MARIN GENERAL HOSPITAL REPLACEMENT BUILDING PROJECT

EIR Addendum
State Clearinghouse #2011092057

Prepared for
Marin Healthcare District

November 2013

ESA

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TABLE OF CONTENTS

Marin General Hospital Replacement Building Project - EIR Addendum

Page

Appendices

List of Figures

List of Tables

CHAPTER 1
Introduction

1.1 Overview

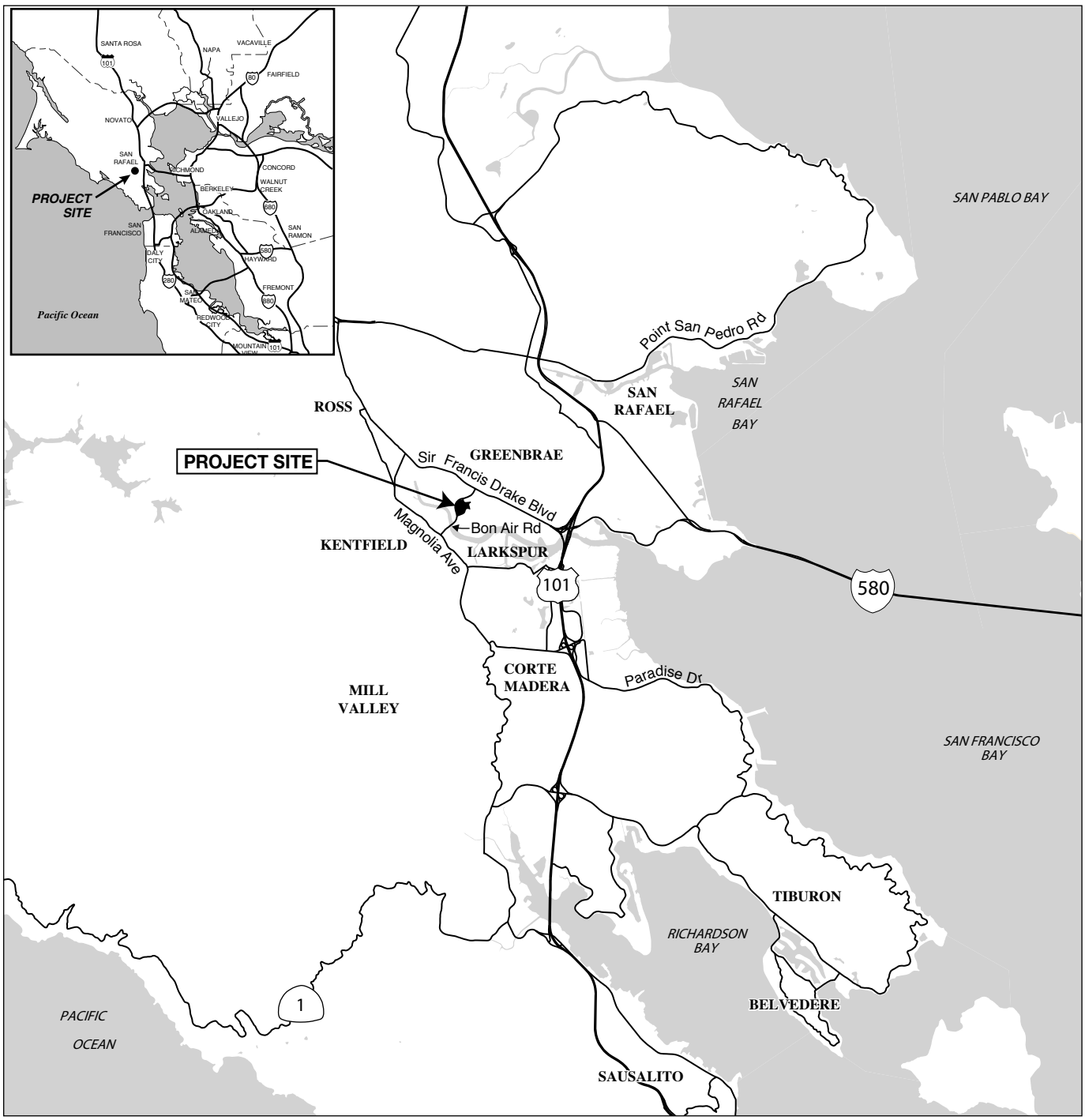
The Marin Healthcare District ("District") is the Lead Agency (pursuant to State and local guidelines for implementing the California Environmental Quality Act [CEQA]) and has prepared this Addendum subject to CEQA (Public Resources Code Section 21000, et seq. and Section 15000, et seq.) and the State CEQA Guidelines (California Code of Regulations). The District has prepared this Addendum to the Marin General Hospital Replacement Building Project EIR (SCH No. 2004032052), which the District certified on June 11, 2013 ("June 2013 EIR").

The District, which is the Project Sponsor and Lead Agency, proposes two additional potential Hillside Parking Structure Options not previously considered with the Marin General Hospital Project ("Approved Project") analyzed in the June 2013 EIR. If approved, either of the proposed additional Hillside Parking Structure Options would allow the District to develop a "Modified Project" that would replace the approved Hillside Parking Structure and remove the approved Bon Air Road Parking Structure previously analyzed in the June 2013 EIR.

As shown in **Figure 1-1, Project Location**, the project site is approximately 19.7 acres located at 250 Bon Air Road, in unincorporated Marin County, California.[1] The project site is approximately 10 miles north of San Francisco and 1.25 miles west of Highway 101. Sir Francis Drake Boulevard is located approximately 1,000 feet to the north of the site.

This Addendum demonstrates that no additional CEQA review is required to address the potential environmental effects of the two proposed additional Hillside Parking Structure Options as none of the conditions requiring preparation of a Supplemental or Subsequent EIR, as specified in Public Resources Code section 21166 and CEQA Guidelines sections 15162 and 15163, are present. (Also see Section 1.3, *Purpose and CEQA Context*, below.) For each environmental topic addressed by CEQA, this Addendum reviews the Approved Project with the Modified Hillside Parking Options in light of the CEQA significance criteria applied in the June 2013 EIR to determine whether any updates or revisions to that EIR analysis or conclusions are required.

[1] The entire Marin General Hospital campus is considered the project site.



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Marin General Hospital . 210606

Figure 1-1
Project Location

1.2 Background

1.2.1 June 2013 EIR and Approved Project

As analyzed in the June 2013 EIR, the Approved Project consists of a phased development of a 300,000 square-foot Hospital Replacement Building (HRB), a 100,000 square-foot Ambulatory Services Building (ASB), a multi-level Hillside Parking Structure, a multi-level Bon Air Road Parking Structure, and various accessory site improvements, that would be developed in phases so as to ensure that the hospital continued functioning during construction.

The project site is located in unincorporated Marin County, between the communities of Kentfield and Greenbrae. Approximately 4.9 acres at the northernmost corner of the project site is co-owned by the District and the County, and a land swap or lease agreement for approximately 0.82 acres between the District and the County was required to accommodate components of the Approved Project.

The primary purpose of the Approved Project was to ensure that Marin General Hospital will comply with the Hospital Facilities Seismic Safety Act (Seismic Safety Act) (Senate Bill [SB] 1953, SB 1661, and SB 499). The Approved Project also allowed the District to achieve its goal to meet the provisions of SB 1953 by January 1, 2020.

The Approved Project will also renovate wings of the existing hospital and involve new and relocated utilities to serve existing and proposed new buildings and the overall campus. Approximately 15,500 square feet of existing ancillary buildings on the project site will be demolished, and the Approved Project will remove portions of existing landscapes that are CEQA-defined historical resources.

The Approved Project will install two new traffic signals at the two main access/exit driveways to the campus off Bon Air Road. Additionally, two new cuts in the Bon Air Road median are proposed to improve emergency access to the Emergency Room facilities.

The Approved Project would add a total of 443 new employees to the project site. It would not result in a net increase in the existing number of licensed beds at Marin General Hospital, but 87 new beds would be added to the 148 beds currently in use onsite.

The June 2013 EIR determined that the Approved Project would result in significant impacts involving aesthetics, cultural resources, construction noise, and traffic wait time delays and back-ups.

1.2.2 Modified Project: Proposed Modified Hillside Parking Options

The District now proposes two Modified Hillside Parking Options not previously considered with the Approved Project. “Option A-12A” would develop a new 411-space Hillside Parking Structure adjacent to the 412-space Hillside Parking Structure analyzed with the Approved

Project, and "Option A-12B" would replace the approved 412-space Hillside Parking Structure with a single 886-space Hillside Parking Structure in essentially the same location as Option A-12A. The four-story (five-parking-level) Bon Air Road Parking Structure located along the Bon Air Road frontage with the Approved Project would not be developed under either Option A-12A or Option A-12B. As with the approved Hillside Parking Structure, both of the Option A-12A and Option A-12B structures would be five stories (six parking levels), tucked within the contours of the hillside in the northeast portion of the project site.

Under both Hillside Parking Options, the development program and all other major components of the Approved Project would be similar or the same as described and evaluated in the June 2013 EIR. A detailed comparison of the Approved Project and the Project with each of the Modified Hillside Parking Options (i.e., the "Modified Project") is presented in Chapter 3, *Project Description*, of this Addendum.

The District would ultimately develop Option A-12A, A-12B, or the Hillside and Bon Air Road Parking Structures with the Approved Project.

As discussed in detail in Chapter 4, *Environmental Issues*, of this Addendum, the Modified Project would result in the same significant impacts as identified in the June 2013 EIR.

1.3 Purpose and CEQA Context

1.3.1 Purpose of this Addendum

According to CEQA Guidelines Section 15162, a Subsequent or Supplemental EIR is required when:

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

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

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

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

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

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

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

An addendum may be prepared if some changes or additions are necessary to a certified EIR and none of the above-stated conditions are present. Based on a review of the Modified Project and existing conditions, this Addendum concludes that there is no substantial change proposed that would require major revisions to the June 2013 EIR; that there is no substantial change in circumstances that would cause new significant impacts or a substantial increase in the severity of previously identified significant impacts; and, that there is no new information of substantial importance that identifies new significant impacts or a substantial increase in the severity of previously identified significant impacts (CEQA Guidelines Section 15162). Also, the Modified Project does not result in the need for new or substantially revised mitigation measures not previously identified for the Approved Project, thus a mitigated negative declaration is also not warranted. Therefore, the District has determined that an addendum to the previously certified June 2013 EIR is required.

1.3.2 Scope of this Addendum

The District has prepared this Addendum to analyze the potential environmental effects of the Modified Project considering the two potential Hillside Parking Structure Options. The June 2013 EIR already analyzed the environmental effects of, and identified feasible mitigation measures for, and alternatives to, the Approved Project. In accordance with CEQA Guidelines Section 15164, this Addendum contains only the information necessary to make the June 2013 EIR adequate for the Modified Project.

This Addendum discusses the reasons for determining that effects would not result in new or substantially more severe significant impacts than those already identified and disclosed in the June 2013 EIR, which encompasses the August 2012 Draft EIR; the March 2013 Response to Comments / Final EIR; the May 29, 2013 Final Addendum to the Response to Comments / Final EIR; and the respective appendices to each of these documents. Each of the aforementioned Marin General Hospital Replacement Building Project CEQA documents are incorporated in this Addendum by reference and are available at locations listed at the end of this chapter.

Consideration of New Information and Changed Circumstances

This Addendum addresses all environmental topics under CEQA that were addressed in the June 2013 EIR. This Addendum also assesses the extent to which "new information of substantial importance" was known, or could have been known at the time of the previous CEQA documents, with the exercise of reasonable diligence, that may indicate a new significant impact

or a substantial increase in significant environmental impact associated with the Modified Project. No such information is known.

