene alluvium as one traverses the city to the southwest, towards the Santa Cruz Mountains (USGS, 2006).

Soil complexes in the city include Novato clay along the San Francisco Bay, Urban land-Orthents (reclaimed complex and cut and fill complex) moving towards the southwest, Botella-Urban land complex moving further to the southwest, and Accelerator-Fagan-Urban land complex in the southwestern most portion of the city (NRCS, 2014). The Novato clay, also known as Bay Mud, consists of silty clay, sand, gravel, and peat (City of Menlo Park, 2016). This soil type is particularly susceptible to liquefaction. The Urban land-Orthents are poorly drained, texturally heterogeneous soils that have been used for fill along the edge of the San Francisco Bay (City of Menlo Park, 2016). Like the Bay Mud, this artificial fill is also susceptible to liquefaction. The Botella-Urban land complex consists of deep or very deep, well-drained clay loams (City of Menlo Park, 2016). The Accelerator-Fagan-Urban land complex consists of deep, well-drained loams or clay loams in the southern foothills (City of Menlo Park, 2016).

The most significant regional faults include the San Andreas Fault to the west of the city and the Hayward Fault to the east of the city, across the San Francisco Bay. Both of these faults are classified as historically active and have experienced movement within the last 200 years. The Monte Vista Fault, located south of the city, has been active during the Holocene period (within the last 11,700 years). Several inactive Quaternary faults occur in or near the city, including the Palo Alto Fault, the Pulgas Fault, the San Jose Fault, and the Stanford Fault. These faults have not moved during Holocene or historic times and are not considered active faults.

The following site-specific setting discussion is focused on the potential for strong ground shaking, liquefaction, erosion, and expansive soils. As described below under the heading *Methodology and Significance Thresholds*, preliminary analysis determined that the project would not result in potentially significant impacts with respect to rupture of a known earthquake fault, landslides, coastal or bluff stability, or the use of septic tanks. Therefore, this section only discusses the environmental setting as it relates to potentially significant impacts.

Local Geology

Strong ground shaking at the project site would occur during an earthquake along any of the nearby active faults, especially the Hayward Fault and the San Andreas Fault. The probability of a magnitude 6.7 earthquake or greater in the San Francisco Bay Region from 2014 to 2043 is 72 percent (USGS, 2016). The probability of a magnitude 6.7 earthquake or greater along the Hayward Fault or the San Andreas Fault during the same period is 33 percent and 22 percent, respectively (USGS, 2016). Ground accelerations from earthquakes of this magnitude can cause major damage to structures and improperly designed foundations. Underground utilities, such as gas and water lines, may rupture if they lack sufficient flexibility to accommodate the seismic ground motion.

The northern and western portions of the project site are underlain by the Orthents (cut and fill) soil group and the Urban land-Orthents cut and fill soil complex. These soil types are susceptible to seismically induced liquefaction. Although the southern portion of the project site is underlain by the Botella-Urban land soil complex, which is less susceptible to liquefaction, the entire project site is shown as located in a Liquefaction Zone on the Earthquake Zones of Required Investigation – Palo Alto Quadrangle (CGS, 2006).

The relatively flat nature of the project site minimizes the potential for substantial erosion. However, some of the underlying soils contain fine particles such as silt and fine sands that would be susceptible to erosion by wind and water following soil disturbance.

Expansive soils are typically very fine-grained with a high to very high percentage of certain types of clay that expand when wet and shrink when dry. These soils typically belong to the Vertisols soil order. The project site is underlain primarily by Entisols and Mollisols and therefore expansive soils are less likely to occur. However, site specific investigations would be required to determine the presence or absence of expansive soils prior to the rehabilitation or reconstruction of any foundations.

Regulatory Setting

Federal

Clean Water Act

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The project site is within a watershed administered by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). Operational storm water discharges at Flood County Park are governed by the SFBRWQCB Municipal Regional Stormwater NPDES Permit (Order No. R2-2015-0049; NPDES Permit No. CAS612008). This Municipal Regional Stormwater Permit prohibits the discharge of non-storm water into storm drains and watercourses.

Individual projects that disturb more than one acre would be required to obtain NPDES coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Order No. 2009-0009-DWQ; NPDES No.

CAS000002). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing Best Management Practices (BMPs) the discharger would use to prevent and retain storm water runoff and to prevent soil erosion.

International Building Code

The International Building Code is published by the International Code Council. The scope of this code covers major aspects of construction and design of structures and buildings. The International Building Code has replaced the Uniform Building Code as the basis for the California Building Code and contains provisions for structural engineering design. The 2015 International Building Code addresses the design and installation of structures and building systems through requirements that emphasize performance. The International Building Code includes codes governing structural as well as fire- and life-safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs. The International Building Code is updated every three years.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (the Act) of 1990 was passed into law following the destructive October 17, 1989 Mw 6.9 Loma Prieta earthquake. The Act directs the California Geological Survey (CGS) to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones.

California Building Code

The CBC, Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. The 2016 California Building Code is based on the 2015 International Building Code with the addition of more extensive structural seismic provisions. Chapter 16 of the California Building Code contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

Local

San Mateo County Code of Ordinances

Chapter 4.100 of the San Mateo County Code of Ordinances (Storm Water Management and Discharge Control) contains discharge prohibitions and BMPs to prevent non-storm water discharges to the municipal separate storm sewer system (MS4). These BMPs include, but are not limited to, filter materials at catch basins to retain any debris and dirt flowing into the County's storm sewer system.

San Mateo County Erosion and Sediment Control Plan

The San Mateo County Planning and Building Department requires the submittal of an erosion and sediment control plan for review and approval prior to the issuance of any demolition, grading, or building permit that involves site disturbance. Although the County would not be required to obtain a grading permit for work on its own property, the County would elect to implement Best Management Practices for erosion control that would otherwise be required by this ordinance. These BMPs include but are not limited to stabilizing disturbed bare earth areas, using diversion berms to divert water from unstable or denuded areas, and directing water from construction areas to designated temporary filtration/detention areas.

Impact Analysis

Methodology and Significance Thresholds

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts related to geology and soils would be significant if the project would:

1 Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:

   a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other significant evidence of a known fault;

   b. Strong seismic ground shaking;

   c. Seismic-related ground failure, including liquefaction and differential settling;

   d. Landslides;

   e. Coastal cliff/bluff instability or erosion;

2 Result in significant soil erosion or the loss of topsoil;

3 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, severe erosion, liquefaction or collapse;

4 Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property; or

5 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.

Because the project is not located in an Earthquake Fault Zone or underlain by an active fault trace, is situated on relatively flat land and is not located in a mapped Earthquake-Induced Landslide Zone, is located approximately 15 miles from the shoreline of the Pacific Ocean and would not affect the stability of coastal cliffs or bluffs, and would not involve the use of septic tanks or alternative wastewater disposal systems, Thresholds 1.i, 1.iv, 1.v, and 5 are discussed in Section 5, *Effects Found Not to Be Significant*.

Project Impacts and Mitigation Measures

Threshold 1.ii

Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving, or create a situation that results in, strong seismic ground shaking.

Impact GEO-1	The Landscape Plan would reconstruct or rehabilitate some existing recreational facilities and on-site structures and would add new recreational facilities. Redevelopment of Flood County Park would result in an incremental increase in recreational users at the park, which would slightly increase the number of people at the project site that could be exposed to strong ground shaking. However, redevelopment of the park would not include construction of habitable structures and impacts related to strong ground shaking would be less than significant.

Phases I, II, and III

Flood County Park is located in a seismically active area that would experience strong ground shaking following an earthquake along any one of several nearby faults, such as the Hayward Fault, the Monte Vista Fault, or the San Andreas Fault. This strong ground shaking could damage structures and result in a risk of loss, injury, or death. However, redevelopment of Flood County Park under the proposed Landscape Plan would not include construction of habitable structures and therefore would not expose residents to a risk of injury or death following strong ground shaking. Although redevelopment of the park would result in an incremental increase in the number of visitors at the park, those visitors would generally be located in open spaces such as softball and soccer/lacrosse fields, tennis courts, and walking paths, and would not be exposed to overhead hazards such as collapsing buildings that could cause injury or death following strong ground shaking. Existing on-site structures, such as the existing adobe buildings, would be used by visitors and park administrators but would not be inhabited. While it is anticipated that the adobe administrative office building would be open for public use, it would be seismically reinforced in accordance with California Building Codes. Therefore the risk of injury or death from collapse of existing on-site structures would be reduced with implementation of the Landscape Plan. Impacts related to strong seismic ground shaking would be less than significant and no mitigation is required.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 1.iii

Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving, or create a situation that results in, seismic-related ground failure, including liquefaction and differential settling.

Threshold 3

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, severe erosion, liquefaction or collapse

Impact GEO-2	Flood County Park is located in a mapped Liquefaction Zone and redevelopment of the park could result in damage to reconstructed or rehabilitated structures due to seismically induced liquefaction. However, redevelopment of the park would not include the construction of habitable structures and adherence to California Building Codes would minimize the potential for damage of uninhabited structures from liquefaction. Impacts related to seismically induced liquefaction would be less than significant.

Phases I, II, and III

Flood County Park is located in a mapped Liquefaction Zone as shown on the Earthquake Zones of Required Investigation - Palo Alto Quadrangle (CGS, 2006). Implementation of the Landscape Plan would include rehabilitation and reconstruction of recreational facilities (such as a ballfield, a soccer/lacrosse field, and tennis courts) and demolition, reconstruction, and/or rehabilitation of on-site structures (such as the existing adobe buildings). Redevelopment of Flood County Park under the proposed Landscape Plan would not include construction of habitable structures and therefore would not expose residents to a risk of injury or death following seismic-related ground failure, including liquefaction. Grading activities associated with implementation of the Landscape Plan would remove soils subject to liquefaction to the extent feasible and would replace those soils with clean, engineered fill. Therefore, implementation of the Landscape Plan would reduce the potential risk of loss, injury, or death from seismically-induced ground failure, including liquefaction. Rehabilitated structures, such as the existing adobe buildings, would be reinforced to resist seismic forces, including seismically-induced ground failure, in accordance with applicable California Building Codes. Overall, implementation of the Landscape Plan would reduce the likelihood of loss, injury, or death from liquefaction and this impact would be less than significant.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 2

Result in significant soil erosion or the loss of topsoil.

Impact GEO-3	Implementation of the Landscape Plan would involve soil disturbance that could result in soil erosion or the loss of topsoil. However, compliance with existing regulations, including the NPDES Construction General Permit, would ensure that disturbed soil is properly managed to minimize the potential for erosion. Impacts related to soil erosion or the loss of topsoil would be less than significant.

Phase I

During Phase I of the Landscape Plan, grading would total approximately nine acres. If not properly managed, this disturbed soil could be eroded during a subsequent storm event. The generally flat nature of the project site would minimize the potential for substantial soil erosion. Also, because project activities under Phase I would disturb more than one acre, the applicant would be required to obtain coverage under the NPDES Construction General Permit. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Chapter 4.100 of the San Mateo County Code of Ordinances would similarly prohibit non-storm water discharges to the MS4 drainage infrastructure and would require BMPs to prevent dirt or debris from entering that system. Finally, the applicant would elect to implement BMPs for erosion control similar to those required by the County's Erosion and Sediment Control Plan. These BMPs include but are not limited to stabilizing disturbed bare earth areas, using diversion berms to divert water from unstable or denuded areas, and directing water from construction areas to designated temporary filtration/detention areas. Compliance with applicable regulations and implementation of voluntary storm water BMPs would ensure that disturbed soils are properly managed and that the potential for erosion or loss of topsoil is minimized. This impact would be less than significant.

Phases II and III

Phases II and III of the Landscape Plan would include less soil disturbance than Phase I, and therefore would result in a lower potential for erosion and the loss of topsoil. In the event that Phase II and III activities disturb less than one acre, the applicant would not be required to obtain coverage under the NPDES Construction General Permit. However the applicant would implement BMPs to control erosion and storm water discharge of sediment in compliance with Chapter 4.100 of the San Mateo County Code of Ordinances. Also, the applicant would elect to implement BMPs for erosion control similar to those required by the County's Erosion and Sediment Control Plan, as described above. Compliance with applicable regulations and implementation of voluntary storm water BMPs would ensure that disturbed soils are properly managed and that the potential for erosion or loss of topsoil is minimized. This impact would be less than significant.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 4

Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property.

Impact GEO-4	The Landscape Plan would involve the rehabilitation or reconstruction of structures that could be located on expansive soils. However, soils would be evaluated for their expansive potential during grading and would be removed and replaced with non-expansive soils as necessary. Also, the Landscape Plan would not include construction of habitable structures and therefore would not place people at risk to safety hazards from expansive soils. Adherence to California Building Codes would ensure that impacts related to expansive soils would be less than significant.

The project site is not underlain by typically expansive soils (soils belonging to the Vertisols soil order). However, site-specific conditions may differ from the general soil types expected in the area and the project site may contain expansive soils. Grading associated with Phases I, II, and III would remove problematic soils as necessary and replace those soils with clean, engineered fill. Implementation of the Landscape Plan does not involve construction of habitable structures and therefore the potential for significant risks to life is negligible. Also, in accordance with California Building Codes, if expansive soils are encountered within four feet of the finish grade of any area intended or designed as a location for a building then the applicant shall remove such expansive soil to a minimum depth of four feet below finish grade within the building footprint area and replace that soil with non-expansive, properly compacted soil. Adherence to California Building Code requirements would ensure that significant risks to property would be avoided. This impact would be less than significant.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Cumulative Impacts

Cumulative development in the project vicinity would generally increase ground disturbance during construction activities, which could result in subsequent soil erosion and loss of topsoil. However, other cumulative projects would be subject to the same laws and regulations to avoid or minimize erosion and loss of topsoil as the proposed project. Impacts from the proposed project related to the exposure of people or structures to a risk of loss, injury, or death from strong ground shaking, liquefaction, or expansive soils would be site-specific and would not combine with adverse effects from other projects to produce a cumulatively considerable impact. As described above, the proposed project would not result in significant impacts to geology and soils, and would not cause, accelerate, or otherwise exacerbate off-site impacts related to erosion and loss of topsoil. Therefore, the proposed project would not result in cumulatively considerable impacts to geology and soils.

4.6 Greenhouse Gas Emissions

Environmental Setting

Climate Change and Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2007).

Greenhouse Gas Emissions Inventories

Federal Emissions Inventory

Total U.S. GHG emissions were 6,586.7 million metric tons (MMT or gigatonne) CO_2e in 2015 (U.S. EPA 2017). Total U.S. emissions have increased by 3.5 percent since 1990; emissions decreased by 2.3 percent from 2014 to 2015 (U.S. EPA 2017). The decrease from 2014 to 2015 was a result of multiple factors, including: (1) substitution from coal to natural gas consumption in the electric power sector; (2) warmer winter conditions in 2015 resulting in a decreased demand for heating fuel in the residential and commercial sectors; and (3) a slight decrease in electricity demand (U.S. EPA 2017). Since 1990, U.S. emissions have increased at an average annual rate of 0.2 percent. In 2015, the industrial and transportation end-use sectors accounted for 29 percent and 27 percent of CO_2 emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 16 percent and 17 percent of CO_2 emissions, respectively (U.S. EPA 2017).

California Emissions Inventory

Based on the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2014, California produced 441.5 MMT CO_2e in 2014 (CARB 2016). The largest single source of GHG in California is transportation, contributing 37 percent of the state's total GHG emissions. Industrial

sources are the second largest source of the state's GHG emissions, contributing 24 percent of the state's GHG emissions (CARB 2016). California emissions are due in part to its large size and large population compared to other states. However, the state's mild climate reduces California's per capita fuel use and GHG emissions as compared to other states. CARB has projected statewide unregulated GHG emissions for the year 2020 will be 509.4 MMT CO_2e (CARB 2016). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

San Mateo County Emissions Inventory

San Mateo County developed an inventory of community-wide emissions for the baseline year 2005, which was used to develop appropriate GHG emissions reduction strategies in the County's 2014 Energy Efficiency and Climate Action Plan. In 2005, San Mateo County produced an estimated 782,080 MT CO_2e (San Mateo County 2014). The transportation sector had the largest contribution at 61%, followed by commercial and industrial energy at 21%. Residential energy represented 12% while off-road represented 5%. Solid waste contributed only 1%, and agriculture, water, and wastewater represented less than 1%.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89°C (0.69°C–1.08°C) over the period 1901–2012 and about 0.72°C (0.49°C–0.89°C) over the period 1951–2012 when described by a linear trend. Several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014).

Potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA 2010). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could

increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Energy Commission [CEC] 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008; CCCC 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. Based on historical data and modeling DWR projects that the Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR 2008).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect: the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. According to The Impacts of Sea-Level Rise on the California Coast, prepared by the California Climate Change Center (CCCC) (CCCC 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report (2013) predicts a mean sea–level rise of 11-38 inches by 2100. This prediction is more than 50 percent higher than earlier projections of 7-23 inches, when comparing the same emissions scenarios and time periods. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply due to salt water intrusion. In addition, increased CO_2 emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a $30 billion annual agricultural industry that produces half of the country's fruits and vegetables. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the average global surface temperature could rise by 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006).

Regulatory Setting

The following regulations address both climate change and GHG emissions.

Federal

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the U.S. EPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. In 2012 the U.S. EPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act 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.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

State

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has a numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, U.S. EPA granted the waiver of Clean Air Act preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

Assembly Bill 32

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020, and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines CARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 statewide goals. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (CARB 2017).

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan

Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP).

The Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) were assigned targets of a 7% reduction in GHGs from transportation sources by 2020 and a 15% reduction by 2035. ABAG and MTC adopted a RTP/SCS, called Plan Bay Area, which, when implemented, would meet the assigned targets by achieving a 10% per capita GHG emissions reduction in 2020 and a 16% reduction in 2035.

Senate Bill 32

On September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). CARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target. The updated Scoping Plan is expected to be completed and adopted by CARB in 2017 (CARB 2015).

For more information on the Senate and Assembly Bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *State CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

Regional Regulations

Consistent with statewide goals, the Bay Area Air Quality Management District (BAAQMD) has set goals in the 2017 Clean Air Plan to reduce GHG emissions to 40% below 1990 levels by 2030 and to 80% below 1990 levels by 2050. The 2017 Clean Air Plan, which identifies potential rules, programs, and strategies to reduce GHG emissions, includes 85 control measures to decrease fossil fuel consumption, improve energy efficiency, and decrease emissions of potent GHGs and other pollutants.

Local Regulations

The Energy and Climate Change Element of the San Mateo County General Plan demonstrates the County's commitment to achieve energy efficiency and mitigate its impact on climate change. The Element includes goals, policies, and implementation strategies to reduce greenhouse gases. In addition, San Mateo County adopted an Energy Efficiency Climate Action Plan (EECAP) in June 2013. The EECAP reductions strategies were based on the GHG emissions inventory completed for the baseline year 2005, which quantified community-wide emissions by sector. Reduction measures included in the EECAP provide a diverse mix of regulatory and incentive-based programs to help the County reach its reduction goal of 17% below baseline emissions by 2020.

Impact Analysis

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts related to GHG emissions from the proposed project would be significant if the project would:

1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;

2 Conflict with an applicable plan (including a local climate plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases;

3 Result in the loss of forestland or conversion of forestland to non-forest uses, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering;

4 Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels;

5 Expose people or structures to a significant risk of loss, injury, or death involving sea level rise;

6 Place structures within an anticipated 100-year flood area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; and/or

7 Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows.

Thresholds 3 through 7 are discussed in Section 5, *Effects Found Not to Be Significant*.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (State CEQA Guidelines, Section 15355).

Significance Thresholds

In late 2015, the California Supreme Court's Newhall Ranch decision confirmed that there are multiple potential pathways for evaluating GHG emissions consistent with CEQA, depending on the circumstances of a given project (Center for Biological Diversity v. Department of Fish and Wildlife (2015) 62 Cal. 4th 204). The decision also identified the need to analyze both near term and post-2020 emissions, as applicable, stating that an "EIR taking a goal-consistency approach to CEQA significance may in the near future need to consider the project's effects on meeting longer term emissions reduction targets." While not legally binding on local land use agencies, SB 32 extends the statewide AB 32 reduction goal, requiring the State to further reduce GHGs to 40% below 1990 levels by 2030, and Executive Order S-03-05 has set forth a long-term reduction target to reduce GHG emissions in California by 80% below 1990 levels by the year 2050.

While the State has adopted the AB 32 Scoping Plan and multiple regulations to achieve the AB 32 year 2020 target, there is no currently adopted State plan to meet post-2020 GHG reduction goals. CARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target set forth by SB 32 (CARB 2015). As a result, State reduction strategies cannot be applied to the project to achieve long-term reductions. Achieving these long-term GHG reduction policies will

require State and federal plans and policies for achieving post-2020 reduction goals. Placing the entire burden of meeting long-term reduction targets on local government or individual new development projects would be disproportionate and likely ineffective.

Given the recent legislative attention and judicial action regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in October 2016 to provide guidance on defensible GHG thresholds for use in CEQA analyses and GHG reduction targets in climate action plans in light of the change in focus on the 2030 reduction target and questions raised in the Newhall Ranch case. The following methods for assessing construction and operational emissions are described below.

Construction Emissions

The AEP Climate Change Committee white paper stated that construction emissions can be evaluated in one of two methods.

(1) **Using best management practices (BMPs).** Construction-related emissions would be less than significant if a project implements all feasible BMPs, including alternatively fueled vehicles, reduction of worker trips, and sourcing construction materials from local sources when possible (without substantial cost implications).

(2) **Amortizing construction emissions over the operational lifetime**. Construction-related emissions are quantified and amortized over the lifetime of a project. The amortized construction emissions are added to the operational emissions to calculate the total annualized emissions. If the annualized emissions are below quantitative thresholds, GHG emissions would be less than significant.

This analysis uses method (2) for construction emissions since it may not be possible to apply all feasible BMPs. Construction emissions were amortized over the operational lifetime in order to quantify GHG emissions.

Operational Emissions

The AEP Climate Change Committee white paper identified seven thresholds for operational emissions. The following four methods described are the most widely used evaluation criteria.

(1) **Consistency with a qualified GHG reduction plan**. For a project located within a jurisdiction that has adopted a qualified GHG reduction plan (as defined by CEQA Guidelines Section 15183.5), GHG emissions would be less than significant if the project is anticipated by the plan and fully consistent with the plan. However, projects with a horizon year beyond 2020 should not tier from a plan that is qualified up to 2020.

(2) **Bright line thresholds.** There are two types of bright line thresholds:

   a. Standalone threshold: Emissions exceeding standalone thresholds would be considered significant.

   b. Screening threshold: Emissions exceeding screening thresholds would require evaluation using a second tier threshold, such as an efficiency threshold or other threshold concept to determine whether project emissions would be considered significant.

However, projects with a horizon year beyond 2020 should take into account the type and amount of land use projects and their expected emissions out to the year 2030.

(3) **Efficiency thresholds.** Land use sector efficiency thresholds are currently based on AB 32 targets and should not be used for projects with a horizon year beyond 2020. Efficiency metrics should be adjusted for 2030 and include applicable land uses.

(4) **Percent below "Business as Usual" (BAU).** GHG emissions would be less than significant if the project reduces BAU emissions by the same amount as the statewide 2020 reductions. However, this method is no longer recommended following the Newhall Ranch ruling.

Operational emissions methods (1), (3), and (4) were not applicable. Although Menlo Park has a CAP, it is not considered a qualified GHG reduction plan by BAAQMD standards. The BAAQMD has adopted efficiency thresholds of 4.6 metric tons of carbon dioxide equivalent (MT CO_2e) per service population per year; however, this threshold was based on AB 32 targets and is not applicable for SB 32 consistency. BAU emissions are no longer recommended following the Newhall Ranch ruling.

Although the BAAQMD has adopted a bright line threshold of 1,100 MT CO_2e, this figure is also based on AB 32. Without further guidance on SB 32, a conservative approach would be to assume the threshold would reduce by 40%, consistent with SB 32. This would mean that the project's emissions would not be significant if emissions do not exceed 660 MT CO_2e.

Methodology

The significance thresholds described in the previous section represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. All proposed recreational improvements in the Landscape Plan would result in temporary construction-related and long-term operational emissions. At this time, only the Phase I improvements are defined to an extent that would warrant project-level analysis. This phase is analyzed on a project-level basis. However, the proposed Phase II and III improvements are not defined to a level that would warrant project-level analysis and thus it would be speculative to include project-level impacts as part of this analysis. Rather, impacts for Phases II and III are discussed qualitatively. Because Phase I includes the most substantial recreational improvements in the Landscape Plan, the elements in following phases are assumed to result in similar or fewer emissions. The California Emissions Estimator Model (CalEEMod) version 2016.3.1 was used to calculate construction and operational emissions for Phase I. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98.9% of all GHG emissions by volume (IPCC 2007) and are the GHG emissions that would be emitted in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF_6, were also considered for the analysis. However, because the project is a Landscape Plan for a park, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes. Emissions of all GHGs were converted into their equivalent GWP in terms of CO_2 (CO_2e). Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total calculated CO_2e amounts. Calculations were based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper (CAPCOA 2008) and included the use of the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009).

Operational Emissions

CalEEMod provides operational emissions of CO_2, N_2O, and CH_4. Emissions associated with area sources, including landscape maintenance, were calculated in CalEEMod and utilize standard emission rates from CARB, U.S. EPA, and emission factor values provided by the local air district (CalEEMod User Guide 2016).

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on EPA's AP-42, (*Compilation of Air Pollutant Emissions Factors*) and CCAR. Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CalEEMod User Guide 2016). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide 2016). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

For mobile sources, CO_2 and CH_4 emissions were quantified in CalEEMod. Because CalEEMod does not calculate N_2O emissions from mobile sources, N_2O emissions were quantified using the California Climate Action Registry General Reporting Protocol (CAPCOA 2009) direct emissions factors for mobile combustion (see Appendix B for calculations). The estimate of total daily trips associated with the proposed project was based on the traffic study (see Appendix H) and was calculated and extrapolated to derive total annual mileage in CalEEMod. Emission rates for N_2O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

Construction Emissions

Construction of the proposed project would generate GHG emissions on a temporary basis primarily due to the operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to export earth materials offsite. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod was used to estimate emissions resulting from project construction. BAAQMD recommends amortizing construction-related emissions over a 30-year period. Amortized construction emissions were added to operational emissions to calculate the total annualized emissions, as recommended by the AEP Climate Change Committee white paper.

Project Impacts

Threshold 1

Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment.

Impact GHG-1 : CONSTRUCTION AND OPERATION OF THE PROPOSED RECREATIONAL FACILITIES IN THE LANDSCAPE PLAN WOULD GENERATE GHG EMISSIONS. THESE EMISSIONS WOULD NOT HINDER OR DELAY ACHIEVEMENT OF STATE GHG REDUCTION TARGETS ESTABLISHED BY AB 32 OR SB 32. THEREFORE, THE PROJECT'S IMPACT TO CLIMATE CHANGE WOULD BE LESS THAN SIGNIFICANT.