However, since certification of the June 2013 EIR, on August 13, 2013 the California Court of Appeal reversed the Alameda County Superior Court judgment that invalidated the Bay Area Air Quality Management District (BAAQMD) 2010 CEQA thresholds of significance that a lower court had called into question by an order issued March 5, 2012 in *California Building Industry Association v. BAAQMD,* Alameda Superior Court Case No. RGI0548693. This change does not affect the assessment in this Addendum because the District had determined that Appendix D of the BAAQMD Guidelines, in combination with BAAQMD's *Revised Draft Options and Justification Report* (BAAQMD, 2009), provide substantial evidence to support the 2010 thresholds and, therefore, had determined they were appropriate for use in the June 2013 EIR analysis (as discussed on Draft EIR page 4.B-11).

1.4 Document Content and Organization

Following this Chapter 1, *Introduction*, this Addendum is organized as follows:

Chapter 2, *Summary*, contains a brief description of the Modified Project, and a summary table that allows the reader to easily reference the analysis conclusions presented throughout the Addendum.

Chapter 3, *Project Description*, describes the Modified Project in comparison to the Approved Project, and also describes the Modified Project objectives to the extent they are different from those in the June 2013 EIR. Chapter 3 also presents the required approvals for the Modified Project.

Chapter 4, *Environmental Review.* For all environmental topics, Chapter 4 presents sufficient analysis to demonstrate that the Modified Project would not result in any new or substantially more severe significant impacts than identified in the June 2013 EIR, or that no substantial changes to the previous EIR are required to address the Modified Project.

Chapter 5, *Report Preparation*, identifies the authors of this Addendum, including District staff, and technical consultants.

Any reference documents and persons contacted to prepare the Addendum are listed at the end of each analysis section in Chapter 4, *Environmental Review.*

All reference documents and persons contacted to prepare the Addendum #3 analyses are listed at the end of each analysis section in Chapter 4, *Environmental Setting, Impacts, Standard Conditions of Approval and Mitigation Measures*.

The Addendum and all previous CEQA documents prepared for the Marin General Hospital Replacement Building Project are available for review by the public at the Marin Healthcare District offices (100B Drakes Landing Road, Suite 250, Greenbrae, California, 94904), the

District's Internet website (www.marinhealthcare.org), as well as at the main branch of the Marin County Free Library (3501 Civic Center Drive, San Rafael, California, 94903) and the Larkspur Library (400 Magnolia Ave., Larkspur, California, 94939).

CHAPTER 2
Summary

2.1 Overview

The Marin Healthcare District ("District"), as the Lead Agency, has prepared this Addendum to the Marin General Hospital Replacement Building Project EIR ("June 2013 EIR"), which the District certified on June 11, 2013.

As Project Sponsor, the District now proposes two additional potential Hillside Parking Structure Options not previously considered with the Marin General Hospital Replacement Building Project analyzed in the June 2013 EIR ("Approved Project"). If approved, either of the proposed additional Hillside Parking Structure Options would allow the District to develop a "Modified Project" that would replace the approved Hillside Parking Structure and remove the approved Bon Air Road Parking Structure previously analyzed in the June 2013 EIR.

This Addendum addresses differences in the characteristics and environmental effects of the Modified Project compared to those identified in the June 2013 EIR. Overall, the Modified Project would involve greater excavation and grading, tree removal and changed traffic circulation compared to the Approved Project. The Modified Project also proposes adjustments to the development phasing; the Ambulatory Services Building (previously Phase III) and the Hospital Replacement Building (previously Phase IV) would switch order. Also, the elevated pedestrian bridge with the Modified Project could be developed in part with the Phase I Hillside Parking Structure or immediately prior to the construction of the now Phase IV Ambulatory Services Building. However, as detailed in this Addendum, these differences do not cause new significant impacts or a substantial increase in the severity of previously identified significant impacts identified in the June 2013 EIR (CEQA Guidelines Section 15162).

Table 2-1R, below, includes impact statements, recommended mitigation measures, and the level of significance of the impact (after recommended mitigation measures are implemented) that would apply to the Modified Project – none of which are revised from that identified in the June 2013 EIR for the Approved Project.