Phase I

Construction Emissions

Project-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed improvements at Flood County Park. Construction of recreational improvements during Phase I would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. As shown in Table 13, this phase of construction would generate an estimated 834 MT CO_2e. Amortized over a 30-year period, construction would generate an estimated 28 MT CO_2e per year.

Table 13 Construction GHG Emissions – Phase I

Year	Phase I Emissions (MT CO_2e)
2017	90
2018	673
2019	71
Total	834 MT CO_2e total
Total Amortized over 30 Years	28 MT CO_2e per year

See Appendix B for CalEEMod worksheets.

Combined Construction, Stationary, and Mobile Source Emissions

Table 14 combines the construction, operational, and mobile GHG emissions associated with Phase I. The combined annual emissions for Phase I improvements would be approximately 309 MT CO_2e per year. Since Phase I emissions would not exceed the adjusted BAAQMD threshold, the project would not hinder or delay achievement of state GHG reduction targets established by AB 32 or SB 32.

Table 14 Total GHG Emissions – Phase I

Emission Source	Phase I Emissions ($MT CO_2e$)
Construction	28
Operational	
Area	<1
Energy	0
Solid Waste	<1
Water	11
Mobile	
CO_2 and CH_4	256
N_2O	14
Total Emissions	309
BAAQMD Threshold	1,100
Adjusted BAAQMD Threshold (40% below existing threshold)	660
Threshold Exceeded?	No

See Appendix B for CalEEMod worksheets.

Phases II and III

At this time, the recreational improvements during Phases II and III are not defined to a level that would enable project-level analysis and quantification of associated GHG emissions. However, it is possible to use estimated Phase I emissions as a point of comparison. As shown in Table 14, the majority of GHG emissions in Phase I would result from increased mobile trips to the project site, driven primarily by new mobile trips associated with use of the proposed sports fields. In comparison, the smaller-scale passive recreational elements in Phases II and III would generate substantially fewer emissions. Since Phase I emissions would not exceed BAAQMD thresholds, and emissions during Phases II and III would be less, these emissions also would be less than significant.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 2

Conflict with an applicable plan (including a local climate action plan), policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG-2 : Construction and operation of the proposed recreational facilities in the Landscape Plan would be consistent with the San Mateo County Energy Efficiency Climate Action Plan. Therefore, the project's impact related to consistency with plans to address climate change would be less than significant.

As discussed above, San Mateo County adopted the Energy Efficiency Climate Action Plan (EECAP) in 2013. The EECAP is a Qualified GHG Reduction Strategy that builds on local and statewide planning efforts. San Mateo County's reduction target of 17% below 2005 emissions levels by 2020 exceeds the State-recommended 15% target and is intended to satisfy BAAQMD requirements for a Qualified GHG Reduction Strategy. The project would follow Bay-Friendly principles and be consistent with applicable measures listed in the EECAP, as shown in Table 15. Therefore, although the project would generate GHG emissions, project-generated emissions would not hinder or delay achievement of state and GHG reduction targets, and the project would consistent with the EECAP. This impact would be less than significant.

Table 15 Project Consistency with Applicable San Mateo County's Energy Efficiency Climate Action Plan Measures

EECAP GHG Reduction Strategies	Project Consistency
Reduction Measure 2.4. Facilitate energy efficiency in large institutional energy users, including golf courses, airports, and schools.	**Consistent.** The Landscape Plan would not involve construction of new buildings that require energy, except for minor restroom facilities.
Reduction Measure 3.3. Require tree planting, shading design, solar orientation, and "cool" hardscapes.	**Consistent.** A tree-lined promenade is proposed for development during Phase I. In addition, the estimated 78 trees removed for the proposed recreational facilities would be replaced for accenting, screening, or other purposes as space allows, with a preference for native trees.
Reduction Measure 3.5. Promote green building practices and develop community-wide capacity for energy efficiency in new construction.	**Consistent.** The Landscape Plan would not involve construction of new buildings that require energy, except for minor restroom facilities.
Reduction Measure 6.2. Require larger new projects (including existing projects with major renovations) to evaluate and implement appropriate traffic calming measures at the site, as determined through the plan review process.	**Consistent.** The Traffic Impact Study prepared by W-Trans for the project did not identify traffic calming measures as necessary to ensure traffic safety. However, Mitigation Measure T-1 to avoid queuing of motor vehicles entering the park gate would minimize the project's effects on traffic congestion and traffic safety. See Section 4.9, *Transportation and Circulation*, for more details regarding traffic.
Reduction Measure 14.2. Increase the use of grey, rain, and recycled water for landscaping and agricultural purposes throughout the community to reduce the use of potable water.	**Consistent.** During Phase I, the park would install new facilities, including water, electric, gas, and potentially greywater piping. Greywater piping would allow the park to use greywater for landscaping.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

This impact would be less than significant without mitigation.

Cumulative Impacts

GHG and climate change are by definition cumulative impacts, as they affect the accumulation of greenhouse gases in the atmosphere. As discussed above, emissions associated with the proposed project would be less than significant, and the project's impacts are therefore also cumulatively less than significant.

4.7 Hydrology and Water Quality

This section analyzes potential impacts to hydrology and water quality.

Environmental Setting

Surface Water Resources

The project site is located in the San Francisco Bay hydrologic region which extends from southern Santa Clara County north to San Pablo Bay in Sonoma County, and inland to the confluence of the Sacramento and San Joaquin rivers. The water in the region flows to the San Francisco Bay estuary or directly to the Pacific Ocean.

Major surface water bodies in the project vicinity include the southern portion of San Francisco Bay, Atherton Channel, and Searsville Lake, while San Francisquito Creek forms the eastern boundary of the city. The city is located within the 45 square mile San Francisquito Creek watershed, which includes portions of Santa Clara County and San Mateo County. The Los Trancos and San Francisquito creeks form part of the boundary between the two counties. During all but the wettest years, significant portions of San Francisquito Creek and its tributaries dry up by mid-summer. Water typically flows form the southwest to the northeast through natural creeks, streams, and channelized waterways (Stanford University 2012). The project site does not contain any surface water features, streambeds or wetlands (Rincon 2016).

Groundwater Resources

Menlo Park is located above the Santa Clara Valley Groundwater Basin and the San Mateo Plain Subbasin. The Santa Clara Valley Groundwater Basin is composed of geologically young fluvial, alluvial fan, and basin deposits of clay, silt, sand, and gravel. The San Mateo Plain Subbasin covers approximately 48,100 acres and is bound by the Santa Cruz Mountains to the southwest, the San Francisco Bay to the northeast, San Francisquito Creek to the southwest, and the Westside basin to the northeast. The dominant geohydrologic feature is a large inland valley which is drained to the north by tributaries to San Francisco Bay. Natural groundwater recharge to the basins occurs primarily as infiltration from streambeds that exit the upland areas within the drainage basin and from direct percolation of precipitation that falls on the basin floor (Department of Water Resources 2004).

Water Quality

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has designated beneficial uses of water bodies in the county in the *Water Quality Control Plan for the San Francisco Bay Region* (Basin Plan) (2015). The designated beneficial uses of water bodies in the Basin Plan are shown in Table 16.

Table 16 Designated Beneficial Uses of Water Bodies in Menlo Park

Water Body	Designated Beneficial Uses
Surface Water	
San Francisco Bay, South	Commercial and sport fishing, estuarine habitat, industrial service supply, fish migration, navigation, preservation of rare and endangered species, water contact recreation, non-contact water recreation, shellfish harvesting, fish spawning, and wildlife habitat.
Groundwater	
Santa Clara Valley (San Mateo Plain Subbasin)	Municipal and domestic supply, industrial process supply, industrial service supply, and potential agricultural study.

Source: San Francisco Bay Area Regional Water Quality Control Board (RWQCB), Water Quality Plan for San Francisco Bay Area, 2015

The Basin Plan also contains water quality criteria for groundwater. Groundwater in the Santa Clara San Mateo Subbasin, which includes Menlo Park, is characterized as calcium magnesium carbonate water and the mineral content is very hard, averaging 471 milligrams per liter (Department of Water Resources 2004).

Regulatory Setting

Federal

Clean Water Act (CWA)

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The project site is within a watershed administered by the San Francisco Bay RWQCB.

Operational storm water discharges at Flood County Park are governed by the San Francisco Bay RWQCB's Municipal Regional Stormwater NPDES Permit (Order No. R2-2015-0049; NPDES Permit No. CAS612008). This Municipal Regional Stormwater Permit, referred to as an "MS4 General Permit," prohibits the discharge of non-storm water into storm drains and watercourses. Non-storm water discharges include substances such as sediment, oil, trash, pesticides, and herbicides.

During construction of individual projects that disturb more than one acre, storm water discharges must obtain NPDES coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Order No. 2009-0009-DWQ; NPDES No. CAS000002). Construction activities can comply with and be covered under the General Construction Permit provided that the permittee:

- Develops and implements a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) to prevent all construction pollutants from contacting storm

water and with the intent of keeping all products of erosion from moving offsite into receiving waters.

- Eliminates or reduces non-storm water discharges to storm sewer systems and other waters of the nation.
- Performs inspections of all BMPs.

Section 401 of the CWA requires that any activity which may result in discharges into a State waterbody must be certified by the RWQCB. This certification ensures that the proposed activity does not violate State and/or federal water quality standards. The limits of non-tidal waters extend to the Ordinary High Water Mark, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. The USACE may issue either individual, site-specific permits or general, nationwide permits for discharge into U.S. waters.

Section 303(d) of the CWA (CWA, 33 USC 1250, et seq., at 1313(d)) requires states to identify "impaired" waterbodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of TMDL requirements. The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

State

Porter-Cologne Water Quality Control Act

The SWRCB regulates water quality through the Porter-Cologne Water Quality Act of 1969, which contains a complete framework for the regulation of waste discharges to both surface waters and groundwater of the State. The City of Menlo Park is located within the jurisdiction of the San Francisco Bay Region RWQCB, which is responsible for the implementation of State and federal water quality protection statutes, regulations, and guidelines. The San Francisco Bay Region has developed a Water Quality Control Plan (Basin Plan) to show how the quality of the surface and groundwater in the San Francisco Bay Region should be managed to provide the highest water quality reasonably possible. The Basin Plan lists the various beneficial uses of water within the region, describes the water quality which must be maintained to allow those uses, describes the programs, projects, and other actions which are necessary to achieve the standards established in this plan, and summarizes plans and policies to protect water quality.

Local

San Mateo County Code of Ordinances

Chapter 4.100 of the San Mateo County Code of Ordinances (Storm Water Management and Discharge Control) contains discharge prohibitions and BMPs to prevent non-storm water discharges to the municipal separate storm sewer system (MS4). These BMPs include, but are not limited to, filter materials at catch basins to retain any debris and dirt flowing into the County's storm sewer system.

San Mateo County Erosion and Sediment Control Plan

The San Mateo County Planning and Building Department requires the submittal of an erosion and sediment control plan for review and approval prior to the issuance of any demolition, grading, or building permit that involves site disturbance. Although the County would not be required to obtain a grading permit for work on its own property, the County would elect to implement Best Management Practices for erosion control that would otherwise be required by this ordinance. These BMPs include but are not limited to stabilizing disturbed bare earth areas, using diversion berms to divert water from unstable or denuded areas, and directing water from construction areas to designated temporary filtration/detention areas.

Impact Analysis

Methodology and Significance Thresholds

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts related to hydrology and water quality would be significant if the project would:

1. Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash);
2. Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
3. Significantly 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 that would result in significant erosion or siltation on- or off-site;
4. Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
5. Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide significant additional sources of polluted runoff;
6. Significantly degrade surface or ground-water water quality; or
7. Result in increased impervious surfaces and associated increased runoff.

Project Impacts

Thresholds 1 and 6

Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

Significantly degrade surface or ground-water water quality.

Impact HWQ-1 : Construction and operation of the proposed recreational facilities could result in storm water runoff of pollutants such as sediment and nutrients. However, compliance with NPDES permit requirements and County landscaping standards would control sediment flow and maintain water quality. The project would have a less than significant impact on water quality.

Phase I

Construction of the proposed recreational elements in Phase I would involve ground disturbance of approximately nine acres. Because disturbed soils are susceptible to water erosion, storm water runoff during grading could result in sedimentation. However, Phase I would involve disturbance of soil on more than one acre and therefore would be subject to erosion control requirements stipulated in the NPDES Construction General Permit issued by the San Francisco Bay RWQCB. These requirements include the preparation and implementation of a SWPPP that contains BMPs for reducing storm water impacts. The purpose of a SWPPP is to identify potential sediment sources and other pollutants and prescribe BMPs to ensure that potential adverse erosion, siltation, and contamination impacts would not occur during construction activities. BMPs to protect water quality may include, but are not limited to, damp street sweeping, providing appropriate covers for outdoor material storage areas, and temporary cover of disturbed surfaces. Inspection of construction sites before and after storms would be also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Implementation of a SWPPP with BMPs would control erosion and protect water quality from potential contaminants in storm water runoff emanating from the construction site.

The installation of Phase I elements also would change the area of impervious surface at Flood County Park. While the County would replace the existing tennis courts and asphalt paths with new facilities of similar surface area, the proposed basketball court, tree-lined promenade, and a drop off location would incrementally increase the net area of impervious surface. During the operation of Phase I elements, storm water runoff from new impervious surfaces could wash pollutants and chemicals such as sediments, particulate matter, and oil into the local drainage system. Polluted runoff from impervious surfaces would degrade water quality. Exposed soil at the proposed pump track also could lead to erosion and siltation during storm events. In addition, the maintenance of trees lining the proposed promenade and new and replaced athletic fields (if natural surface) could involve fertilizer and pesticide applications that degrade water quality.

Adherence to the County's MS4 regulations and landscaping standards would protect water quality during the operation of Phase I elements. The project would be consistent with Chapter 4.100 of the San Mateo County Code of Ordinances, which is intended to prohibit non-storm water discharges to the MS4 drainage infrastructure. This ordinance would require the use of BMPs to prevent water pollutants such as sediment, trash, and waste products from entering the storm sewer system. Although park maintenance activities would not be subject to the prohibition on non-storm water discharges, pursuant to Section 4.100.080, the County would maintain vegetation in accordance with its adopted Integrated Pest Management Policy. County employees use "non-pesticide alternatives where feasible and, when necessary, employ the least toxic chemicals" (San Mateo County 2010). This practice would minimize water pollution from landscaping practices.

Therefore, construction and operation of Phase I improvements would not violate water quality standards or substantially degrade water quality. The impact on water quality would be less than significant.

Phases II and III

Whereas Phase I would involve larger-scale soil disturbance for construction of the proposed athletic fields, Phases II and III would involve less intensive grading for smaller recreational facilities. This would reduce the potential for erosion and sedimentation. In the event that Phase II and III activities disturb less than one acre, the County would not be required to obtain coverage under the NPDES Construction General Permit. However, the County would implement BMPs to control erosion and storm water discharge of sediment in compliance with Chapter 4.100 of the San Mateo County Code of Ordinances, minimizing adverse effects on water quality during construction.

New restrooms and pathways would incrementally increase the area of impervious surface, as could the proposed gathering plazas if paved. Maintenance of new demonstrations gardens and other landscaping also could involve the use of fertilizers and pesticides. Storm water runoff from these surfaces could wash pollutants and chemicals into the local drainage system. However, as discussed under Phase I, adherence to the County's MS4 regulations and landscaping standards would protect water quality during the operation of proposed recreational improvements. Therefore, Phases II and III would have a less than significant impact related to violating water quality standards or degrading water quality.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 2

Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Impact HWQ-2 : THE PROPOSED RECREATIONAL IMPROVEMENTS WOULD INCREMENTALLY INCREASE THE AREA OF IMPERVIOUS SURFACE AT FLOOD COUNTY PARK BUT TO THE EXTENT THAT GROUNDWATER RECHARGE WOULD BE REDUCED. THE PROJECT ALSO WOULD NOT DRAW ITS WATER SUPPLY FROM GROUNDWATER. THEREFORE, THE IMPACT TO GROUNDWATER SUPPLY AND RECHARGE WOULD BE LESS THAN SIGNIFICANT.

Phase I

As discussed in Impact HWQ-1, new recreational features in Phase I such as a basketball court, promenade, and drop off area would result in a very minor increase in the area of impervious surface at Flood County Park. This incremental change in impervious surface on a 24.5-acre site would not substantially reduce groundwater recharge. As discussed in Section 5, *Effects Found Not to Be Significant*, the Menlo Park Municipal Water District would continue to serve the project site with water supplied by the SFPUC's Hetch Hetchy Regional Water System. Local groundwater does not contribute to this water supply. Therefore, additional water demand to serve Phase I facilities would not deplete groundwater supplies. Phase I would have a less than significant impact on groundwater supplies or recharge.

Phases II and III

Similar to Phase I, the proposed Phase II and III recreational elements including restrooms, pathways, and gathering plazas could incrementally increase the area of impervious surfaces in the park. However, the modest increase in impervious surfaces associated with Phases II and III would not substantially interfere with groundwater recharge. In addition, the following proposed e: demonstration gardens, gathering meadow, and picnic areas would allow for groundwater recharge. Therefore, Phases II and III of the Landscape Plan would have a less than significant impact on groundwater supplies or recharge.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Thresholds 3, 4, 5, 7

Significantly 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 that would result in significant erosion or siltation on- or off-site.

Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide significant additional sources of polluted runoff.

Result in increased impervious surfaces and associated increased runoff.

Impact HWQ-3 : THE LANDSCAPE PLAN WOULD ALTER EXISTING DRAINAGE PATTERNS BY GRADING ACTIVITY AND THE ADDITION OF IMPERVIOUS SURFACES. HOWEVER, COMPLIANCE WITH NPDES REQUIREMENTS WOULD MINIMIZE EROSION AND AVOID A SUBSTANTIAL INCREASE IN SURFACE RUNOFF. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Phase I

Although the project would not directly affect any streams or rivers, construction of the proposed Phase I recreational facilities would alter the existing relatively flat topography of Flood County Park by grading on approximately nine acres. Soil would be imported to raise the ground surface at the reconstructed ballfield and soccer/lacrosse field by six inches. The proposed pump track would be shaped into berms, rollers, and jumps. As discussed in Impact HWQ-1, storm water runoff from disturbed soil during construction could result in erosion and sedimentation of nearby waterways. However, implementation of a SWPPP with BMPs to minimize storm water discharges during construction, preventing significant erosion or siltation offsite.

Phase I also would alter existing drainage patterns by demolition of paved areas (e.g., existing tennis courts, asphalt paths) and construction of new paved areas (e.g., basketball court, promenade, drop off area). In this phase of the Landscape Plan, the County would redevelop or create more than 10,000 of impervious, paved areas. For example, the proposed tennis courts would replace the existing tennis courts and have an estimated 13,000 square feet of paved surface area. As discussed

in Impact HWQ-1, Phase I would incrementally increase impervious surface area at the park, resulting in a modest increase in the volume of storm water runoff. Because the Landscape Plan is a redevelopment project that would create and/or replace at least 10,000 square feet of impervious surface, it would be subject to Provision C.3 requirements in the San Francisco Bay RWQCB's MS4 General Permit to control storm water flow. The County would be required to design and size storm water treatment systems to treat runoff from new and replaced impervious surfaces. In addition, Provision C.3 would require the implementation of Low Impact Development (LID) features to infiltrate, store, detain, or ensure biotreatment of storm water runoff. Specific LID features may include permeable pavement, rain gardens, bioretention units, bioswales, or planter/tree boxes.

By compliance with NPDES requirements for storm water discharges during construction and operation, Phase I would have a less than significant impact related to changes in drainage patterns, storm water runoff flow, and storm water drainage systems

Phases II and III

Similar to Phase I, the proposed recreational improvements in Phases II and III would not directly affect streams or rivers. While construction would alter existing drainage patterns, the County would implement BMPs to control erosion and storm water discharge in compliance with Chapter 4.100 of the San Mateo County Code of Ordinances. In addition, implementation of a SWPPP with BMPs to minimize storm water discharges would be required if Phase II and III activities disturb less than one acre. Compliance with regulatory requirements would minimize erosion and siltation.

Phase II and III recreational elements including restrooms, pathways, and gathering plazas also could incrementally increase the area of impervious surfaces in the park. As for Phase I, compliance with Provision C.3 requirements in the San Francisco Bay RWQCB's MS4 General Permit would prevent excessive storm water flow from the project site. Therefore, Phases II and II would have a less than significant impact related to changes in drainage patterns, storm water runoff flow, and storm water drainage systems.

MITIGATION MEASURE

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Cumulative Impacts

Cumulative development in the project vicinity would generally increase soil erosion and urban pollutants, demand on groundwater resources, and introduce impermeable surfaces. However, other cumulative projects would be subject to the same laws and regulations to avoid or minimize adverse effects associated with water quality, groundwater, and drainage pattern alterations as the proposed project. As described above, the proposed project would not result in significant impacts to hydrology and water quality, and would not cause, accelerate, or otherwise exacerbate off-site impacts related to hydrology and water quality. Therefore, the proposed project would not result in cumulatively considerable impacts to hydrology and water quality.

4.8 Noise

This section evaluates the project's potential impact to local noise conditions. Both temporary construction noise and long-term noise generated by the project are evaluated.

Setting

Overview of Noise and Vibration Measurement

Noise

Noise is defined as unwanted sound that disturbs human activity. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with human hearing response, which is most sensitive to frequencies around 4,000 Hertz (similar to the highest note on a piano) and less sensitive to frequencies below 100 Hertz (similar to a transformer hum).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since nighttime noise tends to disturb people more than daytime noise. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dB penalty for noise occurring during the evening (7:00 PM to 10:00 PM). Noise levels described by Ldn and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and Ldn are often used interchangeably.

Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Groundborne vibration related to human annoyance is generally related to root mean square (RMS) velocity levels expressed in vibration decibels (VdB). However, construction-related groundborne vibration in relation to its potential for building damage can also be measured in inches per second (in/sec) peak particle velocity (PPV) (Federal Transit Administration 2006). Based on the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* and the Caltrans') *1992 Transportation-Related Earthborne Vibration, Technical Advisory*, vibration levels decrease by 6 VdB with every doubling of distance.

The background vibration velocity level in residential and educational areas is usually around 50 VdB. (FTA 2006). The threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Noise-Sensitive Receptors

Policy 16.7 in the County of San Mateo's General Plan (1986) defines noise-sensitive land uses as including, but not limited to, residences and institutional uses such as hospitals, schools, and libraries. Flood County Park is surrounded by single-family residential neighborhoods that are sensitive to noise. The nearest single-family residences to the project site are located adjacent to the southeast edge of Flood County Park on Del Norte Avenue and to the northwest on Hedge Road, both within the city limits of Menlo Park, and across Bay Road to the southwest in the town of Atherton. At the residences south of Bay Road, outdoor activity areas such as front yards and basketball courts are located as close as approximately 75 feet from Flood County Park. In addition, the Haven Family House, which provides transitional housing to homeless people, is located adjacent to the northeast side of the park.

Local jurisdictions apply more stringent standards for noise exposure to noise-sensitive receptors than to commercial or industrial uses that are not susceptible to sleep disturbance or other adverse effects. Sensitive land uses generally should not be subjected to noise levels that would be considered intrusive in character. Therefore, the location, hours of operation, type of use, and extent of new development warrant close analysis in an effort to ensure that noise-sensitive receptors are not substantially affected by noise.

It is important to acknowledge that noise-sensitivity varies not only among land uses but also among individual people at each land use (Menlo Park 2013). For example, individual residents may have high sensitivity to noise for physiological reasons or because of unusual sleeping hours that result in greater sensitivity to daytime noise. Nonetheless, the quantitative noise standards in local ordinances are set with the intention of preserving the peace and quiet of "persons of normal sensitivities," as phrased in Section 4.88.220 of the San Mateo County Ordinance Code.

Existing Noise Conditions and Sources

The primary existing sources of noise near Flood County Park are motor vehicles (e.g., automobiles, buses, trucks, and motorcycles) and aircraft overflights. Roadways that generate noise at Flood County Park and surrounding neighborhoods include U.S. 101, Bay Road, and other local residential streets such as Del Norte Avenue. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and because of its proximity to noise-sensitive uses. Airplanes also fly over and near Flood County Park on a frequent basis, taking off from and descending to airports such as San Francisco International Airport (about 13.5 miles to the northwest) and San Carlos Airport (about 4.5 miles to the northwest). Secondary sources of noise in the vicinity include recreational use and maintenance activities at Flood County Park and the operation of landscaping equipment at nearby residences.

To quantify existing noise levels on and near the project site, five 15-minute noise measurements (Leq[15] dBA) were taken using an ANSI Type II integrating sound level meter. Three measurements were taken on a Sunday afternoon at Flood County Park, April 9, 2017. These measurements were located at the children's playground, a picnic area at the southeast edge of the site, and the tennis court near the eastern corner of the site. These measurement locations were intended to be representative of on-site noise levels from weekend recreational activities, U.S. 101, and aircraft overflights. An additional two weekday measurements were taken on January 19, 2017, along Bay Road and Del Norte Avenue during P.M. peak hours. These measurements are representative of existing exposure of adjacent single-family residences to traffic noise. Figure 12 shows the location of these noise measurements, and Table 17 summarizes the noise monitoring results.

Table 17 Noise Measurement Results

Measurement Location[1]	Description	Primary Noise Sources	Approximate Sample Time	Leq dBA[2]
1	Flood County Park: children's playground	Children shouting	1:50 – 2:05 P.M.	58.6
2	Flood County Park: southeast picnic area	Airplanes	2:13 – 2:28 P.M.	54.8
3	Flood County Park: east of tennis courts	U.S. 101 traffic, airplanes	2:32 – 2:47 P.M.	56.3
4	Bay Road adjacent to park	Bay Road	5:29 – 5:44 P.M.	70.0
5	Del Norte Avenue near Iris Lane	U.S. 101 traffic, airplanes	5:51 – 6:06 P.M.	56.1

[1] Figure 12 shows the noise measurement locations.

[2] Measurements 1-3 were taken on April 9, 2017, and measurements 4-5 were taken on January 19, 2017.

Refer to Appendix G for noise measurement results.

As shown in Table 17, existing sound levels at Flood County Park vary by location. Near popular park amenities like the children's playground, the primary noise source is recreational activity. In passive recreational areas near Del Norte Road, where human recreational activity is more dispersed, the primary noise sources are constant traffic flow on U.S. 101 and occasional aircraft overflights. Because of the proximity of Flood County Park to airports such as San Francisco International, San Carlos Airport, and Palo Alto Airport, aircraft fly over and near the site at a relatively low altitude and generate more noise do than typical overflights. Peak-hour traffic on Bay Road generates the highest noise levels near the project site (up to approximately 70 dBA Leq), as indicated by noise measurement 4 taken next to a single-family residence on Bay Road, adjacent to the park's southern corner.

Figure 12 Noise Measurement Locations

Regulatory Setting

State

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements establishing uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Specifically, Section 1207.4 in Title 24 states that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA Ldn or CNEL in any habitable room of a new building.

While there are no State standards for vibration, for continuous, frequent, and intermittent vibration, Caltrans considers the architectural damage risk level to be somewhere between 0.08 and 0.5 inches per second (in/sec) peak particle velocity (PPV) depending on the type of building that is affected.

Local

San Mateo County Code of Ordinances

Chapter 4.88 (Noise Control) of the San Mateo County Code of Ordinances is intended to protect noise-sensitive receptors from annoying or disturbing noise generated at nearby properties. Section 4.88.330 sets maximum exterior noise levels for activities on properties in the unincorporated County, as measured at noise-sensitive receptors in either incorporated or unincorporated areas. Table 18 shows these exterior noise standards. Higher noise levels are permitted for shorter amounts of time in any one-hour time period. The exterior noise standards are more stringent during nighttime hours from 10 P.M. to 7 A.M.

Table 18 Exterior Noise Standards, dBA

Category	Cumulative Number of Minutes in Any One Hour Time Period	Daytime 7 A.M.—10 P.M.	Nighttime 10 P.M.—7 A.M.
1	30	55	50
2	15	60	55
3	5	65	60
4	1	70	65
5	0	75	70

Source: San Mateo Code of Ordinances, Section 4.88.330.

In the event the measured background noise level exceeds the applicable noise level standard in any category above, the County adjusts the applicable standard in five (5) dBA increments so as to encompass the background noise level.

Table 19 shows the County's interior noise standards at dwelling units, as written in Section 4.88.340.

Table 19 Interior Noise Standards, dBA

Category	Cumulative Number of Minutes in Any One Hour Time Period	Daytime 7 A.M.—10 P.M.	Nighttime 10 P.M.—7 A.M.
1	5	45	40
2	1	50	45
3	0	55	50

Source: San Mateo Code of Ordinances, Section 4.88.340.

In addition to these quantitative noise standards, Section 4.88.350 sets a qualitative standard prohibiting "any unreasonably loud, unnecessary, or unusual noise which disturbs the peace and quiet of any neighborhood or which causes any discomfort or annoyance to any person of normal sensitivity residing in the area."

The County's noise ordinance also exempts certain activities from quantitative noise standards. Section 4.88.360(c) exempts noise generated by "activities conducted on parks, public playgrounds and school grounds provided such parks, playgrounds and school grounds are owned and operated by a public entity." According to this County standard, noise generated by recreational and maintenance activities at Flood County Park would not be subject to exterior or interior standards. Section 4.88.360(e) also exempts construction activity, provided that such activity does not take place between the hours of 6:00 P.M. and 7:00 A.M. on weekdays, 5:00 P.M. and 9:00 A.M. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas.

Impact Analysis

Methodology and Significance Thresholds

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the project. Impacts would be significant if they would exceed the following significance criteria, based on San Mateo County's *Initial Study Environmental Evaluation Checklist*:

1 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;

2 Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

3 A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

4 A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

5 For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels; or

6 For a project within the vicinity of a private airstrip, exposure to people residing or working in the project area to excessive noise levels.

Because Flood County Park is not located within the area covered by an airport land use plan, the proposed Landscape Plan would not increase recreational users' exposure to excessive aircraft noise. Criteria 5 and 6 related to aircraft noise are discussed in Section 5, *Effects Found Not to Be Significant*.

Construction Noise

This analysis estimates noise levels generated by the use of expected heavy equipment during construction of Landscape Plan elements. A preliminary list of construction equipment was derived from the California Emissions Model (CalEEMod) run prepared for the project (see Section 4.2, *Air Quality*). Construction noise is quantified based on reference noise levels reported by the Federal Transit Administration (FTA 2006) for various pieces of construction equipment at a distance of 50 feet between source and receiver. Reference noise levels from the FTA's *Noise and Vibration Impact Assessment* are used to estimate noise levels at nearby sensitive receptors, assuming a standard noise attenuation rate of 6 dBA per doubling of distance for point sources. For the purpose of this analysis, it is assumed that construction equipment would operate no closer than 25 feet to residences adjacent to Flood County Park, for two reasons. First, construction activity would typically occur in the body of the park, rather than at property lines. Second, when calculating construction noise based on reference noise levels that apply to a 50-foot distance, noise levels begin to artificially inflate at much closer distances.

As a reasonable worst-case scenario, this analysis also estimates cumulative noise from the simultaneous construction of three recreational facilities at Flood County Park. The Landscape Plan would have a significant impact if construction noise occurs outside of the County's allowed hours (i.e., between 6:00 P.M. and 7:00 A.M. on weekdays, 5:00 P.M. and 9:00 A.M. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas).

Groundborne Vibration

In the absence of County standards for sources of vibration, this analysis of vibration generated during construction of recreational facilities relies on federal standards. The following vibration thresholds established by the FTA for disturbance of people are applied: 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). These thresholds apply to "frequent events," which the FTA defines as vibration events occurring more than 70 times per day. The thresholds for frequent events are considered appropriate because it is assumed that bulldozers would be used during grading of proposed athletic fields and that they could make more than 70 discrete movements per day when moving earth.

In addition, this analysis applies thresholds in the FTA's *Transit Noise and Vibration Impact Assessment* (2006) for potential damage to historic adobe buildings at Flood County Park. These thresholds are expressed in terms of both maximum inches per second (in/sec) of peak particle velocity (PPV) and VdB:

Table 20 Thresholds for Building Damage from Construction Vibration

Building Category	Maximum PPV (in/sec)	Approximate L_v
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2006.

[1] Magnitude of vibration is expressed in decibel notation (VdB), in terms of "root-mean-square" amplitude referenced to 1 micro-inch per second.

in/sec = inches per second

PPV = peak particle velocity

Vibration generated by construction equipment would have a potentially significant impact from damage to adobe buildings if it exceeds the FTA threshold of 0.2 PPV (in/sec) for non-engineered timber and masonry buildings. A formula provided by FTA is used to calculate the attenuation of vibration from a reference distance of 25 feet to the distances of the nearest noise-sensitive receptors:

$$PPV = PPV_{ref} \times (25/D)^{1.5} \text{ (in/sec)}$$

This formula takes into account the reference vibration level (PPV_{ref}), the distance from vibration-generating equipment to the receptor (D), and a constant value related to the attenuation rate through the ground (1.5).

On-Site Operational Noise

It is assumed that the operation of recreational facilities proposed in the Landscape Plan would generate on-site noise from organized athletic activities and maintenance equipment such as leaf blowers. In addition, it is assumed that the use of athletic field could involve sound-amplifying equipment. This analysis estimates noise levels from athletic activities at the proposed soccer/lacrosse field based primarily on reference noise levels reported in a comprehensive noise study prepared by RGD Acoustics in August 2016 for lacrosse and soccer practices and games at Marin Catholic High School in Kentfield, California. This noise study graphs the fluctuation of noise levels during individual athletic events and breaks noise into components of crowd noise and whistles. Using these reference noise levels, this analysis estimates noise levels at the distance of the nearest noise-sensitive receptors along Del Norte Avenue assuming 6 dBA attenuation of noise per doubling of distance. In addition, anticipated noise from athletic events is compared to existing measured ambient noise levels in the vicinity of Flood County Park. Noise from leaf blowers is estimated at the nearest residences based on noise measurements taken at the park.

This section evaluates on-site operational noise based on qualitative standards in the County Code of Ordinances. Because the County as lead agency is applying its noise standards to this project, and Section 4.88.360(c) of the San Mateo County Code of Ordinances exempts noise generated by activities conducted at publicly owned and operated parks, recreational and maintenance activities at Flood County Park would not be subject to quantitative noise standards. However, pursuant to Section 4.88.350 of the County Code of Ordinances, on-site operational noise would be significant if

it "disturbs the peace and quiet of any neighborhood or which causes any discomfort or annoyance to any person of normal sensitivity residing in the area."

Roadway Noise

Noise levels associated with existing and future traffic along area roadways are estimated by completing a screening analysis for traffic generated by the Landscape Plan. This analysis considers the project's impacts under three traffic scenarios analyzed in the Traffic Impact Study prepared by W-Trans in May 2017 (see Appendix H). The traffic noise impact under the Existing + Project scenario is discussed for informational purposes. Because the Landscape Plan would be implemented in phases, the project would not immediately add vehicle trips to existing traffic conditions. The Near-Term 2021 + Project scenario, discussed in the cumulative noise analysis, is reflective of the addition of vehicle trips associated with Phase I to existing traffic and already approved cumulative projects. In addition, the cumulative noise analysis considers the Landscape Plan's long-term effect on traffic noise under Cumulative 2040 + Project conditions. This cumulative forecast was developed assuming the development of approved and pending projects in the Menlo Park area and a growth rate to account for growth in regional traffic. The analysis of traffic noise assumes that project-generated trips would be distributed among area roadways as shown in Table 9 in the Traffic Impact Study (W-Trans 2017).

Modeling of traffic noise indicates that, in general, a 10 percent increase in traffic volume would raise traffic noise by approximately 0.4 dBA, a 20 percent increase would raise traffic noise by about 0.8 dBA, a 30 percent increase would result in an approximately 1.1 dBA increase in traffic noise, and a 40 percent increase would increase traffic noise by about 1.5 dBA. While the County has not adopted standards for an increase in traffic noise due to a project, this screening analysis evaluates the Landscape Plan's effect on traffic noise based on the FTA's recommended standards. The FTA recommendations, listed in Table 21, are based on the idea that the allowable increase in exposure to traffic noise depends on existing noise levels; as the existing noise level rises, the allowable increase in noise exposure decreases.

Table 21 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA Ldn or Leq)	Maximum Noise Exposure Increase (dBA Ldn or Leq)
45-50	7
50-55	5
55-60	3
60-65	2
65-74	1
75+	0

Source: FTA 2006.

This analysis also considers the effects on residential exposure to traffic noise from the proposed removal of redwood trees on-site.

Project Impacts and Mitigation Measures

Threshold 4

A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact N-1	Construction of proposed recreational facilities would generate high noise levels on and adjacent to the project site. However, construction noise would be temporary, and adherence to the County's allowed hours of construction would prevent noise disturbance during sensitive evening and nighttime hours. Therefore, the impact from construction noise would be less than significant.

Phase I

Construction of the proposed Phase I elements over an anticipated two-year period would intermittently generate high noise levels on and adjacent to Flood County Park. Construction activity would primarily occur in the northern portion of the park for the ballfield replacement, new soccer/lacrosse field, and new tennis courts. During the demolition phase, the County would use jackhammers to break up existing paved surfaces in the northern part of the park, including the two tennis courts and asphalt paths, and bulldozers or similar heavy equipment to demolish the existing Restroom D building. It is expected that site preparation and grading for new utilities and athletic fields would involve the use of bulldozers, excavators, graders, and backhoes. The construction of new asphalt paths, tennis courts, and a basketball court could require the use of pavers and rollers.

Table 22 estimates maximum noise levels from construction equipment based on the combined use of construction equipment anticipated to be used concurrently during each phase of construction. Noise levels are shown for a reference distance of 50 feet from the source equipment and at other distances that correspond to various noise-sensitive receptors. Forty feet is representative of the distance between the closest edge of the existing tennis courts (to be demolished) to the adjacent residence on Del Norte Avenue, 50 feet is representative of the closest potential utility work to residences south of Bay Road, 80 feet is representative of the estimated distance between grading activity at the southeastern edge of the park and residences on Del Norte Avenue, and 115 feet is representative of the distance between paving activity at the new tennis courts and adjacent residences on Del Norte Avenue. The noise levels shown in Table 22 are highly conservative because they assume the use of construction equipment next to the nearest residences, even though most construction activity would occur farther from the site boundary, and simultaneous grading and construction of three recreational facilities.

Table 22 Maximum Estimated Noise Levels by Construction Phase

Construction Phase	Equipment	Estimated Noise Levels at Nearest Sensitive Receptors (dBA Leq)			
		40 feet	50 feet	80 feet	115 feet
Demolition	Dozer, Jackhammer, Saw	86	84	80	77
Site Preparation	Backhoe, Dozer	82	80	81	78
Grading	Backhoe, Dozer, Excavator, Grader	86	84	85	82
Facility Construction	Backhoe, Forklift, Generator, Welder	82	81	81	78
Paving	Cement Mixer, Paver, Roller	85	83	79	75

Source: FTA 2006 and 2012. See Appendix G for equipment noise impact data sheets and assumptions.

Based on Table 22, noise-sensitive receptors would experience the loudest noise during demolition of the existing tennis courts, with noise levels reaching an estimated 86 dBA Leq at the nearest residences located 40 feet to the southeast. Grading would cause noise levels estimated at 85 dBA Leq at residences on Del Norte Avenue. In addition, grading and excavation for new utilities extending from Bay Road also would generate estimated noise levels approaching 84 dBA Leq at residences located 50 feet to the south.

These temporary noise levels during construction would exceed the existing ambient noise levels of approximately 56 dBA Leq along Del Norte Avenue and 70 dBA Leq during peak-hour traffic on Bay Road. However, construction activity would be prohibited outside of the County's allowed daytime hours (i.e., between 6:00 P.M. and 7:00 A.M. on weekdays, 5:00 P.M. and 9:00 A.M. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas). This timing restriction would prevent construction noise during the most sensitive evening and nighttime hours. Therefore, the construction of Phase I elements would have a less than significant impact on nearby noise-sensitive receptors.

Phases II and III

Phases II and III of the Landscape Plan would involve less intensive ground disturbance than would Phase I. No demolition of buildings would occur, paving activity would be limited to new pathways and potentially gathering plazas, and grading activity would be of a smaller scale than for Phase I (restricted to individual recreational improvements such as restrooms, a playground, and gathering plazas). Because the impact from construction noise would be less than significant for Phase I, and construction activity would be of smaller scale during later phases, this impact would also be less than significant for Phases II and III.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 2

Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.

Impact N-2	Grading activity would temporarily generate groundborne vibration on and adjacent to Flood County Park. Because construction of proposed recreational elements would occur inside the hours allowed in the County Code of Ordinances, it would not generate vibration when people normally sleep. Construction vibration would not exceed levels that may cause structural damage to historic adobe buildings on-site. The Landscape Plan would have a less than significant vibration impact.

Phase I

During Phase I of the Landscape Plan, construction of the proposed recreational elements would involve the temporary use of equipment that generates groundborne vibration. The County would use jackhammers to break up existing paved surfaces in the northern part of the park, including the two tennis courts and asphalt paths, and bulldozers to move earth over approximately nine acres. Bulldozers or similar heavy equipment might be used to demolish the existing Restroom D building. In addition, it is expected that vibratory rollers would be used to pave and compact asphalt at the new tennis courts near the southeastern property line.

Table 23 identifies vibration velocity levels at a reference distance of 25 feet and at distances that correspond to various noise-sensitive receptors. Forty feet is representative of the distance between the closest edge of the existing tennis courts (to be demolished) to the adjacent residence on Del Norte Avenue, 80 feet is representative of the estimated distance between grading activity at the southeastern edge of the park and residences on Del Norte Avenue, and 115 feet is representative of the distance between paving activity at the new tennis courts and adjacent residences on Del Norte Avenue. The vibration levels shown in Table 23 are conservative because they assume the use of construction equipment next to the nearest residences, even though most construction activity would occur farther from the site boundary, and the use of large as well as small bulldozers.

Table 23 Vibration Levels for Construction Equipment at Noise-Sensitive Receptors

	Estimated VdB at Nearest Sensitive Receptors			
Equipment	**25 Feet**	**40 Feet**	**80 Feet**	**115 Feet**
Vibratory Roller	94	88	79	75
Large Bulldozer	87	81	72	67
Jackhammer	79	73	64	59
Small Bulldozer	58	51	42	38

Source: FTA 2006.

Based on Table 23, noise-sensitive receptors would experience the strongest vibration during paving of the new tennis courts, with vibration levels reaching an estimated 75 VdB at the nearest residences located 115 feet to the southeast. Jackhammering of the existing tennis courts also would generate vibration levels reaching an estimated 73 VdB at the nearest residence 40 feet away (on Del Norte Avenue). The use of large bulldozers during grading near the southeastern property

line for the proposed soccer/lacrosse field would generate similar vibration levels of approximately 72 VdB at residences on Del Norte Avenue.

Compliance with Section 4.88.360(e) of the San Mateo County Code of Ordinances would restrict construction activities to daytime hours that are generally outside of normal sleeping hours, i.e., 7:00 A.M. to 6:00 P.M. on weekdays and 9:00 A.M. to 5:00 P.M. on Saturdays. This timing restriction on construction activity would limit the exposure of nearby residences to vibration. Vibration levels would not exceed the FTA's threshold of 72 VdB for residences during normal sleeping hours. As discussed in the Setting, it is acknowledged that individual neighbors of Flood County Park may have unusual sleeping hours that result in greater sensitivity to daytime noise and vibration. Nonetheless, noise standards are typically drafted with normal sensitivity in mind. Therefore, vibration would not have significant adverse effects on residences.

Construction equipment would also generate vibration that affects nearby structures. High vibration levels could damage the structural integrity of adobe buildings at the park. Table 24 shows vibration levels at adobe buildings at distances of 25, 50, and 350 feet. The 25-foot reference distance is conservatively representative of the nearest distance between construction activity that generates vibration and adobe buildings that would remain under the Landscape Plan, such as the adobe electrical and maintenance buildings. Three hundred fifty feet is representative of the distance between vibratory rollers used to pave and compact asphalt at the new tennis courts and the nearest remaining adobe building (the electrical building).

Table 24 Vibration Levels for Construction Equipment at Adobe Buildings

	Approximate in/sec PPV at Nearest Noise-Sensitive Receptors		
Equipment	**25 Feet**	**50 Feet**	**350 Feet**
Vibratory Roller	0.210	0.074	0.004
Large Bulldozer	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Small Bulldozer	0.003	0.001	0.000

Source: FTA 2006.

As shown in Table 24, vibration levels of up to an estimated 0.089 in/sec PPV at adobe buildings would not exceed the FTA threshold of 0.2 PPV (in/sec) for non-engineered timber and masonry buildings. Although rollers generate substantial vibration at close range, they would generate minimal vibration (0.004 in/sec PPV) at a distance of 350 feet from the nearest remaining adobe building. Therefore, construction activities during Phase I would not be expected to generate vibration levels that cause structural damage to historic adobe buildings. Vibration impacts during Phase I would be less than significant.

Phases II and III

Phases II and III of the Landscape Plan would involve less intensive ground disturbance than would Phase I. No demolition of buildings would occur, paving activity would be limited to new pathways and potentially gathering plazas, and grading activity would be of a smaller scale than for Phase I (restricted to individual recreational improvements such as restrooms, a playground, and gathering plazas). Because vibration impacts would be less than significant for Phase I, and construction

activity would be of smaller scale during later phases, vibration impacts would also be less than significant for Phases II and III.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Thresholds 1 and 3

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;

A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact N-3	The Landscape Plan would add new sources of on-site operational noise from organized practices and games at the proposed athletic fields and performances at the proposed gathering meadow. Noise from whistles, sound amplification equipment, or air horns could disturb nearby residents. The impact from on-site operational noise would be less than significant with mitigation to prohibit the loudest equipment and restrict the timing of athletic events.

Phase I

The operation of recreational facilities proposed in Phase I of the Landscape Plan would add new sources of noise at Flood County Park. Whereas existing ballfields at the park are not open for programmed athletic use, the proposed ballfield and soccer/lacrosse field would be available for organized athletic activities that would generate noise. Maintenance equipment such as leaf blowers also would generate noise at new locations in the park, depending on the siting of proposed tennis courts and asphalt paths. In addition, human activity at new passive recreational facilities would generate noise. These noise sources are analyzed below.

ATHLETIC ACTIVITIES

Organized practices and games at the proposed ballfield and soccer/lacrosse field would generate noise. As shown by Table 6 in Section 2, *Project Description*, programmed athletic activities would occur throughout the year, although the County anticipates that they would generally be most frequent during the summer. On a daily basis, it is anticipated that organized activities at the athletic fields would occur no earlier than 9 A.M. and no later than 8 P.M. No additional lighting that would enable nighttime use of athletic facilities is proposed as part of the Landscape Plan.

Specific noise sources associated with athletic practices and games include shouting and conversations by players, coaches, referees, and spectators, and whistles to control play. Other potential sources are air horns used by fans and sound amplification equipment to broadcast music or play-by-play commentary. These noise sources would be intermittent during athletic events, adding to background ambient noise from passive recreational use of the park, nearby traffic, aircraft overflights, and residential activities.

Noise from the proposed soccer/lacrosse field would occur as close as approximately 100 feet from the backyards of single-family residences on Del Norte Avenue to the southeast, based on the

proposed Landscape Plan shown in Figure 4 in Section 2, *Project Description*. It is assumed that this distance is representative of the nearest activity on the proposed field with respect to these residences, as well as of spectators lining the southeastern side of the field. In addition, athletic activity at the reconstructed ballfield would generate noise as close as approximately 150 feet from residents at Haven Family House on Van Buren Road to the northeast, 175 feet from residences on Hedge Road to the northwest, and 330 feet from residences on Del Norte Avenue to the southeast.

The primary athletic facility of concern with regard to noise is the proposed soccer/lacrosse field, due to its proximity to residences and the prevalence of loud impulse sounds such as whistles, shouts, and air horns. Based on noise measurements taken in 2016 at a playoff lacrosse game with 162 spectators at a representative suburban Bay Area site, Marin Catholic High School, a lacrosse game generates overall noise levels of 65-70 dBA Leq at the edge of the stadium while a lacrosse practice creates noise levels of 55-60 dBA Leq (RGD Acoustics 2016). These noise measurements were taken at a distance of approximately 50 feet from the edge of the lacrosse field. Assuming that noise from athletic activity attenuates by 6 dBA per doubling of distance from the source, it is estimated that lacrosse activity at Flood County Park would generate noise levels of 59-64 dBA Leq during games and 49-54 dBA Leq during practices, as perceived at residences located 100 feet away on Del Norte Avenue. Noise levels measured from the lacrosse playoff game are considered representative of noise from soccer games (RGD Acoustics 2016).

Average sound energy levels during lacrosse and soccer games may exceed existing ambient noise levels in the vicinity of Flood County Park. As shown in Table 17, ambient noise was measured at approximately 55-56 dBA Leq on a Saturday afternoon at the southeastern edge of the park, next to residential backyards, and at approximately 56 dBA Leq on Del Norte Avenue on a weekday late afternoon. Anticipated noise levels of 59-65 dBA Leq during lacrosse and soccer games would exceed existing ambient noise levels by an estimated 3 to 9 dBA Leq. These short-term increases in ambient noise would be perceptible to residents adjacent to the park.

In addition to increasing average noise levels, athletic activity would generate short-term spikes in noise, such as impulse noise, that may annoy or disturb residents. Impulse noise is a sudden burst of loud noise that can startle people by its fast and surprising nature (Cirrus Research 2015). Sources of impulse noise may include shouting, whistles, and air horns. Whistles could be especially intrusive because of their shrill pitch. Spectators could use portable air horns that produce loud blasts of sound. Sound amplification equipment also could broadcast commentary or music at high volume.

Although Section 4.88.360(c) of the County Code of Ordinances would exempt activities at Flood County Park from quantitative noise standards, the qualitative standard in Section 4.88.350 of disturbing the peace and quiet of neighbors would still apply to the Landscape Plan. The anticipated timing of athletic events – between 9 A.M. and 8 P.M. – would minimize disturbance to neighbors by avoiding normal sleeping hours. However, the use of whistles, air horns, and sound amplification equipment could cause discomfort or annoyance to people of normal sensitivity in the area. Furthermore, without explicit allowable hours for athletic events, early-morning and late-evening events could disturb the peace and quiet of neighbors.

MAINTENANCE ACTIVITIES

Current maintenance activities at Flood County Park, especially the use of lawn mowers and leaf blowers, periodically generate noise. After the construction of proposed recreational facilities, the County would operate such maintenance equipment in new locations within the park. Lawn mowers would be used to cut grass in fields used for passive recreation and in athletic fields (unless artificial turf is installed). Because County employees currently use this equipment to cut grass adjacent to

the southeastern park boundary, the proposed Landscape Plan would not result in the use of lawn mowers closer to residences on Del Norte Avenue. Noise levels would lawn mowers would not increase over existing conditions.

The County also uses leaf blowers to clear paved surfaces such as the existing tennis courts and asphalt paths. The existing tennis courts are located as close as approximately 40 feet from the backyards of residences on Del Norte Avenue. Based on the proposed Landscape Plan shown in Figure 4, new asphalt paths could be built as close as approximately 75 feet from the backyards of residences on Del Norte Avenue, and the new tennis courts would be located about 115 feet from these noise-sensitive receptors. Maximum noise levels from leaf blowers at Flood County Park's existing tennis courts were measured at 76 dBA at a distance of 140 feet. Assuming that noise from this source attenuates by 6 dBA per doubling of distance, it is estimated that leaf blowers would generate a maximum noise level of 81 dBA at a distance of 75 feet from residential backyards. However, noise levels from leaf blowers would not increase over existing conditions because the proposed asphalt paths would be located no closer than the existing tennis courts to residences.

PASSIVE RECREATION

Phase I of the Landscape Plan would involve the construction of new passive recreational facilities including walking paths and a promenade. Similar to existing paths at the park, these features would provide opportunities for walking, bicycling, and human conversations. Therefore, they would not result in increased noise levels from recreational activity.

CONCLUSION

During organized athletic practices and games, the use of whistles, air horns, and sound amplification equipment could cause discomfort or annoyance to nearby residents. Early-morning or late-evening athletic events also could disturb the peace and quiet of residents. These adverse effects would represent a potentially significant impact from on-site operational noise.

Phases II and III

While Phase I would involve the construction of large athletic fields, the second and third phases would add lower-intensity recreational elements such as gardens, a playground, picnic areas, gathering plazas, a gathering meadow, and pathways with exercise stations. These elements would largely support activities similar those in the existing playground, group and individual picnic areas, and pathways. However, the gathering meadow in Phase II would be a performance space suitable for concerts or ceremonies that could involve the use of sound amplification equipment for music or commentary. The central location of this gathering meadow at the park, approximately 475 feet from the nearest residences on Del Norte Avenue, Bay Road, and Hedge Road, would reduce the exposure of noise-sensitive receptors to noise from this facility. Nonetheless, the use of sound amplification equipment at high volume during large events could produce noise that disturbs nearby residents.