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Aesthetics		
Impact AES-1: The Project would have a substantial adverse effect on one scenic vista as seen from the Corte Madera Creek pathway. (Potentially Significant)	**Mitigation Measure AES-1:** The applicant shall add taller tree cover, west of the Hospital Replacement Building, than shown in Figure 4.A-7 (photo "C") of the Draft EIR to "break" up the building's west facing facade, as seen from the Corte Madera Creek pathway looking east. In addition to the proposed relocated palm trees and deciduous trees proposed along the west portion of the project site, three to four tall evergreen conifers, such as redwoods or other tree of similar height and shape (e.g., columnar with a tall trunk without dense low branch cover) shall be added to the proposed landscape plan and installed prior to completion of the Hospital Replacement Building. These additional trees shall be adequately spaced in the area between the building and the west edge of the project site to prevent full blockage of views toward Corte Madera Creek, Creekside Marsh, Hal Brown Park and/or views Mt. Tamalpais from hospital rooms. Prior to the appropriate County design review and other approvals for the portion of the site near the Hospital Replacement Building, the applicant shall present the final landscape plan to the County for conformance review with this measure. The applicant shall install some of the new deciduous shade trees between the Hospital Replacement Building and the west property line along Bon Air Road (shown in Figure 3-14R, Landscape Concept Plan) at an earlier phase of work than site preparation for the Hospital Replacement Building. This would allow for some advanced growth of these trees before the Hospital Replacement Building is completed. The early-planted trees shall be spaced so that they do not block the views described above from hospital rooms. If the early-planted trees do not withstand the distress caused by construction activities occurring nearby, those trees shall subsequently be replaced with the same or like kind.	Significant and Unavoidable
Impact AES-2: The Project would not substantially damage scenic resources or natural viewsheds, but could result in substantial changes to the natural terrain visible from public viewpoints. (Potentially Significant)	**Mitigation Measure AES-2:** The most visible area of retaining walls along the south access road shall be altered by "stepping" the retaining walls on the hillside for the area that is within 250 feet of Bon Air Road. This shall only apply when retaining walls exceed five feet in height. The "steps" of the retaining walls shall be at least two feet in depth to allow planting areas, and the retaining wall heights shall be no greater than five feet. Evergreen plantings shall be added in the stepped portions of the walls to create a partially vegetated and more naturalized slope, more consistent with the existing vegetated area visible south of the proposed retaining wall, compared to 90-degree-vertical retaining walls with no vegetation. Prior to the appropriate County design review and other approvals for the portion of the site near the Hospital Replacement Building, the applicant shall present the final south access road retaining walls and planting plans to the County for conformance review with this measure.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Aesthetics (cont.)		
Impact AES-3: The Project would not substantially degrade the existing visual character of the project site or its surroundings, would	None required	
not change the visual quality of the region, or eliminate significant visual resources. (Less than Significant)		
Impact AES-4: The Project would not create a significant increase in light and glare that would adversely affect nighttime views in the area. (Less than Significant)	None required	
Impact AES-5: The Project would not significantly reduce sunlight or introduce shadows in areas used extensively by the public. (Less than Significant)	None required	
Impact AES-6: The Project would not conflict with the County goals and policies related to visual quality, or other applicable aesthetic or visual policies or standards. (Less than Significant)	None required	
Impact AES-7: The Project, combined with past, present and other reasonably foreseeable future development in the area, would not cause cumulative aesthetics impact. (Less than Significant)	None required	
Air Quality		
Impact AIR-1: The Project could conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)	None required	
Impact AIR-2: Construction of the Project would result in short-term construction equipment exhaust emissions that could contribute to existing or projected air quality standard violations. (Potentially Significant)	**Mitigation Measure AIR-2:** The measures listed below to control diesel exhaust emissions associated with demolition, grading and new construction shall be implemented. These measures shall apply to all phases even though the only potential exceedance of a threshold is in 2015 (or through Phase III): 1. Prior to the commencement of construction activities, the developer or contractor will provide a plan for approval by the District or BAAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction. The NOx reduction will be based on a comparison to URBEMIS2007 emissions estimates for this project (see Appendix C to this Draft EIR). This plan will address all equipment that will be on site for more than two working days.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Air Quality (cont.)		
Impact AIR-2 (cont.)	2. Diesel particulate filters (or features that provide equivalent level of PM2.5 emissions reductions) shall be installed on all diesel-powered equipment with engines larger than 50 horsepower that will be working on the site for more than two working days. These features are anticipated to provide at least a 45-percent reduction in $PM_{2.5}$ exhaust emissions. 3. During building construction, establish on-site electric power to reduce the use of diesel-powered generators. 4. Arrange for service to provide on-site meals for construction workers to avoid travel to off-site locations. 5. Stage construction equipment at least 200 feet from existing or new habitable residences.Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes in accordance with the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations. Clear signage will be provided for truck operators and construction workers at all access points. 7. All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. Require an on-site disturbance coordinator to ensure that the construction period mitigation measures are enforced. This coordinator will respond to complaints regarding construction activities and construction caused nuisances. The phone number of this disturbance coordinator will be clearly posted at the construction site and provided to nearby residences. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. A log documenting any complaints and the timely remedy or outcome of such complaints will be kept.	
Impact AIR-3: Construction of the Project would result in short-term generation of fugitive dust that could contribute to existing or projected air quality standard violations. (Potentially Significant)	**Mitigation Measure AIR-3:** The contractor shall implement the following BAAQMD recommended basic fugitive dust mitigation measures: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Air Quality (cont.)		
Impact AIR-3 (cont.)	3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.	
Impact AIR-4: The Project would result in long-term operational emissions of criteria pollutants that could contribute to existing or projected air quality standard violations. (Less than Significant)	None required	
Impact AIR-5: The Project would contribute to community health risk impacts. (Potentially Significant)	**Mitigation Measure AIR-5:** Implement Mitigation Measure AIR-2.	Less than Significant
Impact AIR-6: Sensitive receptors at Marin General Hospital would not be exposed to health risk impacts. (Less than Significant)	None required	
Impact AIR-7: The Project would not generate localized odors. (Less than Significant)	None required	
Impact AIR-8: The Project would contribute to cumulative air quality degradation and to regional air quality cumulative impacts. (Potentially Significant)	**Mitigation Measure AIR-8:** Implement Mitigation Measures AIR-2 and AIR-3.	Less than Significant
Biological Resources		
Impact BIO-1: Construction of the Project could adversely impact special-status bat species through removal of potential roosting habitat and through increases in noise levels during construction. (Potentially Significant)	**Mitigation Measure BIO-1:** (Applies to Phases I through IV) The project applicant shall ensure that construction activities are conducted in a manner that avoids disturbance or mortality of bats, through surveys to determine whether bats are present. If bats are present, limit construction activities as specified below. Specifically, the project applicant shall take the following measures to avoid direct mortality of roosting special-status bats and disturbance of maternity roosts or winter hibernacula during Phases I through IV of the project: a) Prior to demolition and/or construction of Phases I through IV, a qualified bat biologist, shall conduct surveys of all potential bat habitat within 250 feet of construction activities prior to initiation of such activities. Potentially suitable habitat shall be identified visually. An acoustic detector shall be used to determine any areas of bat activity. At least four nighttime emergence counts shall be undertaken on nights that are warm enough	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-1 (cont.)	for bats to be active. The bat biologist shall determine the type of each active roost (i.e., maternity, winter hibernaculum, day or night). b) If based on the pre-construction surveys no evidence of bats (i.e., visual or acoustic detection, guano, staining, strong odors) is present, no further mitigation is required. If pre-construction surveys indicate that roosts are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. c) Trees or buildings with evidence of bat activity shall be removed during the time that is least likely to affect bats, as determined by a qualified bat biologist. In general, roosts should not be removed if maternity bat roosts are present, typically April 15 – August 15. Roosts should not be removed if present bats are in torpor, typically when temperatures are less than 40 degrees Fahrenheit. Non-maternity bat roosts shall be removed by a qualified bat biologist, by either making the roost unsuitable for bats by opening the roost area to allow airflow through the cavity, or excluding the bats using one-way doors, funnels, or flaps. d) A no-disturbance buffer shall be created around active bat roosts being used for maternity purposes at a distance to be determined by the qualified bat biologist in consultation with CDFW. Bat roosts initiated within 250 feet of the project area after construction has already begun are presumed to be unaffected, and no buffer is necessary. However, the project shall avoid a "take" of individuals, including harming, harassing, or killing. e) If known bat roosting habitat is to be destroyed during tree removal activities, artificial bat roosts shall be constructed at least two weeks prior to such disturbance, in an undisturbed area of the property, at least 250 feet from any ongoing or future activities. The design and location of the artificial bat roost(s) shall be determined by a qualified bat biologist.	
Impact BIO-2: The Project would not have a substantial adverse effect on migratory and breeding birds through building collisions and increases in night lighting. (Less than Significant)	None required	
Impact BIO-3: The Project could affect breeding raptors and other special-status birds through vegetation removal associated with construction. (Potentially Significant)	**Mitigation Measure BIO-3a: (Applies to Phases I-IV)** No more than two weeks in advance of any tree or shrub pruning, removal, ground-disturbing activity, or other construction activity that will commence during the breeding season (February 1 through August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential nesting habitat in the vicinity of the planned activity.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-3 (cont.)	If construction activities for the project cease for a period of seven days or longer, or if construction does not begin within the immediate area within seven days of the initial pre-construction surveys, the qualified wildlife biologist shall conduct another pre-construction survey. Pre-construction surveys are not required for construction activities scheduled to occur during the non-breeding season (August 31 through January 31). Construction activities commencing during the non-breeding season and continuing into the breeding season do not require surveys (as it is assumed that any breeding birds taking up nests would be acclimated to project-related activities already under way). If active nests are found on the site during construction, construction shall be temporarily halted and the consultation with the State Department of Fish and Wildlife will be required before re-commencing construction activities. Nests initiated during construction activities would be presumed to be unaffected by the activity, and a buffer zone around such nests would not be necessary. However, a nest initiated during construction cannot be moved or altered and the nests shall be clearly identified and the immediate area fenced to prevent destruction. If pre-construction surveys indicate that no nests are present or that nests are inactive or potential habitat is unoccupied, no further mitigation is required. If active nests are found during pre-construction surveys, Mitigation Measure BIO-3b will be required. **Mitigation Measure BIO-3b:** If active nests are found during pre-construction surveys, the results of the surveys shall be discussed with the CDFW and avoidance procedures shall be adopted, if necessary, on a case-by-case basis. In the event that an active nest is found, construction in the vicinity would not be initiated until avoidance measures are adopted. Avoidance measures shall include construction buffer areas (up to several hundred feet in the case of raptors), relocation of birds, or seasonal avoidance, as needed. If buffers are created, a no-disturbance zone shall be created around active nests for the remainder of the breeding season, or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted shall take into account factors such as the following: a) Noise and human disturbance levels at the project site and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity; b) Distance and amount of vegetation or other screening between the project site and the nest; and c) Sensitivity of individual nesting species and behaviors of the nesting birds.	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-4: The Project could affect migratory and breeding birds indirectly through increases in ambient noise due to construction. (Potentially Significant)	**Mitigation Measure BIO-4a: (Applies to major noise generating construction and/or demolition phases occurring within 200 feet of Creekside Marsh, as delineated in the Mitigation Monitoring and Reporting Program Attachment 1)** To ensure project construction activities do not exceed existing ambient noise levels (as documented by long-term noise measurement LT-3, as shown in Figure 4.J-1R provided in the Final EIR, to be 60-69 dBA Leq, as stated on page 4.J-5 of the Draft EIR) at Creekside Marsh by over 10dBA: a) Project construction activities shall take place September-January, outside the clapper rail breeding season of February through August); or b) Consistent with Mitigation Measure NOI-2 in Section 4.K, *Noise*, noise reduction measures, including solid plywood fences, sound blankets, or other barriers with noise-dampening materials shall be constructed along portions of the western edge of the project site prior to initiation of construction to serve as noise attenuation barriers. Noise barriers shall be installed on the project site in all locations within 200 feet of the Corte Madera Creekside Marsh and grassland buffer (as delineated in Attachment 1 to the Mitigation Monitoring and Reporting Program and consistent with Figure 4.C-2R [in the Final EIR] supporting Mitigation Measure BIO-6). The barriers shall shield the marshes from major noise generating phases of demolition and construction and will serve to attenuate noise emanating from the project site so any direct or reflected noise would not create increases greater than 10 dBA above current ambient levels in the marshes, where there may be breeding California clapper rails,. The noise attenuation barrier shall be a minimum of 8 feet in height, but sufficient in height to reduce any noise from construction on upper stories or building rooftops. To ensure these noise attenuation barriers prevent significant impacts to breeding California clapper rails, a qualified biologist and noise technician shall periodically monitor noise levels at the edge of Creekside Marsh at least four times per month during the duration of construction within the breeding season. As an extra measure, the District shall retain a qualified biologist and noise monitor to monitor noise conditions at least four to five times during the month of January. The noise monitoring shall coincide with construction activities anticipated to produce the loudest noise. If sound levels are measured that exceed 10 dBA above ambient noise conditions, construction shall be temporarily halted and the contractor shall assess whether other work that would not exceed this threshold can be conducted during the phase of work. If no other construction can occur, work shall not re-commence until consultation with USFWS and CDFW[1] occurs.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-4 (cont.)	[1] Previously "California Department of Fish and Game" or "CDFG" at the time the Draft EIR was published. This revision is made throughout only where it affects mitigation measures and current discussion in this Final EIR. **Mitigation Measure BIO-4b:** Implement Mitigation Measure NOI-2.	
Impact BIO-5: The Project would not have a substantial adverse effect on Waters of the United States, Waters of the State, or critical habitat for endangered steelhead and coho salmon. (Less than Significant)	None required	
Impact BIO-6: The Project would involve the removal of native trees protected under the Marin County Native Tree Protection and Preservation Ordinance. Tree work on the project site has the potential to spread sudden oak death syndrome. (Potentially Significant)	**Mitigation Measure BIO-6a: (Applies to Phases I-IV)** Prior to the removal of County Protected or Heritage trees, the project applicant shall apply for and obtain from the County a Tree Removal Permit. Prior to construction initiation for each project phase, the project applicant shall prepare a map indicating the size and species of trees to be removed and retained. In addition, the project applicant shall do all of the following: a) Prior to the start of any clearing, stockpiling, excavation, grading, compaction, paving, change in ground elevation, or construction, preserved trees that occur adjacent to, or within, project construction shall be identified as preserved and clearly delineated by constructing short post and plank walls, or other protective fencing material, at the dripline of each tree. b) The delineation markers shall remain in place for the duration of the work. c) Where proposed development or other site work must encroach upon the dripline of a preserved tree, special construction techniques shall be required to allow the roots of remaining trees within the project site to breathe and obtain water (examples include, but are not limited to, use of hand equipment for tunnels and trenching, and/or allowance of only one pass through a tree's dripline). Tree wells or other techniques may be used. d) Excavation adjacent to any trees, when permitted, shall be in such a manner that shall cause only minimal root damage. e) The following shall not occur within the dripline of any retained tree: parking; storage of vehicles, equipment, machinery, stockpiles of excavated soils, or construction materials; or dumping of oils or chemicals. **Mitigation Measure BIO-6b: (Applies to Phases I-IV):** All pruning activities of preserved trees shall be performed by a certified arborist. a) No more than 25 percent of a tree's canopy shall be removed during pruning activities of retained trees.	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-6 (cont.)	b) If any protected preserved tree is damaged, then the project applicant shall replace the tree as required by the County. c) All removed trees that meet the criteria of a protected tree shall be replaced with the same species removed as required by the County. **Mitigation Measure BIO-6c: (Applies to Phases I-IV):** The project applicant shall develop and implement a five-year monitoring program for any required replacement plantings. Applicable performance standards may include, but are not limited to: 75 percent survival rate of replacement plantings; absence of invasive plant species; and self-sustaining trees at the end of five years. **Mitigation Measure BIO-6d: (Applies to Phases I-IV):** All tree removal and pruning activities shall include measures to avoid the spread of SOD. Such measures may include, but are not limited to the following: *Before working:* a) As a precaution against spreading the pathogen, clean and disinfect pruning tools after use on confirmed or suspected infested trees or in known infested areas. Sanitize tools before pruning healthy trees or working in pathogen-free areas. Clean chippers and other vehicles of mud, dirt, leaves, organic material, and woody debris before leaving a site known to have SOD and before entering a site with susceptible hosts. b) Inform crews about the arboricultural implications of SOD and sanitation practices when they are working in infested areas. c) Provide crews with sanitation kits. (Sanitation kits should contain the following: Chlorine bleach (10/90 mixture bleach to water) or Clorox Clean-up® or Lysol®, scrub brush, metal scraper, boot brush, and plastic gloves). d) Sanitize shoes, pruning gear, and other equipment before working in an area with susceptible species. *While working:* a) When possible, work on SOD-infected and susceptible species during the dry season (June-October). When working in wet conditions, keep equipment on paved, graveled, or dry surfaces and avoid mud. b) Work in disease-free areas before proceeding to infested areas. c) If possible, do not collect soil or plant material (wood, brush, leaves, and litter) from host trees in the quarantine area. Within the quarantine area, host material (e.g., wood, bark, brush, chips, leaves, or firewood) from tree removals or pruning of symptomatic or non-symptomatic host plants should remain onsite to minimize pathogen spread.	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Biological Resources (cont.)		
Impact BIO-6 (cont.)	*After working:* a) Use all reasonable methods to sanitize personal gear and crew equipment before leaving a SOD infested site. Scrape, brush, and/or hose off accumulated soil and mud from clothing, gloves, boots, and shoes. Remove mud and plant debris by blowing out or power washing chipper trucks, chippers, bucket trucks, fertilization and soil aeration equipment, cranes, and other vehicles. b) Restrict the movement of soil and leaf litter under and around infected trees as spores may be found there. c) Tools used in tree removal/pruning may become contaminated and should be disinfected with Lysol® spray, a 70 percent or greater solution of alcohol, or a Clorox® bleach solution (1 part Clorox® bleach to 9 parts water or Clorox Cleanup ®). Implementation of Mitigation Measures BIO-6a through BIO-6d would reduce impacts to trees protected under the Marin County Tree Preservation Ordinance.	
Impact BIO-7: The Project, combined with other past, present, and reasonably foreseeable development in the vicinity of the Project site would not result in cumulative impacts on special-status species, wetlands and other waters of the U.S. and State, and protected trees. (Less than Significant)	None required	
Cultural and Paleontological Resources		
Impact CUL-1: The Project will have an impact on a historical resource as defined by PRC Section 5024.1. (Significant)	**Mitigation Measure CUL-1:** The project applicant shall conduct the following: • Pre-demolition photo-documentation, a report, and as-built drawings of the gardens in accordance with the Historic American Landscape Survey (HALS) standards. This documentation would include a HALS report in either the short form format or a longer outline format and a measured drawing of the existing conditions. A copy of all of the HALS documentation shall be provided to the Lawrence Halprin archives at the University of Pennsylvania and the Anne T. Kent California Room in the Marin County Free Library. No additional historic registries local to Marin County could be identified. • Installation of a public plaque or element that commemorates the work of Lawrence Halprin on this site. • Design of a new garden that commemorates Lawrence Halprin's design contributions:	Significant and Unavoidable