MITIGATION MEASURES

MM N-3(A) PROHIBIT SOUND AMPLIFICATION EQUIPMENT AND AIR HORNS

The County shall only allow the use of sound amplification equipment and air horns at organized athletic games and practices and at the gathering meadow with the procurement of a special event permit in accordance with City of Menlo Park procedures. The County shall notify all groups using

the proposed soccer/lacrosse field, ballfield, and gathering meadow of this requirement. County staff shall periodically patrol the park during organized athletic events and performances to verify that park users are not operating such equipment without an approved special event permit.

MM N-3(B) TIMING OF ATHLETIC EVENTS

To minimize noise that may disturb neighbors of Flood County Park, the County shall restrict athletic practices and games at the park to the hours of 9 A.M. to 8 P.M.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure N-3(a) would prohibit the use of equipment that generates especially loud impulse noise during organized athletic events and performances without approval of a special event permit, while Mitigation Measure N-3(b) would restrict the timing of athletic events to prevent noise during normally quiet early-morning or late-evening hours. Even with implementation of these measures, events at Flood County Park would incrementally increase ambient noise levels. However, these measures would prevent the most adverse effects from loud equipment or the timing of events at proposed recreational facilities, reducing on-site operational noise to a less than significant level.

Thresholds 1 and 3

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;

A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact N-4	Vehicle trips associated with operation of the proposed recreational elements would increase traffic volumes on nearby roadways, resulting in greater traffic noise audible to existing noise-sensitive residences. However, the increase of vehicle trips from the project relative to existing traffic would be incremental and would not exceed the applicable FTA standard of 1 dBA Leq. Therefore, traffic noise impacts would be less than significant.

New vehicle trips associated with organized athletic events at the proposed athletic fields and with continued growth in passive recreational use under the Landscape Plan would increase traffic volumes on roadways near Flood County Park. This increase in traffic volumes would result in greater traffic noise at nearby noise-sensitive receptors.

Table 25 shows the net increase in roadway traffic volumes along the studied roadway segments with the greatest increase in traffic for the A.M. and P.M. peak hours, according to traffic data in the Traffic Impact Study prepared by W-Trans in May 2017 (see Appendix H).

Table 25 Increase in Existing Roadway Traffic Volumes with Project during Weekday P.M. and Saturday Peak Hours

Roadway Segment	Existing Trips	Net Increase in Trips	Percentage Increase in Trips
Weekday P.M. Peak Hour			
Bay Road: Marsh Road to Ringwood Avenue	465	23	4.9%
Bay Road: Ringwood Avenue to Willow Road	909	16	1.8%
Ringwood Avenue south of Bay Road	865	44	5.1%
Saturday Peak Hour			
Bay Road: Marsh Road to Ringwood Avenue	313	14	4.5%
Bay Road: Ringwood Avenue to Willow Road	304	8	2.6%
Ringwood Avenue south of Bay Road	322	22	6.8%

Source: W-Trans 2017; see Appendix H.

As shown in Table 25, Phase 1 of the Landscape Plan would generate the highest estimated increase in traffic volume (6.8 percent), relative to existing traffic conditions, on Ringwood Avenue south of Bay Road during peak Saturday hours of park use. As discussed under Methodology and Significance Thresholds, a 10 percent increase in vehicle traffic would result in an increase in traffic noise of approximately 0.4 dBA Leq. Because Phase 1 would increase traffic volumes on nearby streets by less than 10 percent, it would not increase traffic noise by more than 0.4 dBA Leq.

This analysis conservatively applies the FTA standard of a 1 dBA Leq increase in traffic noise along a roadway that currently generates a noise level of 65-74 dBA Leq. (At no time in the week would noise levels substantially exceed the 70.0 dBA Leq measured at Bay Road during weekday peak hours, which are the busiest traffic period on nearby roadways.) The expected increase in traffic noise of less than 0.4 dBA Leq would not exceed the 1 dBA Leq standard.

Site preparation and grading under Phase I also would involve the removal of a belt of evergreen redwood trees in the eastern corner of the park, which partially screen residences on Del Norte Avenue from exposure to highway noise from U.S. 101. Typically, vegetation does not substantially buffer noise-sensitive receptors from ambient noise. In noise modeling, at least two staggered rows of evergreen trees are required to noticeably reduce traffic noise. Because the existing redwood trees are irregularly arranged in single row, they do not substantially attenuate highway noise. The removal of this belt of trees would not expose residents to substantially higher traffic noise levels.

Therefore, Phase 1 would have a less than significant impact related to traffic noise.

Phases II and III

In contrast to Phase I, in which programmed active recreation would generate the lion's share of vehicle trips, Phases II and II of the Landscape Plan would generate an incremental increase in vehicle trips from continued growth in passive recreation. As discussed in the Traffic Impact Study (see Appendix H), it is assumed that passive recreational trips would increase proportional to regional traffic growth, i.e., 0.8 percent per year. This incremental growth in park use during Phases II and III would not exceed trip generation for Phase I. Therefore, the later phases of the Landscape Plan would also have a less than significant impact related to traffic noise.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Cumulative Impacts

Long-term development in Menlo Park and Atherton, including the proposed Landscape Plan, would generate temporary noise during construction. Construction activities on cumulative residential and commercial projects in the area could generate higher noise levels than would construction of the proposed recreational facilities because of the need for more intensive demolition, grading, and building construction. However, construction noise and vibration is localized and rapidly attenuates within an urban environment. Because Flood County Park is surrounded by settled single-family residential neighborhoods that are fully built out, construction of other major projects would not occur sufficiently close to the park or its neighbors to result in a cumulative impact. Therefore, the project would not contribute considerably to temporary cumulative construction noise and vibration impacts.

Traffic noise impacts associated with cumulative development through the years 2021 and 2040 would incrementally increase noise levels along roadways. Table 26 shows the project's cumulative contribution to traffic volumes on nearby road segments in the Near-Term 2021 traffic scenario, and Table 27 shows the project's contribution in the Cumulative 2040 traffic scenario.

Table 26 Cumulative Contribution to Area Roadway Traffic Levels during Weekday P.M. and Saturday Peak Hours in Near-Term 2021 Conditions

Roadway Segment	Existing Peak Hour (trips)	Cumulative + Project Increase in Peak Hour Trips	Percentage Increase from Cumulative Trips	Percent of Cumulative Increase Due to Project
P.M. Peak Hour				
Bay Road: Marsh Road to Ringwood Avenue	465	41	8.8%	80.5%
Bay Road: Ringwood Avenue to Willow Road	909	98	10.8%	1.0%
Ringwood Avenue south of Bay Road	865	106	12.3%	58.5%
Saturday Peak Hour				
Bay Road: Marsh Road to Ringwood Avenue	313	27	8.6%	77.8%
Bay Road: Ringwood Avenue to Willow Road	304	38	12.5%	78.9%
Ringwood Avenue south of Bay Road	322	38	11.8%	57.9%

Source: W-Trans 2017; see Appendix H.

Table 27 Cumulative Contribution to Area Roadway Traffic Levels during Weekday P.M. and Saturday Peak Hours in Year 2040 Conditions

Roadway Segment	Existing Peak Hour (trips)	Cumulative + Project Increase in Peak Hour Trips	Percentage Increase from Cumulative Trips	Percent of Cumulative Increase Due to Project
P.M. Peak Hour				
Bay Road: Marsh Road to Ringwood Avenue	465	163	35.1%	12.9%
Bay Road: Ringwood Avenue to Willow Road	909	370	40.7%	4.3%
Ringwood Avenue south of Bay Road	865	359	41.5%	12.3%
Saturday Peak Hour				
Bay Road: Marsh Road to Ringwood Avenue	313	90	28.8%	15.6%
Bay Road: Ringwood Avenue to Willow Road	304	94	30.9%	8.5%
Ringwood Avenue south of Bay Road	322	100	31.1%	22.0%

Source: W-Trans 2017; see Appendix H.

As shown in Table 26, under Near-Term 2021 conditions, cumulative growth in combination with the Landscape Plan would increase traffic volumes during peak hours by up to an estimated 12.5 percent on Bay Road from Ringwood Avenue to Willow Road. Because a 20 percent increase in traffic volume would raise traffic noise by about 0.8 dBA, this expected increase of less than 20 percent would not exceed the FTA standard of 1 dBA Leq. Therefore, cumulative traffic noise would have a less than significant impact on noise-sensitive receptors under Near-Term 2021 conditions.

As shown in Table 27, under Cumulative 2040 conditions, cumulative growth in combination with the Landscape Plan would increase traffic volumes during peak hours by up to an estimated 41.5 percent on Ringwood Avenue south of Bay Road, and by up to an estimated 40.7% on Bay Road from Ringwood Avenue to Willow Road. In addition, estimated cumulative traffic volumes would increase by greater than 30 percent on Bay Road from Marsh Road to Ringwood Avenue during weekday P.M. peak hours, and on Bay Road east of Ringwood Avenue and on Ringwood Avenue during Saturday peak hours. A 40 percent increase in traffic volume would raise traffic noise levels by about 1.5 dBA and a 30 percent increase would raise traffic noise by about 1.1 dBA, which would exceed the FTA standard of 1 dBA Leq. Therefore, the cumulative traffic noise impact on residences next to the above road segments would be potentially significant. However, the Landscape Plan would not substantially contribute to noticeable increases in cumulative traffic noise. The project would be responsible for a minor share of the estimated increase in cumulative traffic by the year 2040, relative to growth in background traffic volumes. At the most, trips associated with the Landscape Plan would constitute as much as 22% of the estimated increase in cumulative traffic, during Saturday peak hours on Ringwood Avenue. This contribution would increase traffic noise by less than 1 dBA Leq, which would not be an audible change to nearby residents. Therefore, the Landscape Plan would not considerably contribute to a significant cumulative impact.

Cumulative residential and commercial development would also add sources of on-site operational (non-traffic) noise in Menlo Park and Atherton. Noise sources associated with this development may include heating, ventilation, and cooling (HVAC) equipment; loading activity; trash compactors; and

parking lot activity. Concentrated new development could generate on-site operational noise that substantially increases ambient noise levels near noise-sensitive receptors. However, new development would be subject to local noise ordinances that are intended to prevent the generation of disturbing noise near such receptors. Furthermore, as noted above, because Flood County Park is surrounded by settled single-family residential neighborhoods that are fully built out, it is not anticipated that major new developments would occur in proximity to the park or its neighbors. Therefore, the Landscape Plan would not contribute considerably to a significant cumulative impact.

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4.9 Transportation and Circulation

This section evaluates potential impacts relating to transportation and traffic on and around the project site. The analysis is based on the Flood County Park Landscape Plan Traffic Impact Study prepared by W-Trans (Appendix H).

Environmental Setting

Roadway Network

Studied Intersections

The nearest freeway to the project site is US Highway 101, and its centerline is approximately 350 feet north of the park. Based on the characteristics of the project, the project site location, and consultation with County staff, the following three intersections (shown in Figure 13) were selected for assessment of potential impacts within the study area:

Bay Road/Marsh Road is a four-way signalized intersection with protected left-turn phasing on the southbound approach of Marsh Road and permitted left-turn phasing on all other approaches. Marked crosswalks, pedestrian signals, and curb ramps are provided across all four legs. Bicycle detection is marked for both approaches on Bay Road.

Bay Road/ Ringwood Avenue is a five-way stop controlled intersection. Marked crosswalks are provided across all legs except the northbound Ringwood Avenue approach. Curb ramps are provided at the northwest and northeast corners of the intersection.

Bay Road/Willow Road is a T-shaped signalized intersection with protected left-turn phasing on the northbound approach of Willow Road. The right-turn movement on the southbound approach of Willow Road is yield controlled. Pedestrian crossing is only permitted across Bay Road where a crosswalk, pedestrian signals, and curb ramps are provided.

Intersection Level of Service

Intersection level of service (LOS) is a qualitative assessment of an intersection's performance based on traffic volumes and roadway capacity. An intersection is characterized by a letter grade ranging from A to F, where LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. The LOS rating is also accompanied by the level of delay.

The study intersections were analyzed using methodologies in the Highway Capacity Manual (HCM) (Transportation Research Board 2000). For intersection with a stop sign on all approaches, an "All-Way Stop-Controlled" method was used, which evaluates delay based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole, which is then related to a LOS grade. Signalized intersections were evaluated based on traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. This method was based on average stopped delay per vehicle in seconds, which was calculated using optimized signal timing. Table 28 summarizes the ranges of delay associated with LOS A through F.

Figure 13 Studied Intersections and Lane Configurations

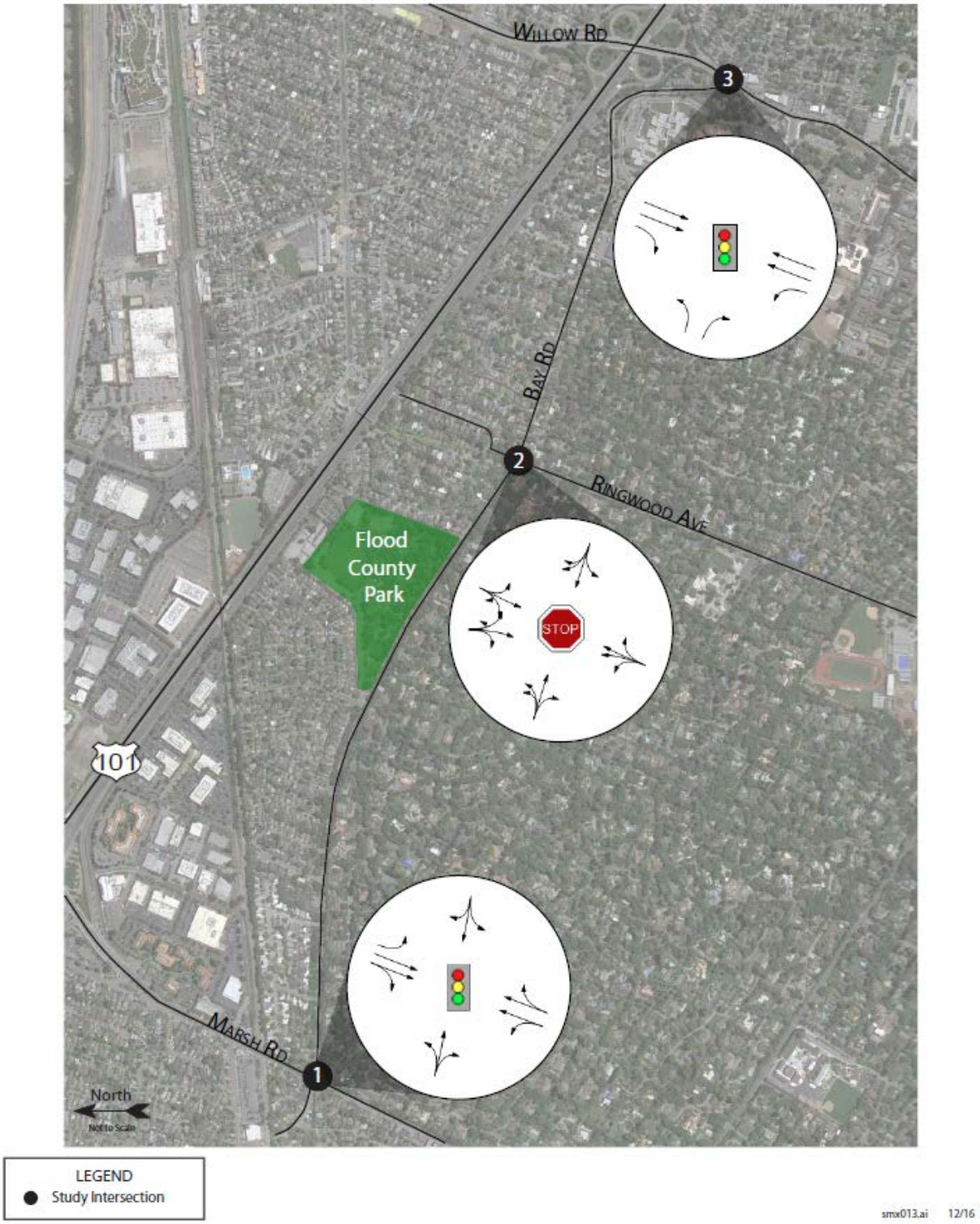

Table 28 Intersection Level of Service Criteria

LOS	All-Way Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach, and wait for vehicle to clear from one or more approaches prior to entering the intersection.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers enter long queues on all approaches.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Source: W-Trans 2017; see Appendix H.

Existing Operating Conditions

Existing operating conditions at three nearby intersections were evaluated during weekday PM peak (between 4:00 PM and 6:00 PM) and Saturday midday peak (between 12:00 PM and 4:00 PM) periods, using the City of Menlo Park's Vistro traffic analysis network. The weekday PM peak hour was selected for analysis as representative of the worst rush hour traffic conditions in the area, while the Saturday midday peak hour was selected because it aligns with peak weekly use of Flood County Park. Table 29 summarizes existing peak hour intersection LOS.

Table 29 Existing Peak Hour Intersection Levels of Service

	PM Peak		SAT Peak	
Study Intersection	Delay	LOS	Delay	LOS
Bay Road/Marsh Road	15.9	B	13.7	B
Bay Road/Ringwood Avenue	21.2	C	8.8	A
Bay Road/Willow Road	>80*	F	9.4	A

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

While the Bay Road/Marsh Road and Bay Road/Ringwood Avenue intersections currently operate at an acceptable LOS, the intersection of Bay Road and Willow Road operates at an unacceptable LOS during the PM peak hour. According to City of Menlo Park staff, traffic conditions modeled in the Vistro program for the Willow Road corridor during PM peak hour do not accurately reflect actual congestion because of "unserved demand" (Menlo Park 2016). This term refers to congestion upstream and downstream of a given intersection that results in delays that are not captured by Vistro program.

Near-Term 2021 Conditions

The near-term scenario represents projected traffic conditions without implementation of the Landscape Plan in the year 2021, which is the assumed completion year for the proposed recreational elements that would generate the most new vehicle trips. This scenario includes traffic that would be generated by approved projects with the City. Traffic volumes that would be generated by these approved projects were obtained from the City's Vistro traffic analysis network, where available, or developed from data published by ITE in the 9th edition of the Trip Generation Manual (2012).

In addition, a growth rate was based on the C/CAG Travel Forecast Model, which accounted for growth in regional traffic until 2021. The growth rate applied was 0.8% per year for peak hour volumes. As shown in Table 30, near-term 2021 conditions show that Bay Road and Ringwood Avenue would operate at LOS D during the PM peak hour. Moreover, as in the existing conditions shown in Table 29, the Bay Road and Willow Road intersection is expected to continue operating unacceptable due to "unserved demand."

Table 30 Near-Term 2021 Peak Hour Intersection Levels of Service

	PM Peak		SAT Peak	
Study Intersection	**Delay**	**LOS**	**Delay**	**LOS**
Bay Road/Marsh Road	19.1	B	14.2	B
Bay Road/Ringwood Avenue	29.4	D	9.1	A
Bay Road/Willow Road	>80*	F	9.9	A

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

Cumulative 2040 Conditions

The cumulative scenario represents projected traffic volumes without implementation of the Landscape Plan for the horizon year 2040. This scenario includes traffic that would be generated by approved developments that were identified in the near-term scenario, traffic that would be generated by developments that are currently pending approval, and a growth rate to account for growth in regional traffic. As in the near-term 2021 scenario, the growth rate applied was 0.8% per year for peak hour volumes.

Table 31 summarizes the cumulative 2040 peak hour LOS. The Bay Road and Ringwood Avenue intersection would operate at LOS F during the PM peak hour under cumulative conditions. As in the existing and near-term conditions, the Bay Road and Willow Road intersection during PM peak hours is expected to continue operating unacceptable due to "unserved demand," even after implementation of General Plan Goals, Policies, and Programs.

Table 31 Cumulative 2040 Peak Hour Intersection Levels of Service

	PM Peak		SAT Peak	
Study Intersection	**Delay**	**LOS**	**Delay**	**LOS**
Bay Road/Marsh Road	29.1	C	16.0	B
Bay Road/Ringwood Avenue	95.7	F	9.7	A
Bay Road/Willow Road	>80*	F	10.9	B

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

Pedestrian Network

Bay Road has intermittent sidewalk coverage with substantial gaps on both sides of the street between Marsh Road and Willow Road. A sidewalk is present on the north side of Bay Road along the park frontage. A marked crosswalk connects this sidewalk with a San Mateo County Transit District (SamTrans) bus stop on the south side of Bay Road, adjacent to Greenwood Drive. In addition to the main entrance gate, pedestrian access points to Flood County Park are located at the southern corner of the park from Bay Road and at the eastern corner from Iris Lane..

Bicycle Network

A network of bike lanes provides access to and from Flood County Park. In the vicinity of the park, Bay Road has 1.7 miles of bike lanes between Marsh Road and Van Buren Road, Ringwood Avenue has 0.9 mile of bike lanes between Bay Road and Middlefield Road, and Willow Road has 1.4 miles of bike lanes between Durham Street and Bay Road. A planned extension of the Willow Road bike lanes north of Durham Street would connect to Bay Road. In addition, a mixture of separated bikeways and bike lanes are planned on Marsh Road between Middlefield Road and the Bayshore Expressway, which would connect with the existing Bay Road bike lanes.

Transit

SamTrans provides fixed route bus service in the project area. SamTrans Local Route 281 stops on Newbridge Street at Pierce Road, which is a 0.25 mile walk from Flood County Park across the U.S. 101 pedestrian bridge. This route operates weekdays with approximately 20-30 minute headways between 6:00 AM and 8:00 AM and 6:00 PM and 10:30 PM, and 15 minute headways between 8:00 AM and 6:00 PM. Saturday service operates with 30 minutes headways between 8:00 AM and 7:30 PM, while Sunday service operates with 30 minutes headways between 8:30 AM and 6:30 PM.

SamTrans Local Route 82, 83, and 88 all stop on Bay Road near the project site and also provide school bus service in Atherton and Menlo Park to Hillview Middle School and Encinal Elementary School. Routes 82 and 88 directly serve the park and operate on schooldays.

Regulatory Setting

State

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 creates a process to change analysis of transportation impacts under CEQA, which could include analysis based on project vehicle miles traveled (VMT) rather than impacts to

intersection Level of Service. On December 30, 2013, the Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis. The intent of the original guidance documentation was geared towards projects within areas that are designated as transit priority areas first, to be followed by other areas of the State. OPR issued another draft discussion document in March 2015 suggesting some new revisions to the formal *CEQA Guidelines*. In January 2016, OPR issued another guidance document and requested additional input. The requirements are not binding as no formal changes to the *CEQA Guidelines* have occurred to date. The impact analysis methodology used in this EIR is based on and is consistent with the City of Menlo Park's currently adopted thresholds for traffic conditions, which use intersection LOS to determine impacts on the transportation system.

Local

City of Menlo Park General Plan

The City's General Plan has adopted policies and plans that apply to public transit, bicycle, and pedestrian facilities in city limits. The following General Plan Circulation Element policies are relevant to the Landscape Plan and alternative transportation modes:

Policy CIRC-1.8 **Pedestrian Safety**. Maintain and create a connected network of safe sidewalks and walkways within the public right of way ensure that appropriate facilities, traffic control, and street lighting are provided for pedestrian safety and convenience, including for sensitive populations.

Policy CIRC-4.3 **Active Transportation**. Promote active lifestyles and active transportation, focusing on the role of walking and bicycling, to improve public health and lower obesity.

Policy CIRC-5.2 **Transit Proximity to Activity Centers**. Promote the clustering of as many activities as possible within easy walking distance of transit stops, and locate any new transit stops as close as possible to housing, jobs, shopping areas, open space, and parks.

Impact Analysis

Methodology and Significance Thresholds

Operating conditions during the weekday PM and Saturday midday peak periods were evaluated at the study intersections to capture the highest potential impacts of the proposed project as well as the highest volumes on the local transportation network. The weekday PM peak hour occurs between 4:00 and 6:00 PM and reflects conditions during the homeward bound commute, while the Saturday midday peak hour occurs between noon and 4:00 PM and typically reflects the highest level of weekend activity for a park. The following scenarios were analyzed as part of this study:

- Existing conditions
- Existing plus project conditions
- Near-term 2021 conditions
- Near-term 2021 plus project conditions
- Cumulative 2040 conditions
- Cumulative 2040 plus project conditions

The near-term 2021 scenarios were analyzed to reflect prevailing traffic conditions once Phase I of the Landscape Plan would be implemented, while the cumulative 2040 scenarios were analyzed to reflect long-term growth in traffic volumes in the Menlo Park and Atherton area.

Trip Generation

Trip generation estimates are typically developed using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 9th Edition, 2012. However, standard rates are not available or applicable to the improvements planned at the park; therefore, trip generation rates were developed based on historic park visitor statistics and anticipated future programming and park usage.

The existing conditions at Flood County Park were derived using historic park visitor statistics from 2011 through 2015. During this time period the baseball field was not in programmed use and this time period was assumed to represents the existing conditions at the park. The average daily number of visitors was determined for each month and then averaged over the four years, to account for annual variation in park visit. Average vehicle occupancy of 1.2 persons per vehicle was used to convert the average daily visitor total into average daily trips per month. In order to account for seasonal variation, these daily trips were averaged over 12 months to determine the number of daily trips the park generates. Driveway counts collected in November 2016 were used to validate this methodology.

It is anticipated that the programmed active recreation would be implemented as soon as the construction for Phase I is complete. The anticipated schedule of baseball events for the Menlo Park Legends included the number of events per month, the events' anticipated time of day, and the number of active users. Both games and practices are expected to occur during the week and on weekends. However, youth practices hosted by the Menlo Park Legends would typically occur on weekdays and youth games would more often occur on weekends, while their adult league games would occur on both weekdays and weekends. It is also anticipated that passive recreational park trips would increase proportional to regional traffic growth, 0.8% per year through Phase I.

During the summer months, the park would be expected to have peak visitation for both passive and active recreation. During the low months, November through February, traffic impacts would be expected to be minimal. The weekday PM peak hour is largely dependent on programmed active recreation while passive recreation would be expected to vary depending on the time of year and weather. Trip generation estimates for Phase I are summarized in Table 32.

Table 32 Phase I Average Trip Generation Summary

Park Use	Daily Trips	PM Peak Hour			SAT Peak House		
		Trips	In	Out	Trips	In	Out
Baseline							
Passive Recreation	149	15	8	7	14	7	7
Proposed							
Growth in Passive Recreation	15	2	1	1	2	1	1
Programmed Active Recreation	143	74	37	37	32	16	16
Phase I Average Trips	**307**	**91**	**46**	**45**	**48**	**24**	**24**

Source: W-Trans 2017; see Appendix H.

Trip Distribution

It was assumed that a majority of trips to and from Flood County Park under the Landscape Plan would originate locally in Menlo Park. These local trips would occur on local streets, while park trips from regional locations, accounting for 10% of all trips, would utilize U.S. 101 or I-280 before travelling on local streets to access the park. Table 33 shows the applied trip distribution assumptions.

Table 33 Trip Distribution Assumptions

Route	Percent	Daily Trips	PM Trips	SAT Trips
To/From Marsh Road east of Bay Road	12%	37	12	7
To/From Marsh Road west of Bay Road	8%	25	7	4
To/From Bay Road north of Marsh Road	5%	15	4	2
To/From Flood Park Triangle	9%	28	8	4
To/From Ringwood Avenue west of Bay Road	48%	147	44	23
To/From Willow Road east of Bay Road	13%	40	12	6
To/From Willow Road west of Bay Road	5%	15	4	2
Total	**100%**	**307**	**91**	**48**

Source: W-Trans 2017; see Appendix H.

Vehicle Miles Traveled

Vehicle miles traveled (VMT) is the measure of miles traveled within a specific geographic area for a given period and it provides an indication of automobile and truck travel on a transportation system. This metric is often used in noise, air quality, and greenhouse gas emissions analyses. VMT can also be used to quantify the impact of a project or plan on the larger transportation system. The California Governor's Office of Planning and Research in the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* (2016) proposes that VMT be used as the metric to quantify a project's impact in place of level of service. While the City of Menlo Park

has not yet adopted VMT as its primary metric for traffic analysis, this analysis includes a discussion of the Landscape Plan's effects on countywide VMT for informational purposes.

According to the Metropolitan Transportation Commission (MTC), on average residents of the Bay Area as a whole travel a total of approximately 23 miles daily, while residents of San Mateo Country drive over 25 miles daily. Land use planning in San Mateo County has historically followed a typical suburban pattern of development, and is therefore has a higher average VMT per capita than the rest of the region.

Traffic Signal Warrants

This analysis applies guidance in Chapter 4C of the *California Manual on Uniform Traffic Control Devices* (CA-MUTCD) to determine whether installation of a traffic signal should be considered at intersections.

Warrant 3 (Peak Hour Volume), which is often the first warrant to be met, has a notice that this signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time. Under the Peak Hour Warrant the need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same one hour (any four consecutive 15-minute periods) of an average day:

    1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: four vehicle-hours for a one-lane approach; or five vehicle-hours for a two-lane approach, and

    2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and

    3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

Thresholds of Significance

Based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, impacts related to transportation or traffic would be significant if the Landscape Plan would:

1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

2 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;

3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in significant safety risks;

4 Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

5 Result in inadequate emergency access;

6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities;

7 Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns; and/or

8 Result in inadequate parking capacity.

Traffic Operation Standards

As discussed in Section 1, *Introduction*, whereas this EIR generally applies the County's standards to the proposed Landscape Plan, for the purposes of transportation analysis the County is relying on the City on Menlo Park's standards. The City's standards are most appropriate in this issue area because the proposed Landscape Plan would affect the transportation network within the city limits of Menlo Park and the City's traffic standards are relatively stringent. The City's 2004 Circulation System Assessment establishes standards of significance for analyzing a project's impact on the circulation network. A potentially significant impact would occur if the addition of project traffic causes an intersection or collector street operating to LOS A through C to operate at an unacceptable level (LOS D, E, or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first. In addition, a potentially significant impact would occur if a project causes an intersection on arterial streets or local approaches to state-controlled signalized intersections operating at LOS A through D to operate at an unacceptable level (LOS E or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.

Moreover, a project can have a potentially significant impact if the addition of project traffic causes an increase of more than 0.8 second seconds of average delay to vehicles on all critical movements for intersections operating at near term LOS D through F for collector streets and at a near term LOS E or F for arterial streets. A critical movement is the phase or leg of an intersection that requires the most green time. For local approaches to state-controlled signalized intersections, a project is considered to have a potentially significant impact if the addition of project traffic causes an increase of more than 0.8 second of delay to vehicles on the critical movements for intersections operating a near term LOS E or F. Table 34 summarizes the LOS thresholds applied to the study intersections.

Table 34 Level of Service Significance

Study Intersection	Jurisdiction	LOS Significance Threshold	Significance Threshold for Unacceptable LOS
Bay Road/Marsh Road	City of Menlo Park	D	LOS becomes E or worse or delay increases by 23 seconds or more or, if LOS is currently E or F, all critical movement delay increases by 0.8 seconds.
Bay Road/Ringwood Avenue	City of Menlo Park	C	LOS becomes D or worse or delay increases by 23 seconds or more or, if LOS is currently D, E, or F, all critical movement delay increases by 0.8 seconds
Bay Road/Willow Road	State (local approach)	D	LOS becomes E or F or, if LOS is currently E or F, all critical movement delay increases by 0.8 seconds

Source: W-Trans 2017; see Appendix H.

Project Impacts

Threshold 1

Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Impact T-1	Traffic generated by the project would cause traffic delay exceeding the City of Menlo Park's standards at the intersection of Bay Road and Ringwood Avenue under all modeled traffic scenarios. Queuing of vehicles at the park's entrance gate also would cause temporary traffic delay on Bay Road. Although new parking fee collection practices would minimize queuing, mitigation measures at the affected intersection would be infeasible. Therefore, the project would have a significant and unavoidable impact on traffic under existing plus project conditions.

Table 35, Table 36, and Table 37 show modeled traffic conditions at the three studied intersections near Flood County Park under existing, near-term 2021, and cumulative 2040 scenarios, respectively, both with and without implementation of the Landscape Plan.

Table 35 Existing and Existing Plus Project Peak Hour Intersection Level of Service

Study Intersection	Existing Conditions				Existing Plus Project			
	PM Peak		SAT Peak		PM Peak		SAT Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Bay Road/Marsh Road	16.0	B	13.7	B	16.4	B	13.9	B
Bay Road/Ringwood Avenue	21.2	C	8.8	A	25.7	D	9.1	A
Addition of Northbound Left-Turn Lane	-	-	-	-	13.8	B	9.0	A
Bay Road/Willow Road	>80*	F	9.4	A	>80*	F	9.5	A

Source: W-Trans 2017; see Appendix H.

Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.

* LOS is based on unserved demand.

Table 36 Near-Term 2021 and Near-Term 2021 Plus Project Peak Hour Intersection Level of Service

Study Intersection	Near-Term Conditions				Near-Term Plus Project			
	PM Peak		SAT Peak		PM Peak		SAT Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Bay Road/Marsh Road	19.1	B	14.2	B	19.2	B	14.3	B
Bay Road/Ringwood Avenue	29.4	D	9.1	A	36.6	E	9.1	A
Addition of Northbound Left-Turn Lane	14.3	B	9.0	A	15.1	C	9.2	A
Bay Road/Willow Road	>80*	F	9.9	A	>80*	F	10.0	A

Source: W-Trans 2017; see Appendix H.

Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.

* LOS is based on unserved demand.

Table 37 Cumulative 2040 and Cumulative 2040 Plus Project Peak Hour Intersection Level of Service

Study Intersection	Cumulative Conditions				Cumulative Plus Project			
	PM Peak		SAT Peak		PM Peak		SAT Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Bay Road/Marsh Road	29.1	C	16.0	B	30.9	C	16.5	B
Bay Road/Ringwood Avenue	95.7	F	9.7	A	111.3	F	10.0	A
Addition of Northbound Left-Turn Lane	22.4	C	9.5	A	27.5	D	9.8	A
Signalization	30.8	C	12.0	B	34.5	C	12.4	B
Bay Road/Willow Road	>80*	F	10.9	B	>80*	F	11.0	B

Source: W-Trans 2017; see Appendix H.

Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.

* LOS is based on unserved demand.

During weekday PM peak hours, the addition of new trips generated by the Landscape Plan are expected to degrade traffic conditions at the intersection of Bay Road and Ringwood Avenue from an acceptable LOS C to an unacceptable LOS D under existing plus project conditions and from an unacceptable LOS D to E under near-term 2021 plus project conditions. Furthermore, new vehicle trips at this intersection would exacerbate unacceptable LOS F conditions under cumulative 2040 plus project conditions. It is worth noting that existing traffic conditions at this intersection during weekday PM peak hours are already approaching the City of Menlo Park's threshold of LOS D for unsignalized intersections. The addition of only 25 PM peak hour trips associated with active and passive recreational use at Flood County Park would push operating conditions from LOS C to D, causing an exceedance of the City's traffic standards. However, a signal warrant analysis indicates that projected traffic volumes at this intersection would not necessitate installation of a traffic signal under any traffic scenario.

The intersection of Bay Road and Willow Road is expected to continue to operate at LOS F during the PM peak hour under all traffic scenarios, due to "unserved demand." As discussed in the Setting, this intersection now operates unacceptably without the addition of project-generated traffic and would continue to operate deficiently due to "unserved demand" upon the addition of project-generated traffic. Therefore, the City would not consider the project responsible for pre-existing unacceptable traffic conditions at Bay Road and Willow Road. The project also could increase traffic congestion on Bay Road for brief periods as vehicles queue up at the park's main entrance, waiting for admission at the fee collection booth. Queuing behavior could occur during peak summer months, especially with the operation of the proposed athletic fields in Phase I of the Landscape Plan. Because of increased traffic congestion at the intersection of Bay Road and Ringwood Avenue and temporary queuing on Bay Road, the Landscape Plan would have a potentially significant impact under existing plus conditions.

As a caveat to the finding of a potentially significant impact related to traffic congestion, this analysis is predicated on locally adopted LOS standards that will change in the near future. It is anticipated that the Governor's Office of Planning and Research will publish final guidelines for implementation of SB 743 in 2017, at which point local agencies would have a two-year grace period to replace LOS standards with vehicle miles traveled (VMT) as the primary metric for evaluating traffic impacts under CEQA. As discussed in Impact T-2, project-generated traffic would have a negligible effect on VMT in San Mateo County. The draft SB 743 guidelines also call for plan-level projects to be evaluated for consistency with the applicable Sustainable Communities Strategy (SCS). Because the Landscape Plan would maintain active and passive recreational uses at Flood County Park, it is expected that the project would meet this criteria. Therefore, the Landscape Plan would have a less than significant impact related to traffic using VMT as the standard of analysis. Nevertheless, this EIR relies on the City of Menlo Park's existing adopted LOS standards for traffic congestion.

MITIGATION MEASURES

As shown in Table 40, the installation of a northbound left-turn lane at the intersection of Bay Road and Ringwood Avenue would improve traffic conditions during PM peak hours from LOS D to B under existing plus project conditions, from LOS E to C under near-term 2021 plus project conditions, and from LOS F to D under cumulative 2040 plus project conditions. This reconfiguration of the intersection would reduce traffic congestion relative to without-project conditions. However, physical constraints at the affected intersection would make implementation of such a measure less likely. The San Mateo County Assessor Map confirms that Ringwood Avenue has 55 feet of right-of-way approaching Bay Road. In this right-of-way, the removal of an existing parking lane and street trees on the east side of Ringwood Avenue would be required to make room for a northbound left-turn lane. This reconfiguration also would require the relocation of existing utility poles and street drainage. Additionally, this measure would require coordination with, and approval, by the City of Menlo Park and the Town of Atherton, which cannot be guaranteed. Therefore, it is conservatively assumed that installing a new turn lane at the intersection would be infeasible.

To minimize queuing on Bay Road, Mitigation Measure T-1 would be required.

MM T-1 PARKING FEE COLLECTION PRACTICES.

The County shall implement parking fee collection practices to avoid the back up of vehicles entering Flood County Park onto local streets. These practices may include automated fee machines, paying upon exiting the park, or a combination of both to move the queues associated with fee collection off of City streets and on-site.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure T-1 would reduce temporary congestion on Bay Road from queuing of vehicles at the park gate. Nevertheless, as discussed above, it may be infeasible to reconfigure the intersection of Bay Road and Ringwood Avenue to avoid a significant impact from traffic congestion. Therefore, the Landscape Plan would have a significant and unavoidable impact on traffic under existing plus project, near-term 2021 plus project, and cumulative 2040 plus project conditions.

Impact T-2	Project-generated traffic would have a negligible effect on vehicle miles traveled in San Mateo County. Therefore, the Landscape Plan would have a less than significant impact related to vehicle miles traveled.

It is expected that the Landscape Plan would have a negligible effect on vehicle miles traveled in San Mateo County. The reconstruction of the existing out-of-service ballfield and addition of a new soccer/lacrosse field could shorten trips by local active recreational users who would no longer have to travel to most distant sites to access quality athletic fields. The main user of the athletic fields would be the Menlo Park Legends community baseball program, which currently uses other fields in Menlo Park and Atherton. Furthermore, the Landscape Plan would maintain and revitalize passive recreational elements likely to be used by local residents who would travel short distances to the park. In addition, because the City of Menlo Park has not yet adopted VMT as its primary metric for evaluating the traffic impacts on projects, there is no significant threshold against which to judge the Landscape Plan's effects on VMT. Therefore, the project would have a less than significant impact related to VMT.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 2

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.

Impact T-3	Vehicle trips generated by implementation of the Landscape Plan would not adversely affect roadways designated under the Congestion Management Plan for San Mateo County. Therefore, the project would have a less than significant impact related to conflicts with this plan.

The City/County Association of Governments of San Mateo County (C/CAG) serves as the Congestion Management Agency (CMA) for San Mateo County. C/CAG's most recent Congestion Management Plan (CMP), referred to as the 2013 CMP Monitoring Report, establishes the designated CMP Roadway network, which includes I-280, U.S. 101, the Bayfront Expressway (SR 84), El Camino Real (SR 82), and Willow Road (SR 114), and the LOS standard for each roadway in the network. It is expected that local residents would account for the majority of new trips associated with the Landscape Plan. Therefore, project-generated trips would not substantially affect traffic on designated CMP roadways that serve as regional corridors. The project would not conflict with C/CAG's Congestion Management Program.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

This impact would be less than significant without mitigation.

Threshold 4

Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact T-4	The project would not introduce design features that increase traffic hazards. No impact would occur.

The Landscape Plan would not alter the offsite circulation system and would introduce minor modifications to the on-site surface parking lot, including a pick-up and drop-off area. No potential design hazards such as sharp curves, dangerous intersections, or new incompatible uses are proposed. Existing bike lanes and sidewalks on Bay Road would safely accommodate bicyclists and pedestrians en route to the park. Therefore, the project would have no impact related to traffic hazards.

MITIGATION MEASURES

No mitigation is required.

SIGNIFICANCE AFTER MITIGATION

No impact would occur without mitigation.

Thresholds 6 and 7

Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns.

Impact T-5	The project would not decrease the performance of existing or planned transit, bicycle, or pedestrian facilities. However, the lack of bicycle storage on-site and a sidewalk gap on Bay Road could result in unsafe conditions for bicyclists and pedestrians accessing the park. Impacts to transit, bicycle, and pedestrian systems would be less than significant with mitigation to install bicycle storage and pedestrian signage.

TRANSIT

Due to the nature and location of the Park, it is expected that the majority of park visitors would be from the nearby residential neighborhoods and would access the park via foot, bike, or vehicle, rather than by transit. Existing SamTrans bus stops are available within acceptable walking distance of the site for those visitors who choose to access the site via transit. Therefore, transit service to the project site would be adequate, and new transit users would not result in overcrowding on buses.

BICYCLE FACILITIES

Existing bicycle facilities, including bike lanes on Bay Road, Ringwood Avenue, Middlefield Road, and Willow Road, together with shared use of minor streets, provide adequate access for bicyclists to Flood County Park. Planned separated bikeways and bike lanes on Marsh Road and a planned extension of existing bike lanes on Willow Road, northward to Bay Road, would provide additional

access to the site. Although bicyclists would easily be able to access the site, t6he Landscape Plan does not identify any bicycle parking or storage facilities in the park. This lack of dedicated bicycle parking may result in unsafe storage for bicyclists traveling to the park.

PEDESTRIAN FACILITIES

The proposed project is not expected to generate noticeable increases in pedestrian traffic or travel patterns in the vicinity of Flood County Park. Visitors who currently live within reasonable walking distance would continue to utilize the pedestrian network to access the Park, including access points at the entrance gate, the southern corner of the park along Bay Road, and at the eastern corner of the park at the terminus of Iris Lane. However, new pedestrian trips to the park may be subject to unsafe conditions because of a gap in the existing sidewalk on the north side of Bay Road between Del Norte Avenue and Ringwood Avenue. At this gap, pedestrians must walk along the roadway shoulder or in the bike lane. Therefore, the Landscape Plan could have adverse effects on pedestrians.

The Landscape Plan would not have substantial adverse effects on public transit, bicycle, or pedestrian facilities. However, the lack of dedicated bicycle parking may result in unsafe storage for bicyclists traveling to the park. This impact would be potentially significant.

MITIGATION MEASURES

To provide safe bicycle storage for park users, Mitigation Measure T-5(a) would require the installation of bicycle racks on-site. To protect pedestrian safety, an existing gap in the sidewalk on the north side of Bay Road between Del Norte Avenue and Ringwood Avenue could be closed; however, the removal of two mature oak trees located in the Bay Road right-of-way would be necessary to complete the sidewalk; therefore, it would not be feasible to complete the sidewalk along Bay Road. Instead of sidewalk closure, Mitigation Measure T-5(b) would require the County to coordinate with the City of Menlo Park to install signage for pedestrian access.

MM T-5(A) BICYCLE STORAGE

The County shall install a minimum of six bicycle racks near the proposed gathering plaza.

MM T-5(B) PEDESTRIAN SIGNAGE

The County shall coordinate with the City of Menlo Park to install signage along the north side of Bay Road between Del Norte Avenue and Ringwood Avenue, informing motorists and bicyclists of pedestrians walking along the should and in the bike lane.

SIGNIFICANCE AFTER MITIGATION

Installation of bicycle storage and pedestrian signage would improve access to the park for bicyclists and pedestrians and reduce safety hazards for these users. Therefore, impacts related to public transit, bicycle, and pedestrian facilities would be less than significant after mitigation.

Threshold 8

Result in inadequate parking capacity.

Impact T-6	While the proposed on-site parking supply would be adequate based on standard parking demand rates for parks, the Landscape Plan could result in increased parking on local residential streets. The impact on parking capacity would be less than significant impact with mitigation measures to facilitate on-site parking and discourage on-street parking by visitors to Flood County Park.

Flood County Park would maintain its existing 375 parking spaces under the Landscape Plan. During parking utilization surveys conducted in November 2016, the tail end of the parking lot behind the ballfield was fenced off and being used for long-term storage. This storage did not allow for a complete survey of the parking facilities.

Parking demand under the Landscape Plan was estimated using standard rates published by ITE in *Parking Generation*, 4th Edition, 2010, for city parks (ITE LU#412). The standard rates for a city park are based on a 25-acre park with softball and soccer fields, outdoor group meeting areas, and an administration building with 375 parking spaces. Based on the size of Flood County Park and proposed recreational uses, peak parking demand is anticipated to be 5.1 parking spaces per acre, or 125 parking spaces. Using this standard rate, the existing parking supply of 375 spaces at Flood County Park would be adequate to accommodate peak demand on-site.

Despite the adequate supply of parking spaces on-site, new vehicle trips generated by the Landscape Plan could increase the number of visitors to Flood County Park who park on nearby residential streets. Under existing conditions, some visitors park on local streets like Del Norte Avenue rather than pay for on-site parking. According to a six-hour weekday count of on-street parking conducted in November 2016, an average of seven cars per hour were parked without permits near the park. During the six-hour Saturday count, an average of 10 cars per hour, not displaying a permit, were parked on local streets. The County would encourage on-site parking under the Landscape Plan by allowing participants in programmed active recreational activities to be dropped off and picked up inside the park without paying an entrance fee. This practice would minimize pick-up and drop-off activity near the Iris Lane gate to Flood County Park. However, off-site parking could still increase, resulting in a reduced parking capacity for residents on local streets.

MITIGATION MEASURES

Mitigation Measure T-1 to implement parking fee collection practices, such as automated fee machines and paying upon exiting the park, would facilitate on-site parking and could reduce the incentive for off-site parking. In addition, Mitigation Measure T-6 would require education of park visitors about on-street parking restrictions and coordination with the City of Menlo Park on enforcement of parking violations.

County Parks should work with the City of Menlo Park and the Town of Atherton to educate park visitors about the parking restrictions, as well as, increase random enforcement of the parking restrictions.

MM T-6 PARKING EDUCATION AND ENFORCEMENT.

The County shall develop a mechanism to inform park visitors of on-street parking restrictions on nearby residential streets and shall post this information in a clearly visible location on-site. The County also shall coordinate with the City of Menlo Park to encourage increased random enforcement of on-street parking restrictions.

SIGNIFICANCE AFTER MITIGATION

With implementation of mitigation measures to facilitate on-site parking and discourage on-street parking, the Landscape Plan would have a less than significant impact related to parking capacity.

Cumulative Impacts

As discussed in Impact T-1, cumulative traffic impacts at the intersection of Bay Road and Ringwood Avenue would be significant and unavoidable under the near-term 2021 and 2040 scenarios with the addition of project-generated vehicle trips. New trips by park users would contribute to a future exceedance of the City of Menlo Park's LOS D threshold at this unsignalized intersection. Although the installation of a northbound left-turn lane on Ringwood Avenue would successfully mitigate the project's contribution to this impact, such a mitigation measure may be infeasible. Therefore, the project would have a considerable contribution to a significant cumulative traffic impact.

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4.10 Tribal Cultural Resources

This section evaluates the Landscape Plan's potential effects on tribal cultural resources.

Environmental Setting

As discussed in the prehistoric and ethnographic setting in Section 4.4, *Cultural Resources*, Flood County Park lies within an area traditionally occupied by the Ohlone tribe.

To identify potential tribal resources and other cultural resources at the park, a California Historical Resources Information System (CHRIS) records search, Native American Heritage Commission (NAHC) Sacred Lands Files (SLF) search, and pedestrian survey were conducted for the project site. None of these records searches identified tribal cultural resources on-site. See Chapter 4.4, *Cultural Resources*, for a more detailed discussion of the CHRIS records search and pedestrian survey. On October 21, 2016, The NAHC was contacted for a review of the SLF and a list of Native American individuals and tribal organizations that may have knowledge of cultural resources, including tribal cultural resources, in or near the project site. According to a response from the NAHC on October 31, 2016, the search of the SLF did not identify tribal cultural resources. The NAHC provided a contact list of five Native American individuals and tribal organizations that may have knowledge of cultural resources in or near the project. Rincon prepared and mailed letters to each contact on the list. As of the date of this EIR, no response has been received from any contact.

Regulatory Setting

State

Assembly Bill 52

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." Assembly Bill 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is

traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Impact Analysis

Methodology and Thresholds of Significance

Since the County has not yet updated its Initial Study Environmental Evaluation Checklist to provide checklist questions for tribal cultural resources, in response to AB 52, this analysis relies on Appendix G of the State CEQA Guidelines. Accordingly, an impact to tribal cultural resources would be significant if the project would:

1) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

    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 Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Project Impacts and Mitigation Measures

Impact TCR-1	Construction of recreational improvements proposed in the Landscape Plan would involve surface excavation, which has the potential to impact previously unidentified tribal cultural resources. Impacts would be less than significant with mitigation to protect such resources in the event of their discovery.

No tribal cultural resources listed on or eligible for listing on the California Register of Historical Resources (CRHR) or a local register or significant tribal cultural resources were identified within the project site as a result of the cultural resources records search, SLF search, Native American scoping, and pedestrian survey. However, ground-disturbing activities during all phases of the Landscape Plan have the potential to uncover previously unidentified buried archaeological resources, which could potentially be considered tribal cultural resources. Therefore, the Landscape Plan would have a potentially significant impact on such resources.

MITIGATION MEASURES

The following mitigation measure is required to protect tribal cultural resources in the event of their discovery during ground-disturbing activities.

MM TCR-1 PROTECTION OF TRIBAL CULTURAL RESOURCES

In the event that archaeological resources of Native American origin are identified during construction of recreational improvements proposed in the Landscape Plan, the qualified archaeologist will consult with the County to begin or continue Native American consultation procedures. If, in consultation with the County, a discovery is determined to be a tribal cultural resource and thus significant under CEQA, the County shall avoid the resource if feasible. If the resource cannot be avoided, the County shall prepare and implement a mitigation plan in accordance with State guidelines and in consultation with Native American groups.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure TCR-1 would protect unanticipated tribal cultural resources at the park, reducing this potential impact to less than significant.

Cumulative Impacts

Cumulative development in Menlo Park and Atherton near Flood County Park would have the potential to unearth buried tribal cultural resources, especially during intensive ground disturbance and excavation. This would be a potentially significant cumulative impact on tribal cultural resources. However, the implementation of Mitigation Measure TCR-1 would ensure that the Landscape Plan does not considerably contribute to this cumulative impact on tribal cultural resources.

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5 Effects Found Not to Be Significant

Section 15128 of the California Environmental Quality Act (CEQA) *Guidelines* requires an EIR to briefly describe any possible significant effects that were determined not to be significant and were, therefore, not discussed in detail in the EIR. This section addresses the potential environmental effects of the Landscape Plan that require analysis based on San Mateo County's *Initial Study Environmental Evaluation Checklist*, yet have been found not to be significant. Any items not addressed in this section were previously addressed in Section 4, *Environmental Impact Analysis*.

5.1 Aesthetics

Section 4.1, *Aesthetics*, addresses impacts related to scenic vistas, scenic resources, and visual character or quality. Other aesthetic impacts would be significant if the project would: Create a new source of significant light or glare that would adversely affect day or nighttime views in the area

- If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions

Project Impacts

Light and Glare

As discussed in Section 2, *Project Description*, the Landscape Plan does not propose additional lighting that would enable nighttime use of the park, although the County may install path lights that could be manually turned on and off for special events. New path light fixtures would not substantially increase ambient light near the park. New vehicle trips to and from the park also could incrementally increase glare from headlights and reflected sunlight in the existing surface parking lot and on nearby roadways. However, these minor sources of light and glare would not cause a significant impact.

Design Review District

The project site, being located in the City of Menlo Park, is not subject to a County Design Review District.

Cumulative Impacts

Cumulative development in the single-family residential neighborhoods surrounding Flood County Park would involve minor residential projects and would not result in the addition of substantial new sources of light or glare. Furthermore, the Landscape Plan would not considerably contribute to light and glare in the area.

Conclusions

The impact related to light and glare would be less than significant, and no impact related to Design Review Districts would occur. These topics do not require further study in the EIR.

5.2 Agriculture and Forestry Resources

A significant impact on agricultural or forestry resources may occur if the Landscape Plan would:

- For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
- Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use
- For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts
- Result in damage to soil capability or loss of agricultural land
- Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))

Project Impacts

The project site is a County park with open space for recreational uses and is situated in an urbanized area in Menlo Park. Maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation categorize lands within Menlo Park as Urban and Built-Up Land (California Department of Conservation 2016). No agricultural lands classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occur in Menlo Park. In addition, the project site is not subject to, nor is it near, a California Land Conservation (Williamson) Act contract site, as identified in the most recent DOC status report which does not identify any lands within San Mateo County that are under Williamson Act contract (California Department of Conservation 2015). Therefore, the Landscape Plan would not conflict with lands under Williamson Act contract.