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Cultural and Paleontological Resources (cont.)		
Impact CUL-1 (cont.)	- Within a new garden, recognize Halprin's use of hardscape materials, landscape grading and planting to evoke local, natural elements and delineate space. The garden would not relocate or mimic Halprin's gardens, but could possibly reuse some materials and/or incorporate similar materials in its construction, particularly plant materials. - Locate the new garden in view of the Corte Madera Marsh to maintain the connection of the hospital landscape to the broader natural setting. • Incorporate a more private garden within the hospital landscape for the purpose of respite or reflection within a natural setting. The intent would be to recall and respect rather than mimic Halprin's work. The garden could also incorporate elements that reference Halprin and his influence. • Marin General Hospital will seek donations to commemorate Lawrence Halprin's influence on the design of the Marin General Hospital Landscape; donations could fund an intern to work with the Halprin archivist at the University of Pennsylvania or similar relevant efforts for a one-year time duration. • Document other Bay Area designs of Halprin's from this early period in his career. This documentation would include a list of his projects, plans when available, project locations, a written description identifying the project types and whether they were public or private commissions and photos, when possible, showing the overall character of the designs. The research could serve as an important resource for the local community and could be combined with HALS documentation, with copies sent to the University of Pennsylvania, the Marin County Free Library, or other institutions. Demolition or destruction of a historical resource, cannot be mitigated below a level of significance, however this mitigation would add to the body of knowledge about Lawrence Halprin's work and would provide further documentation of this particular design.	
Impact CUL-2: The Project would have an impact on archaeological resources as defined by PRC Section 21083.2(g). (Potentially Significant)	**Mitigation Measure CUL-2:** A Secretary of the Interior-qualified archaeologist and a Native American monitor shall be present during ground-disturbing activities in the vicinity of Buildings 1, 2, and 3, and the Halprin Gardens. During the course of the monitoring, the archaeologist may adjust the frequency of the monitoring—from continuous to intermittent— based on observed conditions (i.e. artificial fill) and professional judgment regarding the potential to impact resources. Prior to ground disturbing activities, an archaeological monitoring plan shall be developed that includes: • Training program for all construction personnel involved in site disturbance activities;	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Cultural and Paleontological Resources (cont.)		
Impact CUL-2 (cont.)	• Qualifications of person responsible for conducting monitoring activities, including Native American monitors; • The required format and content of monitoring reports, assessment, designation and mapping of sensitive cultural resource areas on final project maps; Person(s) responsible for overseeing and directing the monitors; • Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports; • Physical monitoring boundaries; • Protocol for notifications in case of encountering of cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation); • Methods to ensure security of cultural resources sites; • Protocol for notifying local authorities (i.e., Sheriff, Police) should site looting and other illegal activities occur during construction. If cultural resources are encountered during construction, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the County. An appropriate treatment plan for the resources shall be developed and shall be submitted to the County for review and approval. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources. In considering any suggested mitigation proposed by the archaeologist and Native American representative, the County will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the site while mitigation for cultural resources is being carried out.	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Cultural and Paleontological Resources (cont.)		
Impact CUL-3: The Project could have an impact on a paleontological resource. (Potentially Significant)	**Mitigation Measure CUL-3:** If fossil or fossil bearing deposits are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (in accordance with Society of Vertebrate Paleontology standards). The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA *Guidelines* Section 15064.5. The paleontologist shall notify Marin County to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the County determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project, based on the qualities that make the resource important. The excavation plan will include identification of an institution willing and able to accept fossil specimens; and emergency discovery procedures, including survey and record keeping of fossil-finds, bulk sediment sample collection and processing, specimen identification, disposition, and museum curation of any specimens and data recovered. The excavation plan shall be submitted to the County for review and approval prior to implementation.	Less than Significant
Impact CUL-4: The Project could have an impact on human remains. (Potentially Significant)	**Mitigation Measure CUL-4:** If potential human remains are encountered, the contractor will halt work in the vicinity of the find and contact the Marin County coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. As provided in PRC §5097.98, the Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent will make recommendations for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.	Less than Significant
Impact CUL-5: The Project, combined with other past, present and reasonably foreseeable development would not have a cumulative impact on cultural resources. (Less than Significant)	None required	
Geology, Soils, and Seismicity		
Impact GEO-1: The Project would not expose people or structures to potential substantial adverse effects involving strong seismic ground-shaking and associated secondary effects due to landslides and/or weak or liquefiable soils. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Geology, Soils, and Seismicity (cont.)		
Impact GEO-2: The Project would not expose people or structures to potential substantial adverse effects involving soils that have shrink-swell characteristics or other properties (e.g., corrosivity, settlement, or collapse) that could damage foundations, underground utilities, and other sub-grade structures. (Less than Significant)	None required	
Impact GEO-3: The Project would not have a substantial adverse effect due to it being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, resulting in a landslide, earthflow or other earth movement, or be subject to soil erosion or loss of topsoil. (Less than Significant)	None required	
Impact GEO-4: The Project, combined with other existing, planned, proposed, or reasonably foreseeable development in the region, would not result in cumulative geologic and soil hazards. (Less than Significant)	None required	
Greenhouse Gases and Climate Change		
Impact GHG-1: Construction of the Project would result in increased GHG emissions, but would incorporate best management practices. (Less than Significant)	None required	
Impact GHG-2: Operations of the Project would result in increased GHG emissions. (Potentially Significant)	**Mitigation Measure GHG-2:** The Project shall include the following features to reduce energy consumption that could reduce the GHG emissions associated with the proposed project. • *Additional Transportation Demand Management Strategies*. The project applicant shall implement the following Transportation Demand Management (TDM) program strategies, in addition to maintaining the existing Marin General Hospital valet parking shuttle transit service, onsite carpool parking spaces, and pre-tax transit expense reimbursements for employees: a) Employee Commute Program. Develop and implement a Marin General Hospital employee commute program with specific actions and goals to provide on-site information to employees about commute alternatives to and from Marin General Hospital. Specific actions shall include the administration of an annual commute behavior survey, implementation of expanded commuter benefit programs, and periodic incentives to promote and encourage commute alternatives to driving alone. Designate an employee transportation coordinator (ETC) to facilitate the program;	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Greenhouse Gases and Climate Change (cont.)		
Impact GHG-2 (cont.)	b) Carpool and Vanpool Matching. Provide easy access to carpool and vanpool matching for Marin General Hospital employees, working together with the Metropolitan Transportation Commission (MTC), *511 Rideshare*, Transportation Authority of Marin (TAM), or other agency or organization with this objective. Provide a rideshare matching information bulletin board, website our other effective means of facilitating coordination among potential employees interested in ridesharing; c) Bicycle Facilities. Provide employee access to showers and changing facilities and provide additional secured bicycle parking facilities to encourage bicycle use by Marin General Hospital employees; d) Emergency Ride Home. Participate in the countywide Emergency Ride Home (ERH) program administered by TAM for employees who use commute alternatives to driving alone; e) Expanded Preferential Parking Program. Designate an increased ratio of on-site parking for carpool vehicles (exclusive of elderly and handicapped parking). (The current ratio is approximately one per 120 total on-site spaces – five of 605 spaces.) Clearly indicate the location of the preferential parking spaces using appropriate signage; f) Vanpool Program Support. Support and promote the development of employee vanpools countywide, in cooperation with MTC, 511 *Rideshare*, TAM, and other agencies offering incentive programs, as appropriate. *Implementation Timeframes.* The project applicant shall initially submit to the County Department of Public Works (or other department or agency designated by the County) documentation sufficient to demonstrate implementation and effectiveness of each of the aforementioned strategies within the timeframes below. Also, each of the strategies, except as specified below, shall be extended to include employees of the Ambulatory Services Building when that building is operational. - **At completion of the Hillside Parking Structure (End of Phase I), and annually thereafter:** TDM strategies "a" (*Employee Commute Program*), except the administration of an annual commute behavior survey; "b" (*Carpool and Vanpool Matching*); "d" (*Emergency Ride Home*); and "f" (*Vanpool Program Support*). Except for the administration of an annual commute behavior survey with TDM strategy "a", each of these strategies are administrative and viable for implementation during construction.	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Greenhouse Gases and Climate Change (cont.)		
Impact GHG-2 (cont.)	- **One calendar year after completion of the Hillside Parking Structure (Phase I + 1 Year):** Part of TDM strategy "a" (*Employee Commute Program*) to administer an annual commute behavior survey. This duration allows time for the Employee Commute Program to be established and used before surveying. - **Upon completion of the Ambulatory Services Building (End of Phase III)**: Part of TDM strategy "c" (*Bicycle Facilities*) to provide additional secured bicycle parking facilities); and TDM strategy "e" (*Expanded Preferential Parking Program*). - **Upon patient occupancy of the Hospital Replacement Building (End of Phase IV)**: Part of TDM strategy "c" (*Bicycle Facilities*) to provide employee access to showers and changing facilities for expanded bicycle facilities. This TDM strategy involves establishing facilities in the hospital and therefore would not be available until after the Hospital Replacement Building is operational. • *Reduce Waste Generation*. MGH shall include waste management and recycling programs to minimize solid waste generation. Such programs are assumed to minimize waste production. The applicant shall implement waste management and recycling programs to minimize solid waste generation. At a minimum, the applicant shall provide employee information, instructional signage at waste areas; and designated recycling bins to promote avoiding products with excessive packaging, recycling, buying refills instead of new items, separating food and landscaping waste (if composting such waste is elected for the program), and using rechargeable batteries, wherever feasible and consistent with hospital operations and regulations. For modeling purposes, GHG emissions associated with energy associated with landfilling of waste were assumed to be reduced by 10 percent, consistent with and expected reduction in waste generation.	
Impact GHG-3: The Project would not conflict with an applicable plan, policy, or regulation adopted to reduce GHGs. (Less than Significant).	None required	
Impact GHG-4: The incremental GHG impact of the Project would be cumulatively considerable (Potentially Significant)	**Mitigation Measure GHG-4:** Implement Mitigation Measure GHG-2.	Less than Significant
Hazards and Hazardous Materials		
Impact HAZ-1: The Project would not cause a significant hazard due to the transport, use and storage of hazardous chemicals, radioactive materials, and biohazardous materials. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Hazards and Hazardous Materials (cont.)		
Impact HAZ-2: The Project's demolition or renovation of existing structures that contain hazardous building materials would not cause a significant hazard by exposing workers, the public, or the environment to them or by generating hazardous waste. (Less than Significant)	None required	
Impact HAZ-3: The Project would not cause a significant hazard by emitting hazardous materials or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (Less than Significant)	None required	
Impact HAZ-4: The Project would occur on a site listed in Government Code Section 65962.5 and could disturb soil and groundwater impacted by historic hazardous material use, but would not cause a significant hazard by exposing construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (Less than Significant)	None required	
Impact HAZ-5: The Project would not cause 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. (Less than Significant)	None required	
Impact HAZ-6: The Project, combined with past, present and other reasonably foreseeable development in the area, would not cause cumulative impacts with respect to hazardous materials. (Less than Significant)	None required	
Hydrology and Water Quality		
Impact HYD-1: The project would not involve activities that would violate water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality. (Less than Significant)	None required	
Impact HYD-2: The Project would not result in impacts due to the depletion of groundwater supplies or substantially interference with groundwater recharge. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Hydrology and Water Quality (cont.)		
Impact HYD-3: The Project would not alter existing drainage patterns, which could result in increased pollutant loading in stormwater runoff, leading to violation of water quality standards of receiving waters or increase the volume of stormwater runoff, leading to flooding in downstream areas. (Less than Significant)	None required	
Impact HYD-4: The Project would not result in significant impacts by placing structures within a 100-year flood hazard zone. (Less than Significant)	None required	
Impact HYD-5: The Project would not expose people or structures to a significant risk of loss, injury or death resulting from flooding caused by failure of a levee or dam. (Less than Significant)	None required	
Impact HYD-6: The Project site would not expose people or structures to a significant risk of loss, injury or death resulting from flooding caused by seiche, tsunami or mudflow. (Less than Significant)	None required	
Impact HYD-7: The project, in conjunction with past, present and other reasonably foreseeable development in the area, would not cause cumulative impacts with respect to hydrology and water quality. (Less than Significant)	None required	
Land Use, Plans, and Policies		
Impact LU-1: The Project would not conflict with uses at the periphery of the project area, divide an existing community, convert open space, or result in incompatible land uses. (Less than Significant)	None required	
Impact LU-2: The Project would not conflict with any applicable land use plan, goal, policy, or regulation, including zoning, adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)	None required	
Impact LU-3: The Project, combined with past, present, and reasonably foreseeable projects in the area, would not result in a cumulative land use impact regarding land use, plans and policies. (Less that Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Noise and Vibration		
Impact NOI-1: The Project would not develop land uses that would be incompatible with the noise environment at and nearby the project site. (Less than Significant)	None required	
Impact NOI-2: Construction of the Project would substantially and temporarily increase noise levels in areas of sensitive receptors and exceed the ambient noise environment. (Significant)	**Mitigation Measure NOI-2:** a) Pursuant to Sections 6.70.030(5) and 6.70.040 of the Marin County Municipal Code, restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturday. Construction will be prohibited on Sundays and holidays. Loud noise-generating construction-related equipment (e.g., backhoes, generators, jackhammers) can be maintained, operated, or serviced at a construction site for permits administered by the community development agency from 8:00 a.m. to 5:00 p.m. Monday through Friday only. b) If during construction it is determined that construction noise disrupts on-going hospital operations for workers of patients within patient rooms or existing medical offices, the project shall erect temporary noise control blanket barriers along existing hospital building facades facing the construction area. This mitigation shall be coordinated with Mitigation Measure BIO-4a.The specific location and height of barriers would depend on the extent of the problem indoors. Noise control blanket barriers can be rented and quickly erected to reduce the intrusiveness of construction noise indoors. If construction noise is not problematic and does not disrupt hospital or medical office operations, the temporary noise barriers would not be necessary. c) Where it is feasible to block the line-of-sight to construction activities, construct solid plywood fences (minimum eight feet in height either around the construction zone or at the common property line) to shield adjacent residences or other noise-sensitive land uses prior to major noise generating phases of demolition and construction; d) Shield adjacent sensitive uses from stationary equipment with individual noise barriers or partial acoustical enclosures; e) Relocate patient rooms and sensitive medical offices away from areas undergoing construction, as feasible and practical; f) Use manually adjustable or self-adjusting back-up alarms to increase or decrease the volume of the alarm based on background noise levels. Installation and use of the back-up alarms will be consistent with OSHA (Occupational Safety and Health Administration) regulations;	Significant and Unavoidable