According to 2006 mapping data from the California Department of Forestry and Fire Protection, there are no woodland or forestland covers in Menlo Park (CAL FIRE 2006). The project site does not meet the definition of forest land or timberland under Public Resources Code §12220(g) and §4526, or Government Code §51104(g). Therefore, the proposed recreational improvements would not lead to the loss or conversion of farmland, forest land, or timberland, and would not create environmental conditions that would lead to conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impacts associated with farmland, forest land, or timberland would occur.

Cumulative Impacts

Because the project would have no impact on agricultural or forestry resources, as discussed above, it would make no contribution towards cumulative impacts in these areas.

Conclusions

No impacts related to agriculture or forestry resources would occur. These topics do not require further study in the EIR.

5.3 Air Quality

Section 4.2, *Air Quality*, addresses impacts related to consistency with air quality plans, violations of air quality standards, increases in criteria pollutants for which the region is in nonattainment, and exposure of sensitive receptors to significant pollutant concentrations. In addition, air quality impacts would be significant if the project would:

- Create objectionable odors affecting a significant number of people

Project Impacts

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, animal farms, and fiberglass molding. The proposed long-term redevelopment of recreational facilities at Flood County Park would not include any uses that generate substantial objectionable odors.

During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. Construction-related odors would disperse and dissipate and would not cause substantial odors at the closest sensitive receptors (residences surrounding the park). In addition, construction-related odors would be short-term and would cease upon completion of construction. Therefore, impacts related to objectionable odors during construction or operation would be less than significant.

Cumulative Impacts

Cumulative development in residential neighborhoods surrounding Flood County Park would not add major new sources of objectionable odors. Because the project would have a less than significant impact from odors, as discussed above, it would not contribute toward a cumulative odor impact.

Conclusions

The impact from objectionable odors would be less than significant. This topic does not require further study in the EIR.

5.4 Biological Resources

Section 4.3, *Biological Resources*, addresses impacts related to special-status species and protected trees. The Landscape Plan would also have a significant impact on biological resource if it would:

- Have a significant adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Have a significant 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
- Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan
- Be located inside or within 200 feet of a marine or wildlife reserve.

Project Impacts

Sensitive Natural Communities

The project site is a highly disturbed neighborhood park that lacks sensitive natural communities (Rincon 2016). The project site does not contain any surface water features, streambeds, or wetlands (Rincon 2016). Therefore, the Landscape Plan would have no impact on sensitive natural communities.

Wildlife Movement

The project site is not located within any known regional wildlife movement corridors and the surrounding urban development reduces the potential for implementation of the landscape plan from having any effect on wildlife movement. Therefore, the proposed recreational improvements would have no impact on wildlife movement.

Habitat Conservation Plans

The closest habitat conservation plan (HCP) to the project site is associated with the Stanford University campus in Palo Alto. This HCP (2011) covers the university's lands, located approximately three miles south of the project site. Implementation of the project would have no impact on this HCP. Other conservation plans in the region include San Francisco Public Utilities Commission (SFPUC) Peninsula Watershed Management Plan (2002). Implementation of the project would have no impact on the SFPUC plan because it is not within the plan boundaries.

Marine or Wildlife Reserves

The project site is not within 200 feet of a marine reserve because the park is over 200 feet southwest from the San Francisco Bay.

Cumulative Impacts

Because the project would have no impact on sensitive natural communities, wildlife movement, habitat conservation plans, and marine reserves, as discussed above, it would not contribute to cumulative impacts related to such biological resources.

Conclusions

No impact on these biological resources would occur. These topics do not require further study in the EIR.

5.5 Cultural Resources

This section is addressed in Section 4.4 of the EIR.

5.6 Geology and Soils

Section 4.5, *Geology and Soils*, addresses impacts related to seismic ground shaking, liquefaction, unstable soils, and expansive soils. The Landscape Plan would also have a significant impact if it would:

- Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other significant evidence of a known fault
  - Landslides
  - Coastal cliff/bluff instability or erosion
- 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

Project Impacts

It is not expected that people at Flood County Park would be subject to hazards from fault rupture because the project site is not located in a known earthquake fault zone delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or underlain by an active fault trace. Landslides are not a substantial risk because the site is situated on relatively flat land and is not located in a mapped earthquake-induced landslide zone. The project site also is located approximately 15 miles from the shoreline of the Pacific Ocean and would not be subject to hazards from unstable coastal cliffs or bluffs. Neither septic tanks nor alternative wastewater disposal systems would be constructed under the Landscape Plan. Therefore, the project would have no impact related to these geologic or soil concerns.

Cumulative Impacts

Because the project would have no impact related to fault rupture, landslides, coastal cliffs or bluffs, or septic systems, as discussed above, it would not contribute to cumulative impacts related to such issues.

Conclusions

No impact would occur. These topics related to geology and soils do not require further study in the EIR.

5.7 Greenhouse Gas Emissions

Section 4.6, *Greenhouse Gas Emissions*, addresses impacts related to emissions and conflicts with applicable plans to reduce emissions. The Landscape Plan would also have a significant impact if it would:

- Result in the loss of forestland or conversion of forestland to non-forest uses, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering
- Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels
- Expose people or structures to a significant risk of loss, injury, or death involving sea level rise
- Place structures within an anticipated 100-year flood area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows

Project Impacts

Loss of Forestland

As discussed in Section 5.2, while the project would involve the removal of individual trees, it would not result in a substantial loss of forestland or conversion of forestland to non-forest use. Furthermore, adherence to the County's protected tree ordinances would require the replanting of trees. Therefore, the impact from the loss of forestland would be less than significant.

Sea Level Rise/Bluff Erosion

According to the National Research Council, sea level rise for the California coast south of Cape Mendocino is projected to rise 42-167 cm (0.4-1.7 meters) by 2100 (NRC 2012). However, Flood County Park is located approximately 900 meters from the coastline at an elevation of six meters. At this distance and elevation from the coastline, the project would not expose people or structures to a significant risk of loss, injury, or death involving sea level rise. As shown in the Figure 4.8-4 in the ConnectMenlo EIR, the project site is also located outside of the bayshore area of Menlo Park that the City expects to be subject to flooding under sea level rise (Menlo Park 2016). In addition, the project site is not located near coastal bluffs that could be subject to accelerated coastal cliff or bluff erosion due to sea level rise. Therefore, no impact related to sea level rise or bluff erosion would occur.

Flooding

The project site is not included in a 100-year flood zone according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for San Mateo County. Therefore, no impact related to flood flows would occur.

Cumulative Impacts

Cumulative development in the already urbanized area of Menlo Park would not result in the loss of forest resources to the extent that a significant release of GHG emissions or loss of GHG sequestering would occur. Moreover, the removal of individual trees on the project site would not contribute to such

a loss. Because the project would have no impact related to sea level rise, bluff erosion, or flood flows, as discussed above, it would not contribute to cumulative impacts related to these issues.

Conclusions

The project would have a less than significant impact from the loss of forestland and no impact related to sea level rise, bluff erosion, and flood flows. These topics do not require further study in the EIR.

5.8 Hazards and Hazardous Materials

The Landscape Plan would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)
- 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
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands
- Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows
- 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
- Expose people to inundation by seiche, tsunami, or mudflow

Project Impacts

Transport, Use, Disposal of Hazardous Materials

The Landscape Plan would continue existing recreational use of the project site, which could involve routine minor use of chemicals such as pesticides and herbicides for maintenance of the park. Compliance with applicable regulations for hazardous materials would ensure that hazardous materials involved in maintenance are stored, used, and disposed of properly. This impact would be less than significant.

Accidental Release, Emission of Hazardous Materials

Recreational use of Flood County Park would not involve activities that could emit hazardous materials near sensitive receptors such as schools or result in an accidental release of hazardous materials. No impact would occur. Hazardous Materials Sites A search of the California Department of Toxic Substances Control's EnviroStor database on November 30, 2016, revealed no listed hazardous materials sites in the vicinity of Flood County Park. A search of the California State Water Resources Control Board's GeoTracker database (2016) revealed one previous case at the project site, pertaining to a leaking underground storage tank with potential gasoline contamination to a groundwater recharge system. The case was closed as of 1997, and no additional cleanup actions or regulatory activities are necessary. Furthermore, the project site is not listed on any other federal, state, or local databases of known sites containing any hazardous wastes or subject to other environmental concerns (U.S. EPA 2016). Therefore, the development of recreational facilities at Flood County Park would result in no impact related to hazardous materials sites.

Airport Hazards

The two nearest airports to the project site are San Carlos Airport and Palo Alto Airport, which are approximately 4.5 miles and 2.9 miles away from the project site, respectively. The project site is outside of the safety zones for both airports (City/County Association of Governments of San Mateo County 2015), and therefore aviation-related incidents do not pose a significant hazard for people recreating at Flood County Park. No impact related to aviation-related hazards would occur.

Emergency Response

As discussed in Section 4.9, *Transportation and Circulation*, emergency access to Flood County Park is available through the main gate and the fire access entryway at the Iris Lane gate. The Landscape Plan would maintain these emergency access points, and park users would still be able to evacuate through the main gate and other pedestrian gateways. Furthermore, the project would not involve modification of Bay Road and other nearby roadways that provide emergency access in Menlo Park. The impact related to emergency response would be less than significant.

Wildland Fire Hazards

The project site is located in an urbanized area, outside of a Very High Fire Hazard Severity Zone as identified and mapped by CAL FIRE and adopted by San Mateo County (CAL FIRE 2008). The risk of loss, injury, or death involving wildland fires is low in Menlo Park, and the proposed recreational improvements would not alter existing fire hazards conditions on-site. Therefore, the project would have no impact related to wildland fire hazards.

Flood Hazards and Inundation

As discussed in Section 5.7, the project site is located outside of a 100-year flood zone. The project would not expose people or structures to hazards from 100-year floods. As shown in Figures 4.8-5 and 4.8-6 in the ConnectMenlo EIR, Flood County Park is not located in a zone subject to inundation from dam failure or tsunamis (Menlo Park 2016). There are no large bodies of water in Menlo Park that could trigger a seiche. The project site is located in a relatively flat portion of Menlo Park that is outside of impacted zones for rainfall-induced landslides and debris flow source areas. Therefore, the project would not subject people or structures to these hazards.

Cumulative Impacts

Because the project would have no impact or less than significant impacts related to the above issues, it would not contribute to cumulative impacts from exposure to hazards and hazardous materials.

Conclusions

The project would have less than significant impacts related to the use of hazardous materials and emergency response. No impact from exposure to the accidental release or emission of hazardous materials, hazardous materials sites, airport hazards, wildlife fire hazards, or flooding would occur. These topics do not require further study in the EIR.

5.9 Hydrology and Water Quality

This section is addressed in Section 4.7 of the EIR.

5.10 Land Use and Planning

The Landscape Plan would have a significant impact related to land use and planning if it would:

- Physically divide an established community
- 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
- Conflict with any applicable habitat conservation plan or natural community conservation plan
- Result in the congregating of more than 50 people on a regular basis
- Result in the introduction of activities not currently found within the community
- Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)
- Create a significant new demand for housing

Project Impacts

Physical Divide a Community

The project would not involve construction of any roads or other physical barriers that could physically disrupt or divide an established community. No changes or divisions to existing property lines or parcels would take place. Therefore, no impact would occur.

Conflict with Land Use Plans and Policies

As discussed in Section 1, *Introduction*, Flood County Park is owned and operated by the County and not subject to the City of Menlo Park's land use plans or policies. Being located within the city limits of Menlo Park, the project site also is not subject to the County's zoning standards. However, the project would be subject to the San Francisco Public Utilities Commission's (SFPUC) land use standards within the right-of-way for the Hetch Hetchy Regional Water System, which crosses the project site on an east-west axis. The County currently holds a five-year Revocable License (#3631B), issued by SFPUC in June 2015, for the recreational use of this on-site right-of-way. The following SFPUC standards would apply to the project within the right-of-way:

- No lighting poles, fence posts, utilities placed parallel to the pipelines, structures and fixtures within 20 feet of the edge of the pipelines, vegetation within 10 feet of the pipeline risers and manholes, trees, or tire crumbles (used with artificial turf)
- Any irrigation that is parallel to the pipelines must be 1.5 inches or less in diameter
- Any utilities or conduit crossing the pipelines must maintain 12 inches of vertical clearance with the pipelines

The proposed Landscape Plan would be consistent with these standards by avoiding the placement within the SFPUC right-of-way of features that could conflict with pipeline safety. In addition, as discussed in Section 2, *Project Description*, the reconstructed ballfield and proposed soccer/lacrosse field would be constructed on an additional six inches of substrate to provide adequate cover above the pipelines. The County also would execute an updated revocable license before any ground disturbance in the right-of-way. With adherence to the SFPUC's standards for pipeline protection and execution of an updated revocable license, the Landscape Plan would be consistent with applicable SFPUC policies.

This analysis also includes a preliminary discussion of the project's conformity with the City of Menlo Park General Plan, for informational purposes. Table 38 analyzes consistency with applicable policies related to environmental impacts. In general, the Landscape Plan would be potentially consistent with the policies discussed below, with the exception of the Policy II-A-8 in the City's Land Use and Circulation Element. This policy is intended to mitigate significant traffic impacts from new development.

Table 38 Preliminary Conformity Analysis with City of Menlo Park General Plan Policies

General Plan Policy	Discussion
Open Space, Conservation, Noise and Safety Elements	
Policy OSC1.4: Habitat Enhancement. Require new development to minimize disturbance of natural habitats and vegetation, and require [sic] revegetation of disturbed natural habitat areas with native or non-invasive naturalized species.	**Potentially Consistent.** As discussed in Section 5.4, the project site is a highly disturbed neighborhood park that lacks sensitive natural communities (Rincon 2016). Therefore, the Landscape Plan would be potentially consistent with policy to minimize disturbance of sensitive natural habitats.
Policy OSC1.5: Invasive, Non-Native Plant Species. Avoid the use of invasive, non-native species, as identified on the lists of invasive plants maintained at the California Invasive Plant Inventory and United States Department of Agriculture invasive and noxious weeds database, or other authoritative sources, in landscaping on public property.	**Potentially Consistent.** Although a plant palette for landscaped areas under the proposed Landscape Plan has not yet been prepared, it is expected that the County would adhere to this policy to avoid the planting of invasive, non-native plant species at Flood County Park.
Policy OSC1.15: Heritage Trees. Protect Heritage Trees, including during construction activities through enforcement of the Heritage Tree Ordinance (Chapter 13.24 of the Municipal Code)	**Potentially Consistent.** As discussed in Section 4.3, *Biological Resources*, the Landscape Plan would preserve the majority of protected trees on-site. However, site preparation for the construction of proposed recreational elements would involve the removal of heritage trees identified by an arborist at Flood County Park. Mitigation Measure BIO-2(a) would require the replacement of County-protected trees at a 2 to 1 ratio with species specified as heritage trees. In addition, Mitigation Measure BIO-2(b) would require avoidance of remaining protected trees during construction, to preserve their health. With implementation of these measures, the project would be potentially consistent with City policy to protect heritage trees.
Policy OSC1.16: Visual Amenities in Public Improvements. Require that all public improvements to facilities, such as streets, civic structures and major municipal projects, recognize the need for visual amenities such as landscaping, public plazas, public art, and pedestrian and bicycle access.	**Potentially Consistent.** The proposed recreational improvements at Flood County Park would include landscaping, gathering plazas, and pedestrian and bicyclist access on paths. Therefore, the project would be potentially consistent with this policy for visual amenities in public improvements.
Policy OSC2.1: Open Space for Recreation Use. Provide open space lands for a variety of recreation opportunities, make improvements, construct facilities and maintain programs that incorporate sustainable practices that promote healthy living and quality of life.	**Potentially Consistent.** The Landscape Plan would provide improved facilities for active and passive recreation for Menlo Park residents, such as athletic fields, picnic areas, and public gathering areas. Therefore, the project would be potentially consistent with this policy that calls for the provision of recreational opportunities.
Policy OSC3.1: Prehistoric or Historic Cultural Resources Investigation and Preservation. Preserve historical and cultural resources to the maximum extent practical. **Policy OSC3.2: Prehistoric or Historic Cultural Resources Protection.** Require significant historic or prehistoric artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and	**Potentially Consistent.** As discussed in Section 4.4, *Cultural Resources*, qualified historic experts investigated existing structures at Flood County Park for historic eligibility, as part of this EIR process. The project would preserve adobe structures identified as potentially historic to the extent practical, rehabilitating the central administrative building for seismic stability and maintaining all other adobe structures except for the Restroom D building. Adobe preservation would maintain the park's eligibility as an historical resource with elements dating to the Works Progress Administration era of the 1930s. Therefore, the project would be potentially

General Plan Policy	Discussion
preservation, and to ensure compliance with local, State and Federal regulations.	consistent with this policy to investigate and preserve historic resources.
Policy OSC3.3: Archaeological or Paleontological Resources Protection. Protect prehistoric or historic cultural resources either on site or through appropriate documentation as a condition of removal. Require that when a development project has sufficient flexibility, avoidance and preservation of the resource shall be the primary mitigation measure, unless the City identifies superior mitigation. If resources are documented, undertake coordination with descendants and/or stakeholder groups, as warranted.	**Potentially Consistent.** As discussed in Section 4.4, *Cultural Resources*, although a records search and site survey did not identify archaeological or paleontological resources at Flood County Park, Mitigation Measures CUL-3 through CUL-5 would be required to protect such resources if discovered during the construction of proposed recreational elements. Therefore, the project would be potentially consistent with this policy to protect such resources.
Policy OSC5.3: Water Conservation. Encourage water-conserving practices in businesses, homes and institutions.	**Potentially Consistent.** As discussed in Section 5.18, the project would not substantially increase water demand relative to existing water use at Flood County Park. Phase I of the Landscape Plan also may involve the installation of greywater piping to reclaim water for reuse. Therefore, the project would be potentially consistent with this policy for water conservation.
Policy N1.4: Noise Sensitive Uses. Protect existing residential neighborhoods and noise sensitive uses from unacceptable noise levels and vibration impacts. Noise sensitive uses include, but are not limited to, hospitals, schools, religious facilities, convalescent homes and businesses with highly sensitive equipment. Discourage the siting of noise-sensitive uses in areas in excess of 65 dBA CNEL without appropriate mitigation and locate noise sensitive uses away from noise sources unless mitigation measures are included in development plans.	**Potentially Consistent.** As discussed in Section 4.8, *Noise*, construction of the proposed recreational elements would not expose nearby residents to excessive noise levels based on County standards or to excessive vibration based on Federal Transit Administration standards. Although the operation of new athletic fields could generate disturbing noise from whistles, sound amplification equipment, and air horns, mitigation would substantially reduce impacts from on-site operational noise. Mitigation Measures N-3(a) and N-3(b) would prohibit the use of sound amplification equipment and air horns, require periodic patrolling for enforcement, and athletic events during early morning hours. Therefore, the project would be potentially consistent with this policy to protect residents from excessive exposure to noise and vibration.
Policy S1.2: Location of Public Improvements. Avoid locating public improvements and utilities in areas with identified flood, geologic and/or soil hazards to avoid any extraordinary maintenance and operating expenses. When the location of public improvements and utilities in such areas cannot be avoided, assure that effective mitigation measures will be implemented.	**Potentially Consistent.** As discussed in Section 4.5, *Geology and Soils*, the Landscape Plan would not locate public improvements or other project features in areas with identified geologic or soil-based hazards. The project would be potentially consistent with this policy.
Policy S1.26: Erosion and Sediment Control. Continue to require the use of best management practices for erosion and sediment control measures with proposed development in compliance with applicable regional regulations.	**Potentially Consistent.** As discussed in Section 4.7, *Hydrology and Water Quality*, the proposed recreational improvements would be required to comply with the County's best management practices for erosion and sediment control, as well as with NPDES permitting requirements to control erosion and stormwater during construction. Therefore, the project would be potentially consistent with this policy for erosion and sediment control.

General Plan Policy	Discussion
Land Use and Circulation Element	
Policy I-G-1. The City shall develop and maintain a parks and recreation system that provides areas and facilities conveniently located and properly designed to serve the recreation needs of all Menlo Park residents.	**Potentially Consistent.** The Landscape Plan would introduce new and modernized active and passive recreational facilities to serve the needs of Menlo Park residents, especially in neighborhoods surrounding the project site. The project would be potentially consistent with this policy.
Policy I-G-11. Well-designed pedestrian facilities should be included in areas of intensive pedestrian activity.	**Potentially Consistent.** The Landscape Plan would add several pedestrian facilities at a County park that would accommodate intensive pedestrian activity during special events at the group picnic areas, outdoor gathering areas, and athletic fields. These facilities include a network of pathways with exercise stations, gathering plazas, and a tree-lined promenade. The project would be potentially consistent with this policy for well-designed pedestrian facilities.
Policy I-H-7. The use of reclaimed water for landscaping and any other feasible uses shall be encouraged.	**Potentially Consistent.** As discussed with regard to Policy OSC5.3, Phase I may involve the installation of a greywater piping system to reclaim water for reuse. Therefore, the project would be potentially consistent with this policy to encourage the use of reclaimed water.
Policy I-H-11. Buildings, objects, and sites of historic and/or cultural significance should be preserved.	**Potentially Consistent.** As discussed with regard to policies OSC3.1 and OSC3.2, the Landscape Plan would preserve the majority of structures of historic significance at Flood County Park, retaining the site's eligibility as an historical resource. Therefore, the project would be potentially consistent with policy for historic preservation.
Policy II-A-8. New development shall be reviewed for its potential to generate significant traffic volumes on local streets in residential areas and shall be required to mitigate potential significant traffic problems.	**Potentially Inconsistent.** Impact T-1 in Section 4.9, *Transportation and Circulation,* analyzes the Landscape Plan's potential to generate significant traffic congestion on Menlo Park streets. The project would have a significant and unavoidable impact at the intersection of Bay Road and Ringwood Avenue. This intersection is currently approaching the City's threshold of LOS D for unsignalized intersections, and trips generated by the project would cause an exceedance of this standard. Because of physical constraints on Ringwood Avenue, a new left-turn lane that would mitigate this impact may not be feasible. Therefore, the project would be potentially inconsistent with this policy to mitigation significant traffic problems from new development.
Policy II-A-12. The City shall endeavor to provide for the safe, efficient, and equitable use of streets by pedestrians and bicyclists through good roadway design, maintenance, and effective traffic law enforcement.	**Potentially Consistent.** The Landscape Plan would improve pedestrian and bicyclist facilities in Menlo Park with the implementation of mitigation measures in Section 4.9, *Transportation and Circulation*. Mitigation Measure T-5(a) would require the installation of bicycle storage at Flood County Park, while Mitigation Measure T-5(b) would be require the County to coordinate with the City of Menlo Park to install signage to increase awareness of pedestrians on Bay Road where it may be infeasible to close a sidewalk gap. Therefore, the project would be potentially consistent with this policy to support pedestrian and bicyclist circulation.

Conflict with Habitat Conservation Plans

As discussed in Section 5.4, the project site is not located within the area covered by any habitat conservation plans or related plans. Therefore, no impact would occur.

Large Congregations of People

Flood County Park currently hosts social events that may include more than 50 participants at its group picnic areas. The proposed Landscape Plan could increase the frequency of events with more than 50 people by introducing a reconstructed ballfield, a soccer/lacrosse field, and a gathering meadow for performances. However, the project would not result in environmental impacts directly associated with the number of people at specific park events. Section 4.8, *Noise*, evaluates the impacts of new noise sources associated with use of the athletic fields and gathering meadow.

Introduction of New Activities

As discussed above, the Landscape Plan would introduce additional activities to Flood County Park, including more active recreational use and occasional performances. However, the project site would remain recreational in nature. No impact would occur from the introduction of new types of activities.

Offsite Development

The Landscape Plan would serve existing demand for recreational facilities in San Mateo County. Although the project would increase the range of recreational uses at Flood County Park, it would not increase recreational capacity to the extent that it could encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas. No impact would occur.

New Demand for Housing

As discussed in Section 5.13, the Landscape Plan would not increase demand for housing. No impact would occur.

Cumulative Impacts

Because the Landscape Plan would not physically divide a community and would not result in conflicts associated with applicable SFPUC policies, habitat conservation plans, congregations of people, or related land use issues, it would not contribute to a cumulative impact related to land use consistency.

Conclusions

The project would be consistent with applicable land use policies. This topic does not require further study in the EIR.

5.11 Mineral Resources

The Landscape Plan would have a significant impact related to mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State

- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

The project site is designated as Mineral Resource Zone (MRZ) 1 classification area by the Department of Conservation, California Geological Survey (CGS). MRZ-1 areas are defined as areas with no significant mineral deposits or areas considered highly unlikely for mineral deposits to exist (California Department of Conservation, CA Geological Survey, 1987). A typical MRZ-1 area is developed or urbanized, with little to no mining or extractive activities. Therefore, the project would have no effect on mineral resources.

Cumulative Impacts

Because the project would have no impact on mineral resources, as discussed above, it would not contribute to a cumulative impact on mineral resources.

Conclusions

No impact to mineral resources would occur. This topic does not require further study in the EIR.

5.12 Noise

Section 4.8, *Noise*, addresses impacts related to local noise standards, ground-borne vibration, construction noise, on-site operational noise, and traffic noise. In addition, the Landscape Plan would have a significant impact related to noise if it would:

- Expose people residing or working in the project area to excessive noise levels 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
- Expose people residing or working in the project area to excessive noise levels within the vicinity of a private airstrip

Project Impacts

As discussed in Section 5.8, the two nearest airports to the project site are San Carlos Airport and Palo Alto Airport, which are approximately 4.5 miles and 2.9 miles away from the project site, respectively. San Francisco International Airport also is approximately 13.5 miles to the northwest. The Landscape Plan would facilitate increased use of Flood County Park, where visitors are exposed to some noise from aircraft flying to and from nearby airports. However, Menlo Park does not fall within the airport land use planning areas, runway protection zones, or the 55 dBA CNEL noise contours of any of these airports. Therefore, the proposed recreational improvements would not result in the exposure of park users to excessive aircraft noise. This impact would be less than significant.

Cumulative Impacts

Because the project would not result in people's exposure to excessive aircraft noise, it would not contribute to a significant cumulative impact related to aircraft noise.

Conclusions

This impact would be less than significant and does not require further study in the EIR.