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Noise and Vibration (cont.)		
Impact NOI-2 (cont.)	g) Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists; h) Equip all internal combustion engine-driven equipment with intake and exhaust mufflers, which are in good condition and appropriate for the equipment; j) Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from residences or noise-sensitive land uses; k) Locate staging areas and construction material areas as far away as possible from residences or noise-sensitive land uses; l) Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible; m) Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site; n) Conduct sensitivity training to inform construction personnel about the requirements of the construction noise control plan and about methods to reduce noise; o) Prohibit all unnecessary idling of internal combustion engines; p) Notify all adjacent business, residences, and noise-sensitive land uses of the construction schedule in writing; q) Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.	
Impact NOI-3: Construction of the Project could expose persons to groundborne vibration. (Potentially Significant)	**Mitigation Measure NOI-3:** Implement Mitigation Measure NOI-2.	Less than Significant
Impact NOI-4: The Project could generate operational noise levels that exceed standards established in the Marin Countywide Plan. (Potentially Significant)	**Mitigation Measure NOI-4a:** During final design of the project, conduct an acoustical analysis to ensure that noise resulting from the rooftop mechanical equipment on the Hospital Replacement Building complies with applicable General Plan policies. The acoustical analysis would calculate noise levels resulting from the selected equipment at the nearest sensitive	Less than Significant

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Noise and Vibration (cont.)		
Impact NOI-4 (cont.)	receiving land uses, assess noise levels relative to applicable standards, and provide feasible and reasonable recommendations to control noise levels in accordance with the applicable limits. Particular attention will be given to the chiller room enclosure and cooling towers. Additional noise control measures might include, but are not limited to, selection of quieter equipment, baffles, packaged sound attenuators, and noise barriers. The report will be completed and submitted to the building department prior to the issuance of building permits, and will be used to determine the added noise measures required. **Mitigation Measure NOI-4b:** During final design of the project, conduct an acoustical analysis to ensure that noise resulting from the operation of the emergency generators is reduced to 85 dBA or less (or a lower limit if necessary to minimize interference with hospital operations) in the ambulance bay. The report will be completed and submitted to the building department prior to the issuance of building permits related to installation of the generators in the West Wing, and will provide feasible and reasonable recommendations as needed to control noise levels in accordance with the applicable limits. Additional noise control measures might include, but are not limited to, high-performance (hospital or critical grade) mufflers, additional banks of silencers, or acoustical louvers. The additional noise control would also reduce noise levels in the surrounding community during testing or emergency operations.	
Impact NOI-5: The Project would not result in increased traffic volumes that would substantially increase noise levels at sensitive receivers in the project vicinity. (Less than Significant)	None required	
Impact NOI-6: The Project, combined with past, present, and reasonably foreseeable projects, would not substantially increase traffic noise levels along area roadways or result in cumulatively significant temporary or operational noise or vibration effects. (Less than Significant)	None required	
Population, Housing, and Employment		
Impact POP-1: The Project would not induce substantial population growth or concentration of population in the area, either directly or indirectly. (Less than Significant)	None required	
Impact POP-2: The Project could conflict with housing and population projections and policies as set forth in the Countywide Plan. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Population, Housing, and Employment (cont.)		
Impact POP-3: The Project, in conjunction with past, present and reasonably foreseeable projects, would not contribute to a cumulatively considerable effect related to population, housing and/or employment. (Less than Significant)	None required	
Public Services and Recreation		
Impact PSR-1: The Project would not cause a substantial adverse physical impact due to increased demand for fire protection services and emergency medical assistance. (Less than Significant)	None required	
Impact PSR-2: The Project would not cause a substantial adverse physical impact due to increased demand for police protection services. (Less than Significant)	None required	
Impact PSR-3: The Project would not cause a substantial adverse physical impact due to the need for additional school capacity or facilities. (Less than Significant)	None required	
Impact PSR-4: The Project would not result in increased use of parks at levels that would require the designation of additional parkland to remain in conformance with locally adopted park standards. (Less than Significant)	None required	
Impact PSR-5: The Project would not result in increased use of recreational facilities that would result in substantial and/or accelerated physical deterioration of facilities. (Less than Significant)	None required	
Impact PSR-6: The Project, combined with past, present, and other reasonably foreseeable development in the area, would not contribute to cumulative impacts with respect to public services and recreation. (Less than Significant)	None required	
Transportation and Circulation		
Impact TRA-1: The Project would increase traffic volumes on area roadways and affect levels of service at the local and CMP study intersections and freeways under Existing plus Project Conditions. (Significant for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd. Less than Significant for freeway segment LOS)	None feasible for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd. None required for freeway segment LOS	Significant and Unavoidable for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Transportation and Circulation (cont.)		
Impact TRA-2: The Project would substantially increase traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways due to roadway design features, incompatible uses, or Project-related vehicles trips. (Potentially Significant regarding hazards for vehicles. Less than Significant for bicyclists, pedestrians, and transit service.)	**Mitigation Measure TRA-2a:** To improve vehicle sight distance from the planned parking garage right-turn only westbound driveway onto Bon Air Road, no vehicle parking shall be allowed on the east side of Bon Air Road between the garage's outbound only driveway and the planned inbound only ambulance driveway located to the south (which would entail removal of two parking spaces, in addition to the two or three parking spaces removed to accommodate the new driveways). In addition, planned trees and shrubbery shall be removed in the landscaped areas both south and between the two driveways to allow for improved vehicle sight distance. These measures will result in reducing potential vehicle sight distance problems to a less-than-significant level.	Less than Significant
	Mitigation Measure TRA-2b: To improve traffic flow and reduce potential queuing impacts at the main full-access southern driveway, it is recommended that a double yellow lane striping shall be installed from the driveway's raised median around the internal curb northbound into the drive aisle to prevent queued vehicles from potentially blocking inbound traffic to the site.	Less than Significant
	None required for bicyclists, pedestrians, and transit service	
Impact TRA-3: The Project could result in inadequate emergency access. (Potentially Significant)	**Mitigation Measure TRA-3:** Implement Mitigation Measure TRA-2a (improve vehicle sight distance from the planned parking garage right-turn only westbound driveway onto Bon Air Road).	Less than Significant
Impact TRA-4: The Project would not be inconsistent with adopted polices, plans, and programs supporting alternative transportation. (Less than Significant)	None required	
Impact TRA-5: The Near-Term Project would increase traffic volumes on area roadways and affect levels of service at the local and CMP study intersections and freeways under Near-Term (Year 2018) plus Near-Term Project Conditions. (Significant for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd. Less than Significant for freeway segment LOS)	None feasible for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd None required for freeway segment LOS	Significant and Unavoidable for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd
Impact TRA-6: The Project would generate temporary increases in traffic volume and temporary effects on transportation conditions during construction activities. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Transportation and Circulation (cont.)		
Impact TRA-7: The Project, in conjunction with past, present and other reasonably foreseeable future development in the area, would increase traffic volumes on area roadways and affect levels of service at the local and CMP study intersections and freeways under Cumulative plus Project conditions. (Significant for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd, and freeway segment LOS)	**Mitigation Measure TRA-7:** If the proposed Highway 101 Greenbrae/Twin Cities Corridor Improvement project circulation improvement for Sir Francis Drake Boulevard (eastbound through lane at Eliseo Drive) is deemed feasible, the project applicant shall contribute proportional "fair share" contribution towards that improvement, based on the project's percent contribution to the total cumulative year 2035 plus project volume at the intersection. The project applicant shall contribute a proportional "fair share" towards the upgrade of A70 traffic signal controllers along Sir Francis Drake Boulevard at the affected intersections at the Wolfe Grade, La Cuesta, and Eliseo Drive intersections based on the percentage of p.m. peak-hour vehicle trips contributed to these intersections. The project applicant shall contribute a proportional "fair share" towards an engineering study to evaluate the potential for increasing the westbound left-turn lane storage based on the percentage of p.m. peak-hour vehicle trips contributed to the Bon Air Road/Sir Francis Drake Boulevard intersection. None feasible for intersection LOS at Sir Francis Drake Boulevard intersections at Wolfe Grade and La Cuesta Drive, and for queuing on Bon Air Road/Sir Francis Drake Blvd None feasible for freeway segment LOS	Significant and Unavoidable for intersection LOS and queuing on Bon Air Road/Sir Francis Drake Blvd Significant and Unavoidable freeway segment LOS
Utilities and Service Systems		
Impact UTIL-1: The Project would not require new or substantially expanded water facilities or new entitlements. (Less than Significant)	None required	
Impact UTIL-2: The Project would not require expanded wastewater treatment services. (Less than Significant)	None required	
Impact UTIL-3: The Project would not be served by a landfill with insufficient permitted capacity or conflict with solid waste regulations. (Less than Significant)	None required	
Impact UTIL-4: The Project would not be served by energy suppliers with inadequate capacity and would not conflict with energy conservation standards. (Less than Significant)	None required	
Impact UTIL-5: Construction of the Project would not use or encourage large or inefficient use of energy, exceed the energy supplier's existing capacity, or conflict with energy conservation standards. (Less than Significant)	None required	

FINAL TABLE 2-1R
SUMMARY OF IMPACTS, MITIGATION MEASURES, AND RESIDUAL EFFECTS (Continued)

Environmental Impact	Mitigation Measures	Level of Significance after application of Mitigation
Utilities and Service Systems (cont.)		
Impact UTIL-6: The Project, in combination with other past, present, and reasonably foreseeable development, would not result in cumulative impacts on utilities and service systems. (Less than Significant)	None required	

CHAPTER 3
Project Description

3.1 Overview

As analyzed in the June 2013 EIR, the Marin General Hospital Replacement Building Project ("Approved Project") consists of a phased development of a 300,000 square-foot Hospital Replacement Building, a 100,000 square-foot Ambulatory Services Building, a multi-level Hillside Parking Structure, a multi-level Bon Air Road Parking Structure, and various accessory site improvements. The Approved Project would be developed in phases to ensure that the hospital would stay fully operational during construction. See **Figure 3-1**, **Approved Project Site Plan**, and **Figure 3-2**, **Approved Project Site View**.

The current proposal is referred to as the "Modified Project." The Modified Project includes two additional potential Hillside Parking Structure Options ("Hillside Parking Options") not previously considered with the Approved Project analyzed in the June 2013 EIR ("Approved Project"). This chapter focuses on the differences between the Modified Project and the Approved Project for purposes pertinent to assessing environmental effects (presented in Chapter 4, *Environmental Issues*) for this Addendum. The overall differences involved with the Modified Project include greater excavation and grading, tree removal, changed traffic circulation, adjusted development phasing that switches the order of two major project components (the Ambulatory Services Building and the Hospital Replacement Building), and alternative construction timing for the Elevated Pedestrian Bridge relative to other proposed buildings.

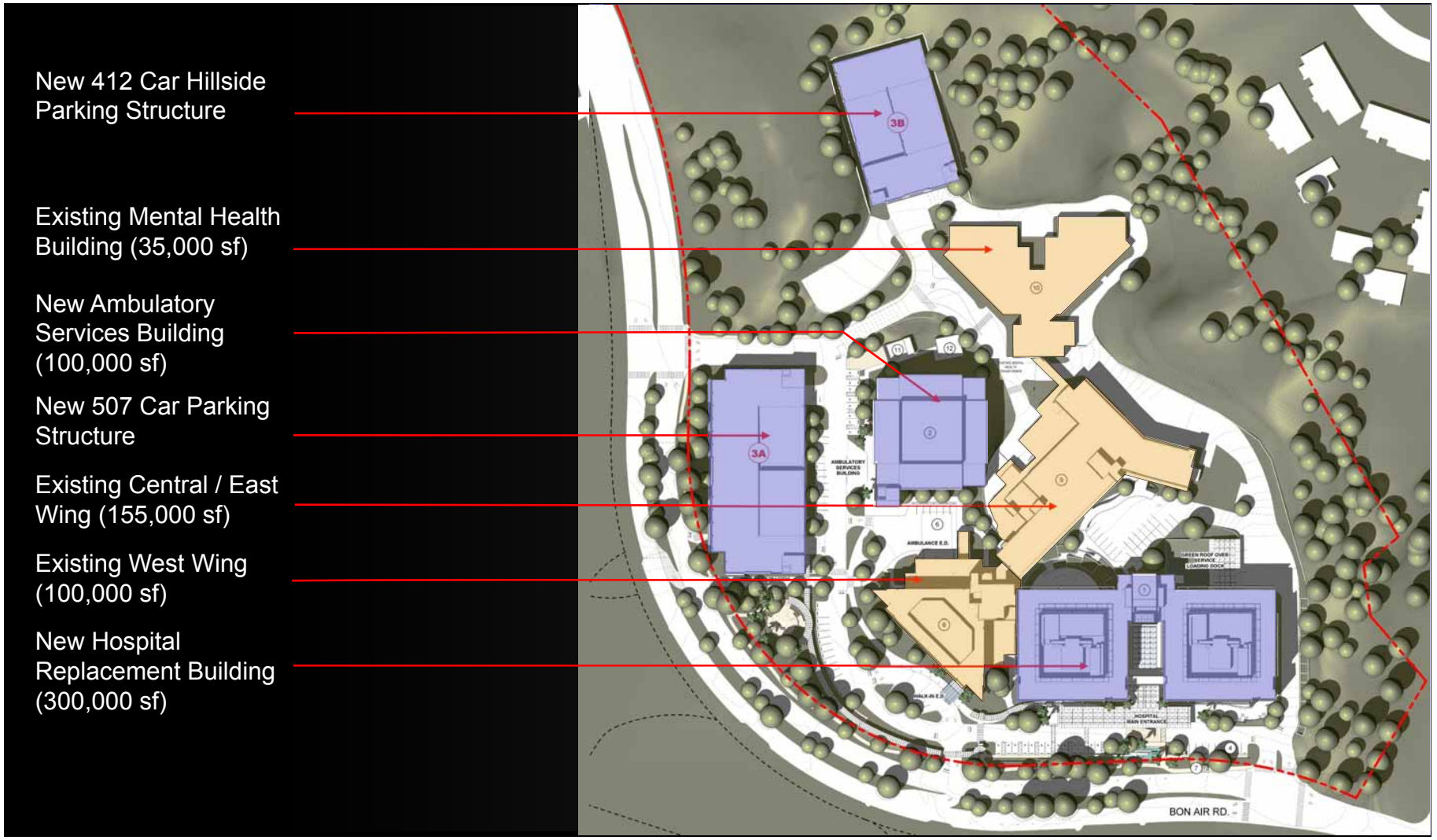
If approved, either of the proposed additional Hillside Parking Options would allow the District to develop a "Modified Project" that would replace the approved Hillside Parking Structure and remove the approved Bon Air Road Parking Structure previously analyzed in the June 2013 EIR.

3.2 Project Area Characteristics

3.2.1 Location and Surroundings

The project site is located at 250 Bon Air Road, in unincorporated Marin County, California.[1] The project site is approximately 10 miles north of San Francisco and 1.25 miles west of Highway 101 (see Figure 1-1, Project Location). Sir Francis Drake Boulevard is located approximately 1,000 feet to the north of the site.

[1] The entire Marin General Hospital campus is considered the project site.



SOURCE: Lee Burkhart, Liu, Inc.

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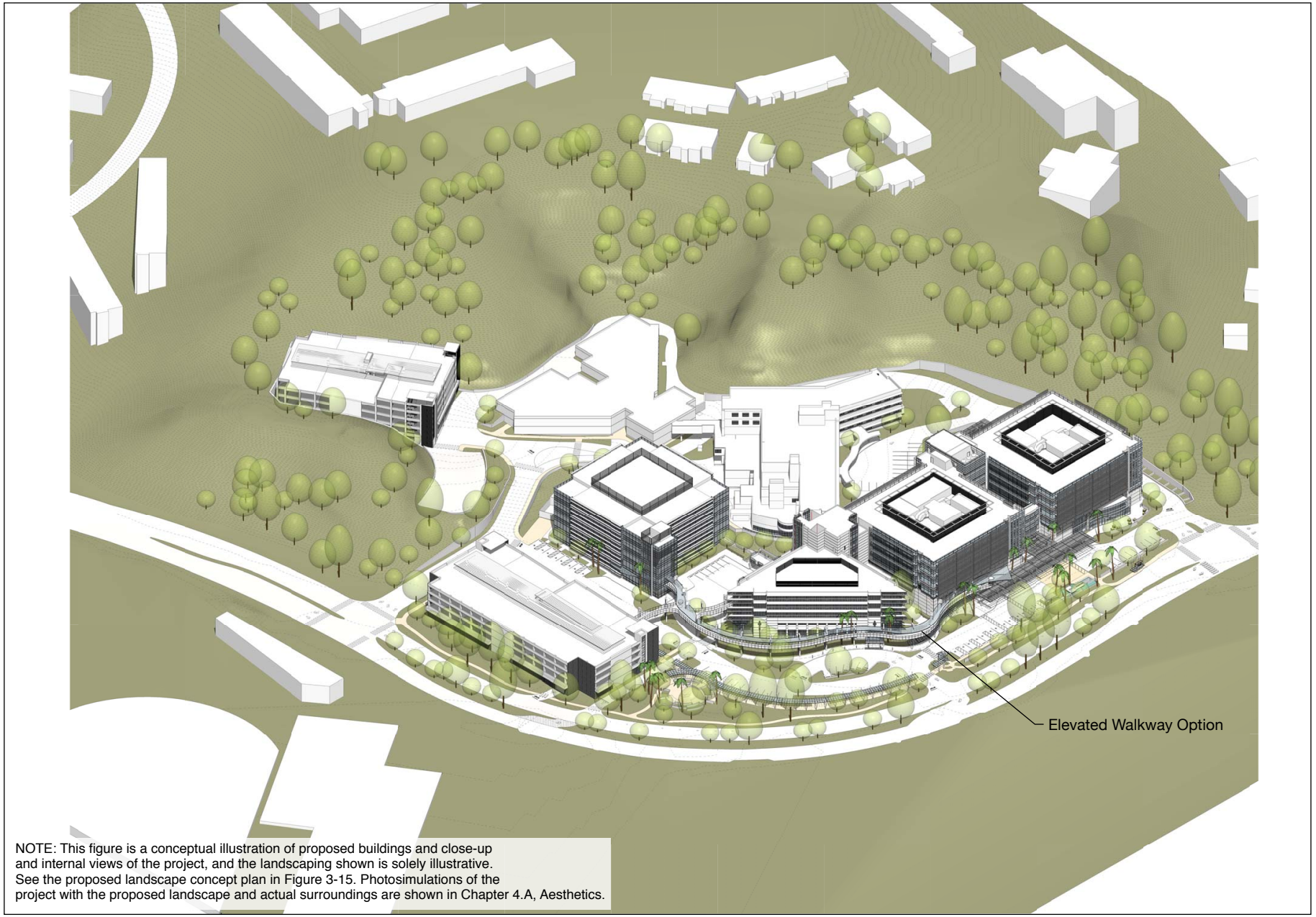
Figure 3-1

Approved Project Site Plan



NOTE: This figure is a conceptual illustration of proposed buildings and close-up and internal views of the project, and the landscaping shown is solely illustrative. See the proposed landscape concept plan in Figure 3-15. Photosimulations of the project with the proposed landscape and actual surroundings are shown in Chapter 4.A, Aesthetics.

SOURCE: Lee Burkhart, Liu, Inc.