5.13 Population and Housing

The Landscape Plan would have a significant impact related to population and housing if it would:

- Induce significant 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)
- Displace existing housing (including low- or moderate-income housing), in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere

Project Impacts

The project site does not have existing housing, and the Landscape Plan would not involve the construction of new housing on-site. Furthermore, the project would not indirectly induce population growth through the extension of roads or other infrastructure to undeveloped areas. Although the proposed recreational facilities would serve new park visitors, they would not induce additional population growth. Construction would generate temporary employment on-site and would draw personnel from the existing regional labor force. Therefore, the project would have no effect related to population growth or existing housing.

Cumulative Impacts

Because the project would have no impact related to population and housing, it would not contribute to cumulative impacts.

Conclusions

No impact to population and housing would occur. These topics do not require further study in the EIR.

5.14 Public Services

The Landscape Plan would have a significant impact related to public services if it would:

- Result in significant adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection
    - Police protection
    - Schools
    - Parks
    - Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)

Project Impacts

Fire Protection

The Menlo Park Fire Protection District (MPFPD) provides fire protection services to the City of Menlo Park and other local communities. MPFPD requests emergency medical services, dispatched through San Mateo County Emergency Medical Services (EMS) Agency as needed. Station 5 (4101 Fair Oaks Avenue) is the closest station, located approximately 1.3 miles west of the project site. Operation of the proposed active and passive recreational facilities would be similar in nature to existing facilities at the park and would not increase the likelihood of fire incidents or increase fuel availability. The project site would be maintained with vegetation comparable to existing conditions with the addition of demonstration gardens and a gathering meadow for performance (during Phase II). New and restored buildings for restrooms and administrative purposes would be designed with fire protection systems based on applicable County building and fire code requirements. Furthermore, MPFPD has identified the adjacent Bay Road as a primary fire service route (MPFPD 2016). Additional access roads within the park exist and provide emergency access throughout the project site. Therefore, the project would have no impact related to fire protection services.

Police Protection

Flood County Park is served by the Menlo Park Police Department, and receives emergency medical services, dispatched through San Mateo County EMS Agency as needed. Ten full-time park rangers serve Flood County Park on a rotational schedule such that two park rangers are on-site for a total of 8 hours per day. Seasonal fluctuations occur for the number of part time personnel. No additional night time security is provided at Flood Park, though one resident park ranger responds to issues during non-operational hours (Kraemer and Herzberg, personal communication, December 2016). The perimeter of the project site is lined with fencing to contain park activities adjacent to residential homes along Del Norte Avenue and Hedge Road, and automobile traffic along Bay Road. The project would maintain recreational uses at Flood County Park and would not require the addition of staff to the Menlo Park Police Department or expansion of police facilities. Therefore, no impact related to police protection services would occur.

Schools

The Landscape Plan would not generate additional students or residents served by local school facilities. In fact, the reconstructed ballfield and new soccer/lacrosse field could shift demand for athletic fields from local schools. Therefore, the project would have no impact related to the need for expanded school facilities.

Parks

Implementation of the Landscape Plan would improve the County's supply of recreational facilities. Rather than generate additional demand for parks, the project would satisfy existing and future demand for parkland. No impact related to the need for additional park facilities would occur.

Other Public Facilities

The project would increase visitorship to the Flood County Park, which could incrementally increase the use of nearby hospitals, and electricity and natural gas associated with park use. However, the

project would not substantially increase demand to the extent that expanded public facilities are needed. This impact would be less than significant.

Cumulative Impacts

Because the project would have no impact or less than significant impacts related to public facilities, it would not contribute to a cumulative impact.

Conclusions

The project would have no impact related to police and fire protection services, schools, and parks, and a less than significant impact related to other public facilities. These topics do not require further study in the EIR.

5.15 Recreation

The Landscape Plan would have a significant impact related to recreation if it would:

- Increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

Project Impacts

Existing Recreational Facilities

As discussed in Section 2, *Project Description*, the Landscape Plan would increase the use of recreational facilities at Flood County Park, especially due to the addition of athletic fields that serve organized baseball, soccer, and lacrosse practices and games, as well as continued growth in passive recreational use. However, this increased public use would not result in deterioration of existing park facilities. By contrast, one objective of the project is to repair and update park features and core infrastructure components to better serve the public. The Landscape Plan would address the existing deterioration of older facilities at the project site, such as the ballfield that has been closed for approximately five years because of unsafe field conditions over the SFPUC pipelines. Therefore, the project would have no adverse impact related to deterioration of existing recreational facilities.

Proposed Recreational Facilities

The project would involve the construction of new recreational facilities, the environmental impacts of which are evaluated throughout this EIR. The project would not generate additional demand for recreational facilities beyond the scope of the Landscape Plan.

Cumulative Impacts

Because the project would have no adverse impact related to deterioration of recreational facilities, or demand for new recreational facilities, it would not contribute to a cumulative impact.

Conclusions

No impacts related to recreation would occur. This topic does not require further study in the EIR.

5.16 Transportation and Circulation

Section 4.9, *Transportation and Circulation*, addresses impacts related to traffic congestion; vehicle miles traveled; traffic safety; bicyclist, pedestrian, and transit circulation; and parking capacity. In addition, impacts also would be significant if the project would:

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in significant safety risks
- Result in inadequate emergency access

Project Impacts

Air Traffic Patterns

The project site is not located near any airports. The closest airport is San Carlos Airport, approximately four miles northwest of the project site. Therefore, implementation of the Landscape Plan would have no impact on air safety, air traffic, or operation of airport facilities.

Emergency Access

The Landscape Plan would not modify the existing transportation network surrounding Flood County Park. Emergency access to the park would be retained through the main entrance gate and the fire lane at the Iris Lane gate. Therefore, the impact to emergency access would be less than significant.

Cumulative Impacts

Because the project would have no impact on air traffic patterns and a less than significant impact on emergency access, it would not contribute to a cumulative impact related to transportation and circulation.

Conclusions

The project would have no impact on air traffic patterns and a less than significant impact on emergency access. These topics do not require further study in the EIR.

5.17 Tribal Cultural Resources

This section is addressed in Section 4.10 of the EIR.

5.18 Utilities and Service Systems

The Landscape Plan would have a significant impact related to utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board

- 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
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- 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
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Comply with Federal, State, and local statutes and regulations related to solid waste
- Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources
- Generate any demands that will cause a public facility or utility to reach or exceed its capacity

Project Impacts

Wastewater

Wastewater from the operations and maintenance of the project site is treated by the West Bay Sanitary District (Schoof, personal communication, December 2016). Increased use of the park under implementation of the Landscape Plan would incrementally increase wastewater generation. Wastewater generation would not substantially increase. Furthermore, a new greywater piping system that the County might install during Phase I would reduce the amount of wastewater conveyed for treatment. Therefore, the project would result in a less than significant impact related to wastewater.

Stormwater

According to the City of Menlo Park *City-Wide Storm Drainage Study*, there is one main storm drain line that collects storm water from Flood County Park and Bay Road, which is connected to U.S. 101 storm drain lines that discharge to systems through eastern Menlo Park and East Palo Alto (2003). As discussed in Section 4.7, *Hydrology and Water Quality*, the project would not result in a substantial increase in storm water runoff from Flood County Park. No new or expanded storm water drainage facilities would be required. Therefore, the project would have no impact to storm water systems.

Water Supply

The Menlo Park Municipal Water District supplies water to the project site from the SFPUC's Hetch Hetchy Regional Water System (Schoof, personal communication, December 2016; Menlo Park Municipal Water District 2017). The addition of new restrooms and gardens during Phase II of the Landscape Plan, as well as increased public use of the park, would lead to incrementally greater

water demand from the site. New athletic fields also could demand water unless built with artificial turf. However, the proposed recreational facilities would not generate more water demand than is typical of local parks. The project would have a less than significant impact to the water supply.

Solid Waste

Recology of San Mateo County manages solid waste generated at the project site (Schoof, personal communication, December 2016). A majority of the waste generated from Flood County Park consists of compostable landscape remnants (i.e., grass clippings, tree trimmings, leaves) and, to a lesser degree, consumer waste (i.e., recyclable water bottles and cans, food packaging). Construction of the proposed recreational facilities would generate solid waste to be disposed at a landfill from the removal of demolished structures and soil export. During operation of the Landscape Plan, with increased public use of Flood County Park, waste generation may incrementally increase from current amounts. Solid waste in San Mateo County is disposed at the Corinda Los Trancos (Ox Mountain) Landfill. The Ox Mountain Landfill has a permitted throughput of approximately 3,600 tons per day and a remaining capacity reported in December 2015 of approximately 22 million cubic yards (CalRecycle 2017). The relatively small amount of additional construction and operational waste that would be generated under the Landscape Plan would not exceed the existing landfill capacity, and this impact would be less than significant.

Cumulative Impacts

Because the project would have a less than significant impact related to utilities and service systems, it would not contribute to a cumulative impact.

Conclusions

Impacts to utilities and service systems would be less than significant. These topics do not require further study in the EIR.

5.19 Mandatory Findings of Significance

The project would have a significant impact if it would:

- Have the potential to degrade the quality of the environment, significantly reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory
- Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- Have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly

Project Impacts

As discussed in Section 4.3, *Biological Resources*, the removal of trees during construction has the potential to adversely affect nesting birds and roosting bats. However, implementation of Mitigation Measures BIO-1(a) and BIO-1(b) would reduce potentially significant impacts to a less than significant level through biological surveys and avoidance of nesting birds or roosting bats during construction. Furthermore, as discussed in Section 4.4, *Cultural Resources*, with preservation of the adobe administrative building and other adobe structures, the project would not significantly impair or eliminate any known prehistoric or historic resources. Impacts on unanticipated cultural resources would be less than significant with implementation of Mitigation Measures CUL-2(a) through CUL-2(c), requiring the protection of any unanticipated cultural resources encountered during construction activity.

Cumulative impacts are generally considered in analyses of air quality, biological resources, cultural resources, noise, and traffic. As discussed in Section 4.2, *Air Quality*, emissions of air pollutants during construction of the proposed recreational improvements would not exceed applicable thresholds. Cumulative impacts on air quality would be less than significant, although implementation of BAAQMD measures to control fugitive dust and NO_x emissions is recommended. As discussed above, the project has the potential to adversely affect nesting birds and roosting bats, but mitigation would reduce these impacts to a less than significant level through biological surveys and avoidance of nesting birds or roosting bats during construction. With implementation of these measures, the project would not have a considerable contribution to cumulative impacts on biological resources. As discussed above, the preservation of adobe structures and mitigation measures to protect unanticipated cultural resources would reduce impacts to cultural resources to less than significant. Therefore, the project would not contribute to cumulative cultural impacts. As discussed in Section 4.8, *Noise*, the project would not contribute to cumulative noise impacts. However, as further discussed in Section 4.9, *Transportation and Circulation*, the project would have a significant and unavoidable cumulative impact on traffic congestion at the intersection of Bay Road and Ringwood Avenue.

As discussed in Section 4.2, *Air Quality*, the Landscape Plan would have a less than significant impact on air quality, although implementation of BAAQMD measures to control fugitive dust and NO_x emissions is recommended to further reduce impacts to human health. As discussed in Section 4.8, *Noise*, the project would not result in the exposure of persons to noise levels in exceedance of applicable standards; exposure of persons to excessive groundborne noise vibration; a significant increase above ambient noise levels in the project vicinity; or subject people to excessive noise from use of an airport or airstrip. As stated in Section 4.6, *Geology and Soils*, construction of the project would not expose people to substantial adverse effects from fault rupture, ground shaking, ground failure, liquefaction, or landslides; result in soil erosion; or involve the construction of habitable structures that could be subject to unstable or expansive soils. Finally, as discussed in Section 5.8, the project would not expose people to hazardous conditions.

6 Other CEQA Required Discussions

This section discusses growth inducing impacts, significant and unavoidable environmental impacts, irreversible environmental impacts, and energy impacts that could be caused by the proposed project.

6.1 Growth-Inducing Effects

Section 15126(d) of the *CEQA Guidelines* requires that an EIR discuss the ways in which a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Typical growth-inducing factors might be the extension of urban services or transportation infrastructure to a previously unserved or under-served area, or the removal of barriers to development. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects.

The proposed project would not involve any residential uses; therefore, it would not result in any direct population growth.

Construction of the proposed recreational elements would generate temporary employment opportunities, which would draw workers for the existing regional workforce. However, the number of long-term County park employees would remain comparable to existing numbers working at Flood County Park. Therefore, the project would not induce growth by a substantial increase in employment opportunities.

6.2 Removal of Obstacles to Growth

The project site is located in an urbanized area that is fully served by existing infrastructure. As discussed in Section 2, *Project Description*, Phase I of the Landscape Plan would involve modernizing existing utilities serving Flood County Park; however, this minor on-site utility work would not extend utilities to previously undeveloped areas. No new or widened/expanded roads would be required. Because the project constitutes redevelopment within an existing park and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

6.3 Significant Unavoidable Environmental Impacts

According to *CEQA Guidelines* Section 15126(b), an EIR must discuss any significant environmental impacts that cannot be avoided under full implementation of the project. The environmental analysis in Section 4 identifies one significant unavoidable environmental impact. As discussed under Impact T-1 in Section 4.9, *Transportation and Circulation*, the proposed recreational improvements at Flood County Park would generate new vehicle trips that exacerbate traffic delay at the intersection of Bay Road and Ringwood Avenue, resulting in a congestion that exceeds the City of Menlo Park's standards for unsignalized intersections. While installation of a northbound left-turn lane on Ringwood Avenue would resolve the project's impact at this intersection, physical

constraints on Ringwood Avenue would make implementation of such a measure less likely. Furthermore, this measure would require coordination with, and approval, by the City of Menlo Park and the Town of Atherton, which cannot be guaranteed. Therefore, it is conservatively assumed that installing a new turn lane at the intersection would be infeasible. This traffic impact would be significant and unavoidable. The proposed mitigation measures outlined throughout each section in Chapter 4 of this EIR would avoid or eliminate other potentially significant impacts.

6.4 Significant Irreversible Environmental Changes

Pursuant to *CEQA Guidelines* Section 15127(a), this EIR for adoption of a plan by a public agency must include a discussion of significant irreversible environmental changes that would result from project implementation. CEQA also requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses nonrenewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed development.

Implementation of the Landscape Plan would involve the use of physical materials and energy, some of which are nonrenewable resources. Renewable and nonrenewable resources that would likely be consumed with the implementation of each project component would include, but are not limited to, sand, gravel, concrete and cement, lumber, steel, water, and similar materials. Furthermore, construction equipment running on nonrenewable fossil fuels would be needed for excavation and hauling of materials. Continued electricity use would also support the operation of a renovated administrative building and restrooms. However, as discussed below, it is not anticipated that the proposed recreational improvements would significantly affect local or regional energy supplies.

Proposed recreational improvements at Flood County Park would require the continued commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal serving the project site. However, as discussed in Section 5, Effects Found Not to Be Significant, impacts related to public services and utilities would be less than significant.

The additional vehicle trips associated with the Landscape Plan would increase local traffic congestion, which would be difficult to reverse. As discussed in Section 4.9, *Transportation and Circulation*, the impact to the local circulation system at the intersection of Bay Road and Ringwood Avenue would be significant and unavoidable.

6.5 Energy Effects

The State *CEQA Guidelines* Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy.

As discussed previously, implementation of the Landscape Plan would involve the use of energy during construction and operation of the proposed recreational elements. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. The long-term operation of recreational facilities would not substantially increase energy consumption. The installation of new utility connections for water, electricity, and natural gas service during Phase I would replace existing connections at the park. Consumption of

water, electricity, and natural gas could incrementally increase as visitorship to the park rises. However, the project would not substantially increase fuel consumption in San Mateo County because existing trips to athletic fields at other locations would be rerouted to new athletic fields at Flood County Park.

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7 Alternatives

This section identifies alternatives to the proposed Landscape Plan and evaluates their potential environmental impacts. Through comparison of these alternatives to the proposed project, the relative environmental advantages and disadvantages of each are weighed and analyzed.

As required by Section 15126.6 of the CEQA Guidelines, this section examines a reasonable range of alternatives. Not every conceivable alternative must be addressed, nor do infeasible alternatives need to be considered (CEQA Guidelines Section 15126.6(a)). Based on the CEQA Guidelines, several factors need to be considered in determining the range of alternatives to be analyzed in the EIR and the level of analytical detail that should be provided for each alternative. These factors include: (1) the nature of the significant impacts of the proposed project, (2) the ability of alternatives to avoid or reduce the project's significant impacts, (3) the ability of the alternatives to meet the objectives of the proposed project, and (4) the feasibility of the alternatives.

The discussion of alternatives must focus on alternatives capable of either avoiding or substantially lessening any significant environmental effects of the project, even if the alternative would impede, to some degree, the attainment of the project objectives or would be more costly (CEQA Guidelines Section 15126.6(b)). The analysis of alternatives need not be presented in the same level of detail as the assessment of the proposed project. Section 15126.6 of the CEQA Guidelines states that the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency or other plans or regulatory limitations, and jurisdictional boundaries.

The analysis in this EIR shows that the proposed Landscape Plan would result in a significant and unavoidable impact with respect to traffic congestion; all other impacts of the project would either be less than significant or could be mitigated to a less than significant level. A Reduced Athletic Programming Alternative (Alternative 2) is intended to reduce the project's significant and unavoidable impact from traffic congestion to the extent feasible, by prohibiting programmed use of athletic fields during P.M. peak traffic hours. In addition, a Multi-Use Field Alternative (Alternative 3) is intended to consolidate athletic activities that generate noise farther from residences adjacent to Flood County Park, reducing the project's already less than significant impact from on-site operational noise.

The following alternatives are evaluated in this section:

- Alternative 1: No Project (no change to existing conditions)
- Alternative 2: Reduced Athletic Programming
- Alternative 3: Multi-Use Field

Table 39 provides a summary comparison of the development characteristics of the project and the alternatives. A more detailed description of the alternatives is included in the impact analysis for each alternative.

Table 39 Comparison of Project Alternatives' Buildout Characteristics

	Alternatives			
Characteristic	**Proposed Project**	**No Project**	**Reduced Athletic Programming**	**Multi-Use Field**
Athletic Fields	Reconstructed ballfield New soccer/lacrosse field	Existing ballfield closed indefinitely	Reconstructed ballfield New soccer/lacrosse field	Multi-use field for softball, soccer, lacrosse
Area of Phase I Grading	9 acres	None	9 acres	7-9 acres
Timing of Programmed Athletic Activities	Full park hours	None	Morning and afternoon park hours except for 4-6 P.M.	Full park hours

Among the alternatives shown in Table 39, this section also identifies the Environmentally Superior Alternative as required by the CEQA Guidelines.

As indicated above, project alternatives should feasibly be able to attain "most of the basic objectives of the project" (Section 15126.6(a) of the *CEQA Guidelines*), even though implementation of the project alternatives might, to some degree, impede the attainment of those objectives or be more costly (Section 15126.6(b) of the *CEQA Guidelines*). The following are the project objectives as described in Section 2, *Project Description*.

- To repair and update park features and core infrastructure components
- To meet demand for active recreation facilities in San Mateo County by increasing offerings of sports
- To provide a variety of uses for a range of user groups, including youth
- To optimize preservation of oak woodland

7.1 Alternatives Considered but Rejected

In addition to the Reduced Athletic Programming and Multi-Use Field alternatives, the County considered two other options for alternatives analysis. One option was to swap the proposed placement of the reconstructed ballfield and the new soccer/lacrosse field. This alternative site layout was considered with the intention of reducing the exposure of adjacent residents to noise from soccer and lacrosse activity. Whereas the proposed soccer/lacrosse field would be located approximately 100 feet away from the backyards of residences along Del Norte Avenue, the swapped field would be approximately 400 feet away from these residences. The field-swapping alternative was rejected primarily because it is infeasible. The new ballfield would be constructed over two existing concrete hatches within the San Francisco Public Utilities Commission's (SFPUC) pipeline right-of-way. First, the County would have to import additional soil to raise the new field to the level of the concrete hatches, which provide access to the pipelines. Second, to protect the safety of recreational users, grass or artificial plugs would need to be installed above the hatches. The County anticipates that SFPUC would not approve this restriction to pipeline access in its right-of-way. Finally, the Multi-Use Field Alternative would accomplish the same purpose of reducing noise exposure, without necessitating more grading or interfering with pipeline access.

The County also considered an alternative to increase preservation of natural and cultural resources. This resource-preservation alternative would remove the proposed soccer/lacrosse field to protect an existing grove of redwood trees and retain existing adobe structures. The primary intention would be to retain the historic feeling associated with adobe structures at Flood County Park. However, since publishing a Notice of Preparation of a Draft EIR in November 2016, the County has amended the Landscaped Plan to increase adobe preservation. When that notice was issued, the Landscape Plan called for partial demolition of the adobe administrative office building and complete demolition of an adobe maintenance building. The County has since revised the Landscape Plan to preserve these features and to repair the administrative office building for seismic stability. With these changes to the Landscape Plan, impacts related to cultural resources would be less than significant, as discussed in Section 4.4, Cultural Resources. In addition, impacts to protected trees would be less than significant with mitigation, as discussed in Section 4.3, Biological Resources. Because the currently proposed project would not have significant impacts on biological or cultural resources after mitigation, a resource-preservation alternative would not be necessary to analyze.

7.2 Alternative 1: No Project

This alternative assumes that the proposed Landscape Plan is not implemented and that the County continues operating and maintaining Flood County Park in its current condition. No existing elements would be removed or demolished, and no new structures or recreational elements would be constructed. It is assumed that, for safety reasons, the existing ballfield would remain indefinitely closed for use. Consistent with the recent trend of steadily increasing visitorship since a temporary closure of the park in 2011, it is likely that the number of park users and use of existing recreational facilities would continue to grow in the future.

Because the No Project Alternative would maintain Flood County Park in its current conditions, it would not alter existing residential views, visual resources, or cultural and paleontological resources. While the project would require mitigation to reduce aesthetic and cultural impacts to less than significant, this alternative would have no impact on these issue areas. Without the construction of proposed recreational improvements, the No Project Alternative would have no impact on nesting birds or roosting bats from vegetation removal, and no impact on air quality from construction emissions. Mitigation measures to protect biological resources and air quality would be unnecessary. By not constructing new athletic facilities, the No Project Alternative also would have no impact related to athletic noise or traffic congestion from athletic participants queuing at the entrance gate. This would avoid the need for mitigation to restrict the timing of programmed athletic events and to implement new parking fee collection practices.

The continuation of existing conditions at Flood County Park may result in infrequent disturbance of neighbors from the use of sound amplification equipment at the park, occasional shortages in on-street parking capacity from park visitors, and safety concerns for bicyclists and pedestrians. Mitigation measures to limit sound amplification, install bicycle storage on-site, and post signage on Bay Road for pedestrians would still be applicable. Nevertheless, the No Project Alternative's overall impacts would be lower than those of the proposed project.

The No Project Alternative also would not achieve most objectives of the proposed project. Although it would optimize preserve of oak woodland, this alternative would not repair or update park features, meet demand for additional active recreation facilities in San Mateo County, or provide a greater variety of uses for a range of user groups.

7.3 Alternative 2: Reduced Athletic Programming

Description

The Reduced Athletic Programming Alternative focuses on revising the programming of the recreational facilities to address identified adverse traffic impacts. This alternative would introduce the same new recreational facilities as planned for in the Landscape Plan, and in the same phases of construction, but would prohibit the organized use of proposed athletic fields on weekdays during afternoon peak hours (4-6 P.M.). This alternative is intended to limit active recreational use that contributes to existing traffic congestion during the afternoon rush hour. The proposed ballfield and soccer/lacrosse field would remain available for informal, non-programmed use at this time.

This alternative would meet the proposed objectives to repair and update park features, to provide a variety of use for a range of user groups, and to optimize preservation of oak woodland. However, by closing athletic fields to programmed use during weekday late afternoons, it would not meet demand for active recreation facilities to the same extent as would the proposed project.

Impact Analysis

Aesthetics

Similar to the proposed Landscape Plan, this alternative would involve the installation of 20-to-30-foot netting around the soccer/lacrosse field to retain lacrosse balls and protect the safety of nearby people. Because of its height, the netting could be a prominent feature in residential views of Flood County Park, especially from adjacent properties on Del Norte Avenue. Mature trees in the eastern part of the park, which enhance the privacy of adjacent residences on Del Norte Avenue, also would be removed to clear room for the soccer/lacrosse field. Like the proposed project, the impact on residential views and privacy would be less than significant with implementation of Mitigation Measure AES-1 to use athletic netting with neutral colors and Mitigation Measure BIO-2(a) to replace removed mature trees along residential property lines.

The Reduced Athletic Programming Alternative would result in the loss of the same number of scenic mature trees as would the proposed project. Ground disturbance during construction also could encroach on the root zone of remaining mature trees, impairing their health. Therefore, similar to the project, the impact on scenic resources would be less than significant with implementation of Mitigation Measures BIO-3(a) and BIO-3(b) to replace protected trees once removed and to avoid the root zone of remaining protected trees during construction.

Air Quality

The Reduced Athletic Programming Alternative would involve the same scale of demolition, site preparation, grading, and construction as would the proposed project. Therefore, construction emissions also would not exceed BAAQMD's significance thresholds and would have a less than significant impact on air quality. Implementation of BAAQMD's basic construction mitigation measures and NO_x reduction measures would still be recommended to further reduce emissions.

During the operation of new recreational elements, the Reduced Athletic Programming Alternative would substantially decrease the number of vehicle trips associated with athletic events by prohibiting programmed athletic activities during weekday P.M. peak hours. This restriction in athletic use relative to the project would reduce emissions of air pollutants from vehicle trips. Operational emissions would not exceed BAAQMD's significance thresholds. Therefore, this

alternative would further reduce the project's already less than significant operational impact on air quality.

Similar to the proposed project, this alternative would lead to an increase in recreational users who may be exposed to toxic air contaminants (TACs) from traffic on U.S. 101. However, it is expected that, at a maximum, park users would only visit for a couple of hours per day (or even per week). Due to this low duration of exposure, park users would not be exposed to TACs for long periods of time that would affect health. The impact from exposure to substantial pollutant concentrations would still be less than significant.

Biological Resources

Similar to the proposed project, the removal of trees, shrubs, and structures during the construction of recreational facilities could adversely affect nesting birds and roosting birds if present. The impact on special-status species would still be less than significant with implementation of Mitigation Measures BIO-1(a) and BIO-1(b) to conduct surveys to identify nesting birds and roosting bats and to protect such species if present.

Similar to the proposed project, this alternative would involve the removal of approximately 80 trees, including some heritage trees protected by the County. The County would prepare a permit application for the removal of protected trees and would be subject to Mitigation Measure BIO-2(a) to replace protected trees at a 2 to 1 ratio. Construction activities also could disturb the root zone of remaining protected trees, so Mitigation Measure BIO-2(b) would still be required to avoid and protect such trees. Like the proposed project, the impact on protected trees would be less than significant with implementation of these measures.

Cultural Resources

Both the proposed Landscape Plan and this alternative would largely preserve existing adobe buildings that contribute to Flood County Park's eligibility as an historical resource, while rehabilitating the adobe administrative office building for seismic safety. Because one adobe building, Restroom D, would be demolished, this alternative also would be subject to Mitigation Measure CUL-1(a) to document historical resources. In addition, Mitigation Measure CUL-1(b) would apply to ensure that rehabilitation of the administrative office building adheres to the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. Therefore, the impact on historical resources would still be less than significant with implementation of these measures.

Similar to the proposed project, ground-disturbing activities for the construction of recreational elements could result in the discovery of unanticipated archaeological resources, human remains, or fossils. Mitigation Measures CUL-2(a), CUL-2(b), and CUL-3 would be applicable to protect such resources in the event of their discovery. These impacts would still be less than significant with mitigation.

Geology and Soils

Similar to the proposed project, this alternative would not include construction of habitable structures and would adhere to applicable California Building Codes for the safety of uninhabited structures like the adobe administrative office building. Therefore, impacts from the exposure of people or structures to seismic-related hazards and expansive soils would still be less than significant. Although soil disturbance during construction also could result in erosion, compliance

with existing regulations, including the NPDES Construction General Plan, would minimize the potential for erosion. Therefore, the impact related to erosion would also be less than significant.

Greenhouse Gas Emissions

The Reduced Athletic Programming Alternative would involve the same scale of demolition, site preparation, grading, and construction as would the proposed project. Therefore, construction-period GHG emissions would be equivalent to those of the project. During the operation of new recreational elements, this alternative would substantially reduce vehicle trips associated with athletic events by prohibiting programmed athletic activities in weekday P.M. peak hours. This restriction in athletic use relative to the project would reduce emissions of air pollutants from vehicle trips. Similar to the project, operational emissions would not exceed BAAQMD's significance thresholds. Therefore, this alternative would further reduce the project's already less than significant impact on climate change from GHG emissions.

Hydrology and Water Quality

Similar to the proposed project, storm water runoff from disturbed soils during construction could lead to sedimentation. However, because ground disturbance would cover more than one acre, this alternative would also be subject to erosion control requirements stipulated in the NPDES Construction General Permit. Adherence to the County's MS4 regulations and landscaping standards would protect water quality during the operation of recreational elements. Therefore, this alternative would still have a less than significant impact on water quality.

Phases I through III of this alternative would introduce a similar amount of grading activity and new impervious surfaces (e.g., basketball court, promenade, pathways) relative to the proposed project. Compliance with NPDES requirements for storm water discharges during construction and operation also would result in a less than significant impact related to changes in drainage patterns, storm water runoff flow, and storm water drainage systems. Because impervious surfaces would incrementally increase, this alternative would not substantially affect groundwater recharge. Like the project, this alternative would be served by water supplied by the SFPUC's Hetch Hetchy Regional Water System, rather than by local groundwater. Therefore, the impact on groundwater supplies or recharge would still be less than significant.

Noise

This alternative would involve construction of the same recreational elements as the proposed Landscape Plan, in the same layout at Flood County Park. Construction would generate similarly high noise levels on and adjacent to the project site. However, construction noise would be temporary, and adherence to the County's allowed hours of construction would prevent noise disturbance during sensitive evening and nighttime hours. Therefore, the impact from construction noise would still be less than significant.

Similar to the proposed project, grading activity for proposed recreational elements would generate groundborne vibration. Because construction would occur inside the County's allowed hours, it would not generate vibration when people normally sleep. Like for the project, construction vibration would not exceed levels that may cause structural damage to historic adobe buildings on-site. Therefore, this alternative would also have a less than significant vibration impact.

Since the Reduced Athletic Programming Alternative would involve construction of the same recreational facilities as proposed, it would also add new sources of on-site operational noise from organized practices and games at athletic fields and performances at a gathering meadow. The

prohibition on programmed athletic activity during weekday P.M. peak hours would avoid associated noise at that time. During scheduled events, however, noise from whistles, sound amplification equipment, or air horns could disturb nearby residents. Similar to the proposed project, the impact from on-site operational noise would be less than significant with implementation of Mitigation Measures N-3(a) and N-3(b) to prohibit the loudest equipment without an approved special event permit and to further restrict the timing of athletic events.

Relative to the proposed project, this alternative would substantially reduce new vehicle trips during weekday P.M. peak hours by prohibiting organized athletic events. This would further reduce the project's incremental increase in traffic volumes on nearby roadways (up to an estimated 6.8 percent on Ringwood Avenue south of Bay Road), under existing plus project conditions. Because such a change in traffic volume would not increase noise by at least 1 dBA Leq, it would not expose noise-sensitive residents to a substantial increase in traffic noise. Therefore, this alternative would further reduce the project's already less than significant impact on noise-sensitive receptors.

Transportation and Circulation

Traffic Congestion

The Reduced Athletic Programming Alternative is intended to generate fewer new vehicle trips on already congested roadways during weekday P.M. peak hours. In that time frame, the alternative would prevent new trips associated with organized athletic events while, similar to the proposed project, facilitating incremental growth in trips for passive recreation. Table 40 shows the change in delay and LOS at nearby intersections under existing conditions.

Table 40 Existing and Existing Plus Alternative 2 Intersection Level of Service During P.M. Peak Hours

	Existing Conditions P.M. Peak		Existing Plus Project P.M. Peak		Existing Plus Alternative P.M. Peak	
Study Intersection	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Bay Road/Marsh Road	16.0	B	16.4	B	16.0	B
Bay Road/Ringwood Avenue	21.2	C	25.7	D	24.7	C
Addition of Northbound Left-Turn Lane	-	-	13.8	B	-	-
Bay Road/Willow Road	>80*	F	>80*	F	>80*	F

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

As shown in Table 40, the Reduced Athletic Programming Alternative would not exacerbate existing traffic congestion at the intersection of Bay Road and Ringwood Avenue to the extent that delay exceeds the City of Menlo Park's threshold of LOS D for unsignalized intersections. This alternative would avoid the project's significant and unavoidable impact under existing plus project conditions. However, Table 41 and Table 42 show that traffic delay would still exceed LOS D at this intersection under near-term 2021 and cumulative 2040 conditions. Similar to the proposed project, a potential mitigation measure to install at northbound left-turn lane on Ringwood Avenue, approaching Bay Road, may be infeasible. Therefore, this alternative would still have a significant and unavoidable

traffic impact under near-term 2021 and cumulative 2040 conditions. Mitigation Measure T-1 also would be applicable to minimize queuing of vehicles on Bay Road by facilitating on-site parking.

Table 41 Near-Term 2021 and Near-Term 2021 Plus Alternative 2 Intersection Level of Service During P.M. Peak Hours

	Near-Term Conditions P.M. Peak		Near-Term Plus Project P.M. Peak		Near-Term Plus Alternative P.M. Peak	
Study Intersection	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Bay Road/Marsh Road	19.1	B	19.2	B	18.8	B
Bay Road/Ringwood Avenue	29.4	D	36.6	E	35.4	E
Addition of Northbound Left-Turn Lane	14.3	B	15.1	C	14.9	B
Bay Road/Willow Road	>80*	F	>80*	F	>80*	F

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

Table 42 Cumulative 2040 and Cumulative 2040 Plus Alternative 2 Intersection Level of Service During P.M. Peak Hours

	Cumulative 2040 Conditions P.M. Peak		Cumulative 2040 Plus Project P.M. Peak		Cumulative 2040 Plus Alternative P.M. Peak	
Study Intersection	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Bay Road/Marsh Road	19.1	B	19.2	B	18.8	B
Bay Road/Ringwood Avenue	29.4	D	36.6	E	35.4	E
Addition of Northbound Left-Turn Lane	14.3	B	15.1	C	14.9	B
Bay Road/Willow Road	>80*	F	>80*	F	>80*	F

Source: W-Trans 2017; see Appendix H.
Note: Delay is measured in average seconds per vehicle; LOS = Level of Service.
* LOS is based on unserved demand.

Transit, Bicycle, Pedestrian Facilities

This alternative would not generate more transit, bicycle, or pedestrian trips than would the proposed project and therefore would not decrease the performance of existing or planned transit, bicycle, or pedestrian facilities. These facilities would remain adequate to serve visitors to Flood County Park and other destinations. However, similar to the project, the lack of bicycle storage on-site and a sidewalk gap on Bay Road could result in unsafe conditions for bicyclists and pedestrians accessing the park. These impacts would be less than significant with implementation of Mitigation Measure T-5(a) to install bicycle storage on-site and Mitigation Measure T-5(b) for the County to coordinate with the City of Menlo Park to install signage for pedestrians.

Parking Capacity

Since this alternative would not generate additional vehicle trips relative to the proposed Landscape Plan, the on-site parking supply would remain adequate. However, new vehicle trips could still result in increased parking on local residential streets. Similar to the project, this impact on parking capacity would be less than significant with implementation of Mitigation Measure T-1 to facilitate on-site parking and reduce the incentive for on-street parking and Mitigation Measure T-6 to discourage on-street parking by visitors to Flood County Park.

Tribal Cultural Resources

Like the proposed project, the construction of recreational facilities would involve surface excavation with the potential to unearth previously unidentified tribal cultural resources. This impact would also be less than significant with implementation of Mitigation Measure TCR-1 for the protection of such resources in the event of their discovery during construction.

7.4 Alternative 3: Multi-Use Field

Description

The Multi-Use Field Alternative would introduce a new multi-use athletic field in the location of the existing ballfield, while eliminating the Landscape Plan's proposed soccer/lacrosse field. A multi-use field would cater to softball, soccer, and lacrosse without the need for additional separate athletic fields. This field would fit approximately within the dimensions of the existing ballfield, with an estimated width of 400 feet and a length of 360 feet. The Multi-Use Field Alternative would retain all other planned recreational elements in the Landscape Plan. In the eastern part of the park, the alternative could potentially involve demolition of the existing pétanque and tennis courts and construction of new passive recreational elements in lieu of the proposed soccer/lacrosse field.

This alternative would meet all four proposed objectives: to repair and update park features, to meet demand for active recreational facilities in San Mateo County, to provide a variety of use for a range of user groups, and to optimize preservation of oak woodland. It would meet demand for active recreational facilities to a lesser degree than would the proposed project because the multi-use field would have less capacity to host simultaneous athletic events.

Impact Analysis

Aesthetics

Similar to the proposed Landscape Plan, this alternative could involve the installation of 20-to-30-foot netting around the multi-use field to retain lacrosse balls and protect the safety of nearby people. This netting would be installed as close as an estimated 150 feet from residences on Hedge Road and Van Buren Road and an estimated 300 feet from residences on Del Norte Avenue. Because of its height, the netting could be a prominent feature in residential views of Flood County Park, especially from two-story residences. Mature trees in the eastern part of the park, which enhance the privacy of adjacent residences on Del Norte Avenue, also could be removed for the installation of additional passive recreational facilities. Like the proposed project, the impact on residential views and privacy would be less than significant with implementation of Mitigation Measure AES-1 to use athletic netting with neutral colors and Mitigation Measure BIO-2(a) to replace removed mature trees along residential property lines.

The Multi-Use Field Alternative could reduce the loss of mature trees that serve as scenic resources at Flood County Park. If the existing pétanque and tennis courts were left in place, the County would retain a grove of redwood trees between these facilities in the eastern corner of the park. However, other mature trees would still be removed for construction of other facilities like volleyball courts and the multi-use field. Ground disturbance during construction also could encroach on the root zone of remaining mature trees, impairing their health. Therefore, similar to the project, the impact on scenic resources would be less than significant with implementation of Mitigation Measures BIO-3(a) and BIO-3(b) to replace protected trees once removed and to avoid the root zone of remaining protected trees during construction. This alternative could further reduce this less than significant impact if mature trees near the existing tennis courts are preserved.

Air Quality

As shown in Table 39, whereas Phase I of the proposed Landscape Plan would involve grading of an estimated nine acres for the construction of athletic fields, the Multi-Use Field Alternative would require grading of an estimated seven to nine acres for this phase. If no new recreational elements are constructed in lieu of the proposed soccer/lacrosse field, then the area of grading in Phase I would decrease by approximately two acres. Therefore, this alternative could incrementally reduce emissions of air pollutants during construction. Like the project, construction emissions would not exceed BAAQMD's significance thresholds and would have a less than significant impact on air quality. Implementation of BAAQMD's basic construction mitigation measures and NO_x reduction measures would still be recommended to further reduce emissions.

During the operation of new recreational elements, this alternative would incrementally reduce vehicle trips associated with athletic events. Whereas the proposed reconstructed ballfield and soccer/lacrosse field would enable simultaneous athletic events on each field, it is assumed that a multi-use field would typically accommodate one event at a time. Relative to the project, this change in athletic capacity would incrementally reduce emissions of air pollutants from vehicle trips. Similar to the project, operational emissions would not exceed BAAQMD's significance thresholds and would have a less than significant impact on air quality.

Similar to the proposed project, this alternative would lead to an increase in recreational users who may be exposed to toxic air contaminants (TACs) from traffic on U.S. 101. However, it is expected that, at a maximum, park users would only visit for a couple of hours per day (or even per week). Due to this low duration of exposure, park users would not be exposed to TACs for long periods of time that would affect health. The impact from exposure to substantial pollutant concentrations would still be less than significant.

Biological Resources

Similar to the proposed project, the removal of trees, shrubs, and structures during the construction of recreational facilities could adversely affect nesting birds and roosting birds if present. The impact on special-status species would still be less than significant with implementation of Mitigation Measures BIO-1(a) and BIO-1(b) to conduct surveys to identify nesting birds and roosting bats and to protect such species if present.

As discussed in Section 4.3, *Biological Resources*, it is estimated that construction of the proposed recreational elements would involve the removal of approximately 80 trees. Because this alternative could preserve the grove of redwood trees between the existing pétanque and tennis courts, it could incrementally reduce the removal of County-protected trees. However, similar to the

proposed project, the County would prepare a permit application for the removal of protected trees and would be subject to Mitigation Measure BIO-2(a) to replace protected trees at a 2 to 1 ratio. Construction activities also could disturb the root zone of remaining protected trees, so Mitigation Measure BIO-2(b) would still be required to avoid and protect such trees. Like the proposed project, the impact on protected trees would be less than significant with implementation of these measures. This alternative could further reduce the less than significant impact if mature trees near the existing tennis courts are preserved.

Cultural Resources

Both the proposed Landscape Plan and this alternative would preserve existing adobe buildings that contribute to Flood County Park's eligibility as an historical resource, while rehabilitating the adobe administrative office building for seismic safety. This alternative could enhance preservation of adobe buildings. While the project would involve demolition of one adobe building (Restroom D) to clear room for the proposed soccer/lacrosse field in the eastern corner of the park, the Multi-Use Field Alternative could leave this building intact if no additional recreational facilities are built in that area. Similar to the proposed project, this alternative would be subject to Mitigation Measure CUL-1(a) to document historical resources if Restroom D is demolished and to Mitigation Measure CUL-1(b) to ensure that rehabilitation of the administrative office building adheres to the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. Therefore, the impact on historical resources would still be less than significant with implementation of these measures, as applicable.

Similar to the proposed project, ground-disturbing activities for the construction of recreational elements could result in the discovery of unanticipated archaeological resources, human remains, or fossils. Mitigation Measures CUL-2(a), CUL-2(b), and CUL-3 would be applicable to protect such resources in the event of their discovery. These impacts would still be less than significant with mitigation.

Geology and Soils

Similar to the proposed project, this alternative would not include construction of habitable structures and would adhere to applicable California Building Codes for the safety of uninhabited structures like the adobe administrative office building. Therefore, impacts from the exposure of people or structures to seismic-related hazards and expansive soils would still be less than significant. Although soil disturbance during construction also could result in erosion, compliance with existing regulations, including the NPDES Construction General Plan, would minimize the potential for erosion. Therefore, the impact related to erosion would also be less than significant.

Greenhouse Gas Emissions

As shown in Table 39, whereas Phase I of the proposed Landscape Plan would involve grading of an estimated nine acres for the construction of athletic fields, the Multi-Use Field Alternative would require grading of an estimated seven to nine acres for this phase. If no new recreational elements are constructed in lieu of the proposed soccer/lacrosse field, then the area of grading in Phase I would decrease by approximately two acres. Therefore, this alternative could incrementally reduce greenhouse gas emissions (GHGs) associated with construction equipment.

During the operation of new recreational elements, this alternative also would incrementally reduce vehicle trips associated with athletic events. Whereas the proposed reconstructed ballfield and

soccer/lacrosse field would enable simultaneous athletic events on each field, it is assumed that a multi-use field would typically accommodate one event at a time. Relative to the project, this change in athletic capacity would incrementally reduce GHGs from vehicle trips. Like the project, GHG emissions would not hinder or delay achievement of State GHG reduction targets, and the alternative would be consistent with the County's Energy Efficiency Climate Action Plan. Therefore, the alternative's impact to climate change would also be less than significant.

Hydrology and Water Quality

Similar to the proposed project, storm water runoff from disturbed soils during construction could lead to sedimentation. However, because ground disturbance would cover more than one acre, this alternative would also be subject to erosion control requirements stipulated in the NPDES Construction General Permit. Adherence to the County's MS4 regulations and landscaping standards would protect water quality during the operation of recreational elements. Therefore, this alternative would still have a less than significant impact on water quality.

Phases I through III of this alternative would introduce a similar amount of grading activity and new impervious surfaces (e.g., basketball court, promenade, pathways) to the proposed project. Compliance with NPDES requirements for storm water discharges during construction and operation also would result in a less than significant impact related to changes in drainage patterns, storm water runoff flow, and storm water drainage systems. Because impervious surfaces would incrementally increase, this alternative would not substantially affect groundwater recharge. Like the project, this alternative would be served by water supplied by the SFPUC's Hetch Hetchy Regional Water System, rather than by local groundwater. Therefore, the impact on groundwater supplies or recharge would still be less than significant.

Noise

The Multi-Use Field Alternative could incrementally reduce construction noise relative to the proposed project. Whereas the project would involve demolition of existing tennis courts within approximately 40 feet of residents on Del Norte Avenue, this alternative could leave intact these courts and other existing facilities in the eastern corner of the park. Other construction activity, however, would take place at similar distances to noise-sensitive receptors as under the project: grading activity for utility work as close as 50 feet from residences south of Bay Road; grading activity at the southeastern edge of the park, approximately 80 feet from residences on Del Norte Avenue; and paving activity at new tennis courts, approximately 115 feet from those residences. As discussed in Section 4.8, *Noise*, the demolition of tennis courts could generate estimated noise levels of 86 dBA Leq at the nearest residences, while other construction activity would cause noise levels up to an estimated 85 dBA Leq at a distance of 50 feet from the source. These construction noise levels would not exceed those for the proposed project. Furthermore, construction activity would be temporary and would adhere to the County's allowed hours of construction, preventing noise disturbance during sensitive evening and nighttime hours. Therefore, the impact from construction noise would still be less than significant.

Grading activity for new recreational elements would generate groundborne vibration no closer to nearby residents than for the proposed project. Because construction would occur inside the County's allowed hours, it would not generate vibration when people normally sleep. Like for the project, construction vibration would not exceed levels that may cause structural damage to historic adobe buildings on-site. Therefore, this alternative would also have a less than significant vibration impact.

The Multi-Use Field Alternative is intended to increase the distance between nearby residents and organized athletic activities that generate noise at Flood County Park. While the proposed project would plan for construction of a soccer/lacrosse field an estimated 100 feet away from residents on Del Norte Avenue, this alternative would eliminate that proposed facility. In place of a reconstructed ballfield, this alternative would add a multi-use field that caters to softball, soccer, and lacrosse, located as close as approximately 150 feet from residents on Hedge Road and Van Buren Road and an estimated 300 feet from residences on Del Norte Avenue. Because the multi-use field would be about 50 feet farther from noise-sensitive receptors than would the soccer/lacrosse field, it is estimated that average noise from lacrosse and soccer games would decrease from 59-64 dBA Leq to 56-61 dBA Leq at the nearest receptors. At residences located approximately 300 feet away on Del Norte Avenue, such noise would decrease to 50-55 dBA Leq. Despite this reduction in average noise levels, impulse noise from whistles, sound amplification equipment, or air horns at either athletic events or the gathering meadow could still disturb nearby residents. This alternative would further reduce the project's already less than significant impact from on-site operational noise with implementation of Mitigation Measures N-3(a) and N-3(b) to prohibit the loudest equipment without an approved special event permit and to further restrict the timing of athletic events.

Relative to the proposed project, this alternative would incrementally reduce new vehicle trips because the multi-use field would accommodate fewer simultaneous athletic events. This would further reduce the project's incremental increase in traffic volumes on nearby roadways (up to an estimated 6.8 percent on Ringwood Avenue south of Bay Road), under existing plus project conditions. Because such a change in traffic volume would not increase noise by at least 1 dBA Leq, it would still have a less than significant impact on noise-sensitive receptors.

Transportation and Circulation

Traffic Congestion

The Multi-Use Field Alternative would generate incrementally fewer new vehicle trips for active recreation than would the proposed Landscape Plan because it would accommodate less simultaneous athletic events. It would generate a similar amount of trips associated with passive recreation at other proposed facilities. Despite incrementally reducing new vehicle trips, this alternative would not avoid the project's significant impacts at the intersection of Bay Road and Ringwood Avenue under existing, near-term 2021, or cumulative 2040 conditions. As discussed under Impact T-1 in Section 4.9, *Transportation and Circulation*, the addition of only 25 P.M. peak hour trips would push operating conditions at this intersection from LOS C to D, causing an exceedance of the City of Menlo Park's traffic standards. Even one adult baseball game would generate an estimated 30 P.M. peak hour trips (Appendix H). Therefore, a reduction in simultaneous athletic events at the park would not be sufficient to retain LOS C conditions at the affected intersection. It would be necessary to eliminate athletic events during weekday P.M. peak hours to avoid a significant impact under existing conditions. Similar to the proposed project, a potential mitigation measure to install at northbound left-turn lane on Ringwood Avenue, approaching Bay Road, may be infeasible. Therefore, this alternative would still have significant and unavoidable traffic impacts under existing, near-term 2021, and cumulative 2040 conditions.

Transit, Bicycle, Pedestrian Facilities

This alternative would not generate more transit, bicycle, or pedestrian trips than would the proposed project and therefore would not decrease the performance of existing or planned transit,

bicycle, or pedestrian facilities. These facilities would remain adequate to serve visitors to Flood County Park and other destinations. However, similar to the project, the lack of bicycle storage on-site and a sidewalk gap on Bay Road could result in unsafe conditions for bicyclists and pedestrians accessing the park. These impacts would be less than significant with implementation of Mitigation Measure T-5(a) to install bicycle storage on-site and Mitigation Measure T-5(b) for the County to coordinate with the City of Menlo Park to install signage for pedestrians.

Parking Capacity

Since this alternative would not generate additional vehicle trips relative to the proposed Landscape Plan, the on-site parking supply would remain adequate. However, new vehicle trips could still result in increased parking on local residential streets. Similar to the project, this impact on parking capacity would be less than significant with implementation of Mitigation Measure T-1 to facilitate on-site parking and reduce the incentive for on-street parking and Mitigation Measure T-6 to discourage on-street parking by visitors to Flood County Park.

Tribal Cultural Resources

Like the proposed project, the construction of recreational facilities would involve surface excavation with the potential to unearth previously unidentified tribal cultural resources. This impact would also be less than significant with implementation of Mitigation Measure TCR-1 for the protection of such resources in the event of their discovery during construction.

7.5 Environmentally Superior Alternative

Table 43 compares the physical impacts for each of the alternatives to the physical impacts of the proposed project. The No Project Alternative would be the overall environmentally superior alternative since it would avoid all project impacts. However, the No Project Alternative would not achieve most project objectives as stated in Section 2, *Project Description*.

Among the park redevelopment options, Alternative 2 (Reduced Athletic Programming) would be the most environmentally superior relative to the proposed project. This alternative would substantially reduce vehicle trips associated with athletic activity, avoiding a significant and unavoidable impact on traffic congestion at the intersection of Bay Road and Ringwood Avenue during weekday P.M. peak hours under existing plus project traffic conditions. However, this impact would still be significant and unavoidable under cumulative traffic scenarios. The reduction in vehicle trips also would incrementally decrease emissions of air pollutants and GHGs, further reducing the project's less than significant impacts in these resource areas. This alternative would partially meet the proposed objectives but would not make athletic fields available on weekday late afternoons. Therefore, it would not meet demand for active recreation facilities to the same extent as would the proposed project.

Alternative 3 (Multi-Use Field) also would be environmentally preferable to the proposed project, although it would not avoid the project's significant and unavoidable impact on traffic congestion. Without construction of the proposed soccer/lacrosse field near residences on Del Norte Avenue, this alternative would reduce people's exposure to operational noise. In addition, this alternative could enhance preservation of adobe buildings that contribute to the park's eligibility as an historical resource. This alternative would meet all four proposed objectives: to repair and update park features, to meet demand for active recreational facilities in San Mateo County, to provide a variety of use for a range of user groups, and to optimize preservation of oak woodland. It would

meet demand for active recreational facilities to a lesser degree than would the proposed project because the multi-use field would have less capacity to host simultaneous athletic events.

Table 43 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: Reduced Athletic Programming	Alternative 3: Multi-Use Field
Aesthetics	Less than Significant with Mitigation	+ (Less than Significant)	= (Less than Significant with Mitigation)	= (Less than Significant with Mitigation)
Air Quality	Less than Significant	+ (Less than Significant)	+/= (Less than Significant)	= (Less than Significant)
Biological Resources	Less than Significant with Mitigation	+ (Less than Significant)	= (Less than Significant with Mitigation)	= (Less than Significant with Mitigation)
Cultural Resources	Less than Significant with Mitigation	+ (Less than Significant)	= (Less than Significant with Mitigation)	+/= (Less than Significant with Mitigation)
Geology and Soils	Less than Significant	+ (Less than Significant)	= (Less than Significant)	= (Less than Significant)
Greenhouse Gas Emissions	Less than Significant	+ (Less than Significant)	+/= (Less than Significant)	= (Less than Significant)
Hydrology and Water Quality	Less than Significant	+ (Less than Significant)	= (Less than Significant)	= (Less than Significant)
Noise	Less than Significant with Mitigation	+/= (Less than Significant with Mitigation)	= (Less than Significant with Mitigation)	+/= (Less than Significant with Mitigation)
Transportation and Circulation	Significant and Unavoidable	+ (Less than Significant)	+/= (Significant and Unavoidable)	= (Significant and Unavoidable)
Tribal Cultural Resources	Less than Significant with Mitigation	+ (Less than Significant)	= (Less than Significant)	= (Less than Significant)

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

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