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Figure 3-2
Approved Project Site View

The project site is approximately 19.7 acres bounded generally by Bon Air Road to the west and north, Bayview Road to the south, medical offices and apartment buildings (Via Hidalgo) to the northeast, and the Spyglass and Corte Oriental Apartments uphill to the east and southeast.

Surrounding areas include natural and developed ridges, valleys, and hillside topography. The Hal Brown Park at Creekside (Hal Brown Park) (formerly "Creekside Park") is located west of the site, directly across Bon Air Road.[2] Hal Brown Park includes recreational facilities, open space and estuarial wetlands (also referred to generally as "marsh") associated with Corte Madera Creek to the south and west of the project site.

The surrounding pattern of developed and undeveloped areas is shown above in **Figure 3-3**, **Aerial of Project Site and Surroundings**.

3.2.2 Existing Site Designations

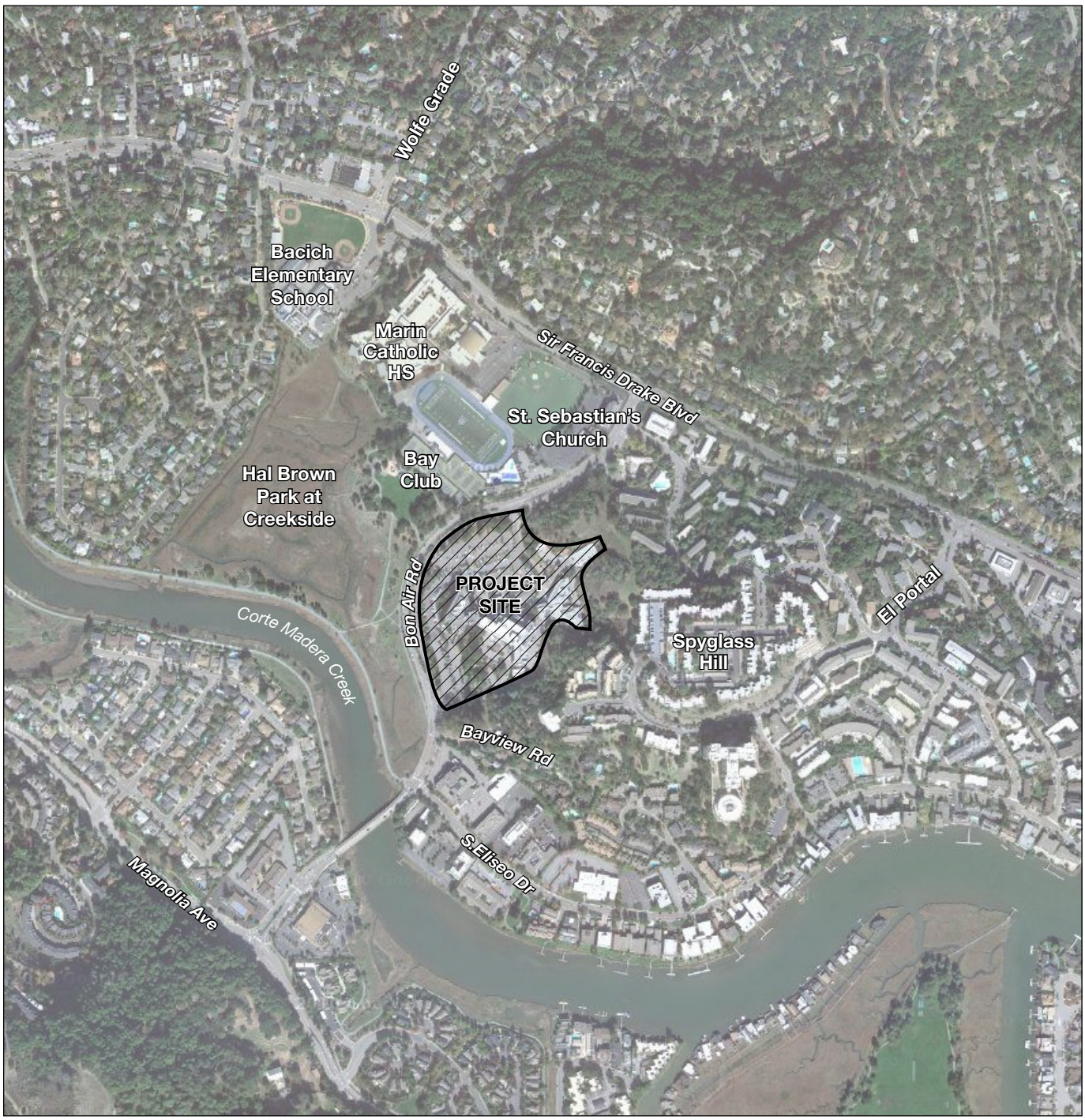
The Marin Countywide Plan Land Use designation for the project site is "PF – Public Facility." The Marin County Zoning designation for the project site is "PF (Public Facilities District)."

3.2.3 Existing Ownership

Approximately 14.8 acres (75 percent) of the 19.7-acre project site are owned by the Marin Healthcare District; 4.9 acres (25 percent) at the northernmost corner of the project site is co-owned by the District and the County of Marin ("County"). As discussed in the 2013 Draft EIR, in order to develop a hillside parking structure on the project site, the Marin Healthcare District would need to lease 0.82 acres of land from the County, or swap that same acreage for the District's lands. In addition, the District would provide an easement for access and parking to the County property - the Marin County Community Health Building in the eastern area of the project site. (See the 2013 Draft EIR Figure 3-3, Existing Marin County Property and Access Parking Easements.)

The County Assessor's Parcel Numbers for the parcels that make up the project site are 022-010-34 and 022-060-20.

[2] Creekside Park Recreational Area reopened on February 14, 2011, following extensive renovations and was renamed "Hal Brown Park." http://maringov.org/Depts/PK/Divisions/Parks/Hal%20Brown.aspx



SOURCE: ESA

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Figure 3-3

Aerial of Project Site and Surroundings

3.3 Objectives of the Modified Project

CEQA Guidelines Section 15124(b) requires that the Project Description of an EIR include a statement of objectives for the proposed project. The objectives of the Approved Project described in the June 2013 EIR are repeated below and continue to apply to the Modified Project:

1. To provide an OSHPD SB 1953 seismically compliant acute care hospital facility for the citizens of Marin County for the foreseeable future.

2. To develop the new Hospital Replacement Building, Ambulatory Services Building, Parking Structures, and internal circulation system, including on-site pedestrian circulation to meet the contemporary energy and design objectives and to adhere to the project's goal for sustainable design that achieves a rating equivalent to the United States Green Building Council Leadership in Energy and Environmental Design's (LEED®) Silver and the LEED® for Healthcare Rating System modeled after the Green Guide for Health Care (GGHC).

3. To promote health, safety and well-being for all future patients, doctors, nurses and employees on the Marin General Hospital campus.

4. To ensure that the Marin General Hospital meets the standards and requirements of the Hospital Facilities Seismic Safety Act (SB 1953). The hospital is proceeding under additional regulations SB 1661, and SB 499, SB 90, and AB 523, pursuing compliance at the earliest practicable date and within mandated State deadlines.

5. To allow for uninterrupted operation of medical services currently provided at Marin General Hospital and maintain continuity of care during and after a major earthquake.

6. To improve a medical campus at 250 Bon Air Road that is accessible to all patients, doctors, nurses, employees, and visitors at buildout of the project.

7. To phase construction of the project so as to allow uninterrupted hospital operations.

8. To provide integrated delivery of high quality health care services from the existing Marin General Hospital campus and to provide private patient rooms where possible. [3]

9. To manage development of the proposed project in a responsible manner sensitive to the surrounding area.

10. To minimize existing on-site parking shortfalls for patients, visitors and staff at Marin General Hospital and reduce parking-related problems in the surrounding neighborhood by providing substantial additional on-site parking; and to locate, design and phase new parking structures onsite to minimize parking shortfalls during and after construction while avoiding any adverse effects to the aesthetic setting of the project site and surroundings.

[3] Use of private rooms (i.e., hospital rooms with a single patient) is a well-established and growing national trend in new hospital construction to address patient health and safety and operational efficiency.

3.4 Approved Parking Structures

The modifications proposed to the Approved Project involve additional options for development of the Hillside Parking Structure. As previously shown in Figure 3-1, the Approved Project would construct two new parking structures during the initial phases of the site. The Hillside Parking Structure with the Approved Project would be constructed on the hillside at the northeast portion of the project site, adjacent to the existing Community Mental Health Building, and in the footprint of the existing Marin Community Clinic structure that would be demolished. The approved parking structure would be five stories (six parking levels), provide 412 parking spaces, and would primarily service staff parking.

This structure would be, tucked within the contours of the hillside. The top-of-slab elevation of the previously approved Hillside Parking Structure would sit at approximately 35 feet amsl. The entire front (south) elevation of the structure would be visible and 57 feet above ground. The rear of the structure would be cut into the hillside slope, leaving two to three stories visible above grade on the side and rear elevations. Retaining walls ranging from approximately three to 25 feet tall would be required for terracing in the northern most area of the site, adjacent to the parking structure.

With the Approved Project, the Bon Air Road Parking Structure would be constructed along Bon Air Road, generally where the existing surface parking lot exists north of the existing West Wing of the hospital. This parking structure would be four stories (five parking levels) and provide 507 parking spaces for patient and visitor parking.

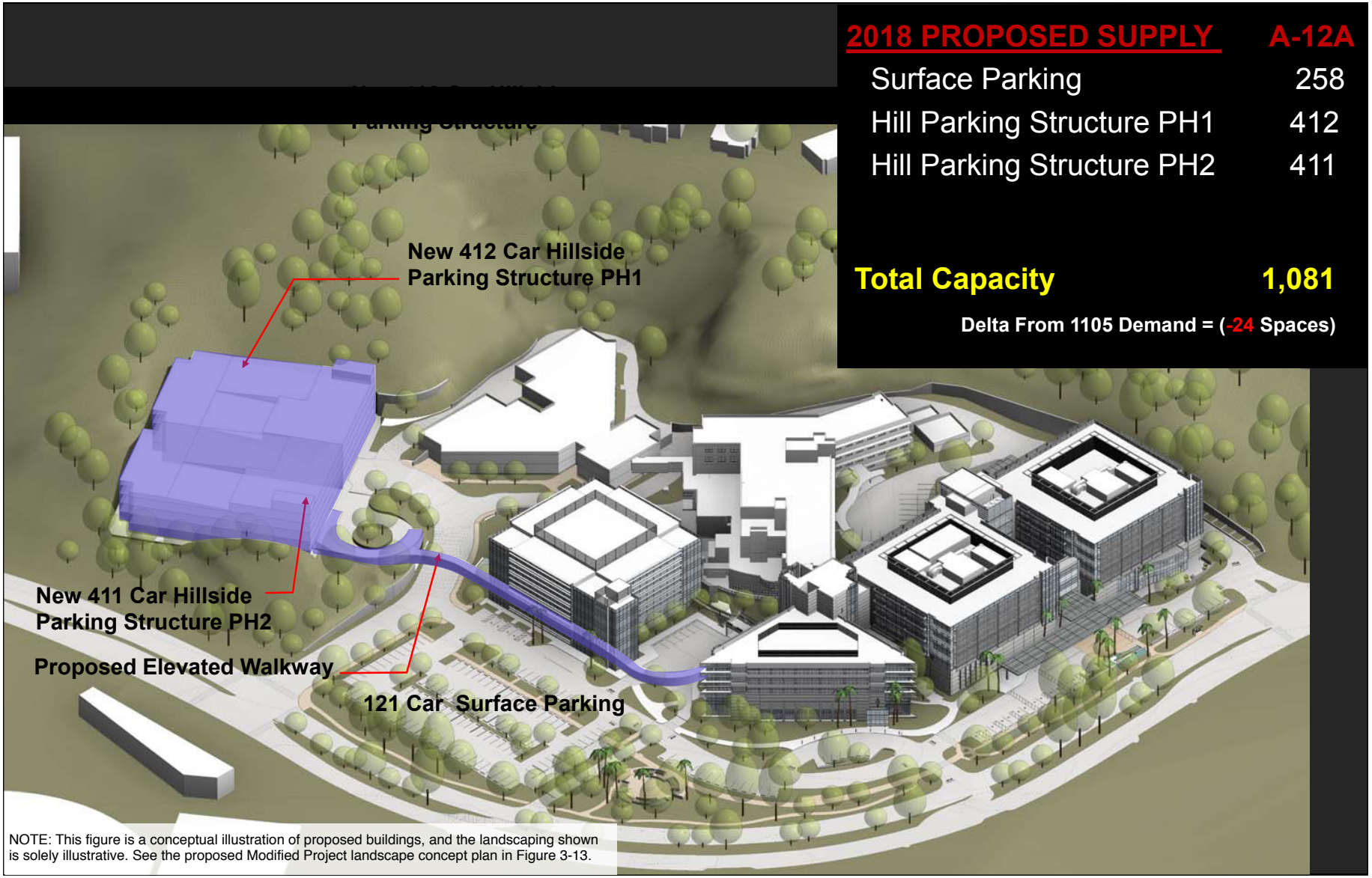
The Approved Project would result in a three (3)-space shortfall in 2018, when all development affecting project parking would be constructed and operational.

Both parking structures with the Approved Project may incorporate a trellis and photovoltaic (PV) system in the center aisles of the top parking levels as an optional project component. This option depends on the Marin Healthcare District's ability to secure adequate funding for it.

3.5 Proposed Modified Hillside Parking Options

3.5.1 Option A-12A: Two Structures (823 spaces)

As shown below in **Figure 3-4**, **Modified Hillside Parking Structure Option A-12A**. Option A-12A would develop a new 411-space Hillside Parking Structure adjacent to and abutting the approved 412-space Hillside Parking Structure described above. As with the approved Hillside Parking Structure, Option A-12A would be five stories (six parking levels), tucked within the contours of the hillside in the northeast portion of the project site. The Bon Air Road Parking Structure would not be developed with Option A-12A.



SOURCE: Lee Burkhart, Liu, Inc.

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Figure 3-4

Modified Hillside Parking Structure Option A-12A

As summarized in Figure 3-4, Option A-12A would result in a total of 1,081 parking spaces on the project site (considering other surface parking areas on the project site), resulting in a 24-space shortfall at 2018.

As with the Approved Project, the Hillside Parking Structure under Option A-12A (as well as Option A-12B described below) also may incorporate the trellis and PV system on the top parking levels as an optional project component that depends on the Marin Healthcare District's ability to secure funding for it.

See Section 3.7.1, *Construction Schedule,* in this chapter for a description of the construction phasing options for Option A-12A.

3.5.2 Option A-12B: One Structure (886 spaces)

As previously mentioned and shown below in **Figure 3-5**, **Modified Project - Hillside Parking Structure Option A-12B**. Option A-12B would replace the approved 412-space Hillside Parking Structure with a single 886-space Hillside Parking Structure in essentially the same footprint as Option A-12A. Also like the Option A-12A, the Bon Air Road Parking Structure would not be developed.

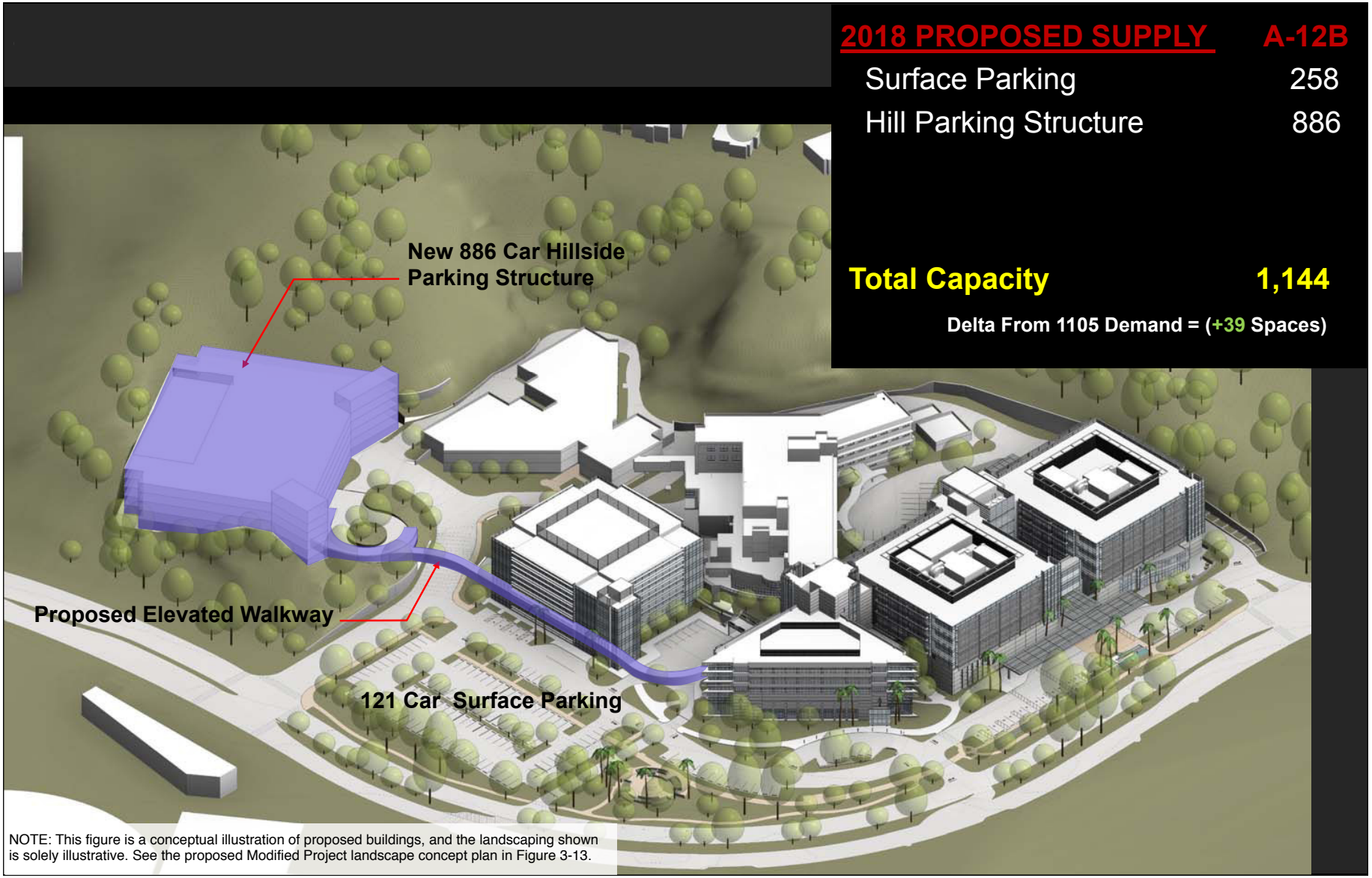
As summarized in Figure 3-5, Option A-12B would result in a total of 1,144 parking spaces on the project site, resulting in a 39-space surplus at 2018.

(Parking conditions with the Modified Project are detailed further in this chapter, under Section 3.6.3, *Parking Supply*.)

3.6 Other Site Development Modifications to the Approved Project

Additional modifications to the Approved Project are required as a result of the proposed Hillside Parking Options described above. Overall, the development program and all other major components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. Generally, these include considerations related to on-site population (visitors and employees), the demands or effects associated with that population, as well as considerations related to the operational effects of the proposed uses, which are not substantially changed with the Modified Project.

Affected modifications are described below and evaluated in Chapter 4, *Environmental Issues*, of this Addendum.



SOURCE: Lee Burkhart, Liu, Inc.

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Figure 3-5

Modified Hillside Parking Structure Option A-12B

3.6.1 Proposed District and County Land Ownership

As previously introduced under Section 3.2.3, *Existing Ownership,* the Modified Project requires greater land area to develop either of the Modified Hillside Parking Options on the project site. Therefore, the proposed area of land the District would need to swap with or lease from the County is adjusted as shown in **Figure 3-6**, **Marin County Property and Parking Access Easement – Modified Project**. For ease of comparison, the Approved Project ownership and easement configuration is shown in **Figure 3-7**, **Marin County Property and Parking Access Easement – Approved Project**.

Previously, the District proposed to lease or swap 0.82 acres of County land. That lease/swap area is now increased to 1.19 acres to accommodate where the expanded Hillside Parking Structure under the Modified Project would be built. The District's previously proposed equivalent land was a single 0.82-acre area along and set back 60 to 100 feet from Bon Air Road (north of the north access driveway). The District now proposes the equivalent land in two parts: a 0.84-acre area abutting Bon Air Road (north of the north access driveway) and a 0.35-acre area immediately east of the Mental Health Building (see Figure 3-6). The required new access road easement to the Hillside Parking Structure for the County is also slightly increased. No other portions of the proposed access or parking easements along the north driveway would change. None of the changes described above alter the total project site acreage (approximately 19.7 acres).

3.6.2 Access and Circulation

General Vehicular Access and Circulation

With regard to vehicle access driveways between Bon Air Road and the project site, vehicle circulation would remain largely unchanged from the Approved Project. There would still be three primary driveways including the north access driveway (full access), central driveway (limited access), and south access driveway (full access) (see Figure 3-12, further in this chapter).

Bon Air Road / North Access Driveway Intersection. With the Modified Project, the primary change in surface traffic circulation to and from the project site compared to the Approved Project would be a shift in vehicle traffic to the north access drive from the central and south access driveways. This change would be due to the Hillside Parking Structure being increased from 401 parking spaces to 823 spaces (with Option A-12A) or 886 spaces (Option A-12B), and the Bon Air Road Parking Structure being eliminated and replaced by less surface parking. (Parking supply discussed under Section 3.6.2, below.) Specifically, 75 percent of the project's vehicle trips would now use the north access driveway compared to 58 percent under the Approved Project. This would be the case for both Hillside Parking Options.

To accommodate this shift in traffic to and from the project site at the north access driveway (at its intersection with Bon Air Road), an additional Bon Air Road southbound left-turn lane (for two total) into the project site would be developed with the project. The intersection lane geometries and signalization at this intersection would be as follows:

- Southbound Bon Air Road: Two (2) left-turn lanes and one (1) through-lane;
- Northbound Bon Air Road: One (1) through-lane and one (1) right-turn lane;
- Westbound north access driveway: One (1) left-turn lane and one (1) right-turn lane; and
- An overlap signal phase for the westbound right-turn movement from the north access drive onto northbound Bon Air Road

The additional southbound left-turn lane into the project site from Bon Air Road would fit within the existing public right of way and would not require a narrowing of existing sidewalks along Bon Air Road. However, the additional lane would narrow the existing landscaped median on the north side of the intersection for the length of the left turn lanes (approximately 120 feet), subject to review and approval by Marin County Parks and Open Space Department, which has jurisdiction in the Bon Air Road median).

Immediately at the intersection, southbound traffic flows would continue to transition from two southbound through-lanes to one southbound through-lane.

North Access Driveway Configuration. The Modified Project would adjust the striping and lane designations from what was evaluated for the Approved Project as follows (see Figures 3-9 and 3-11, below):

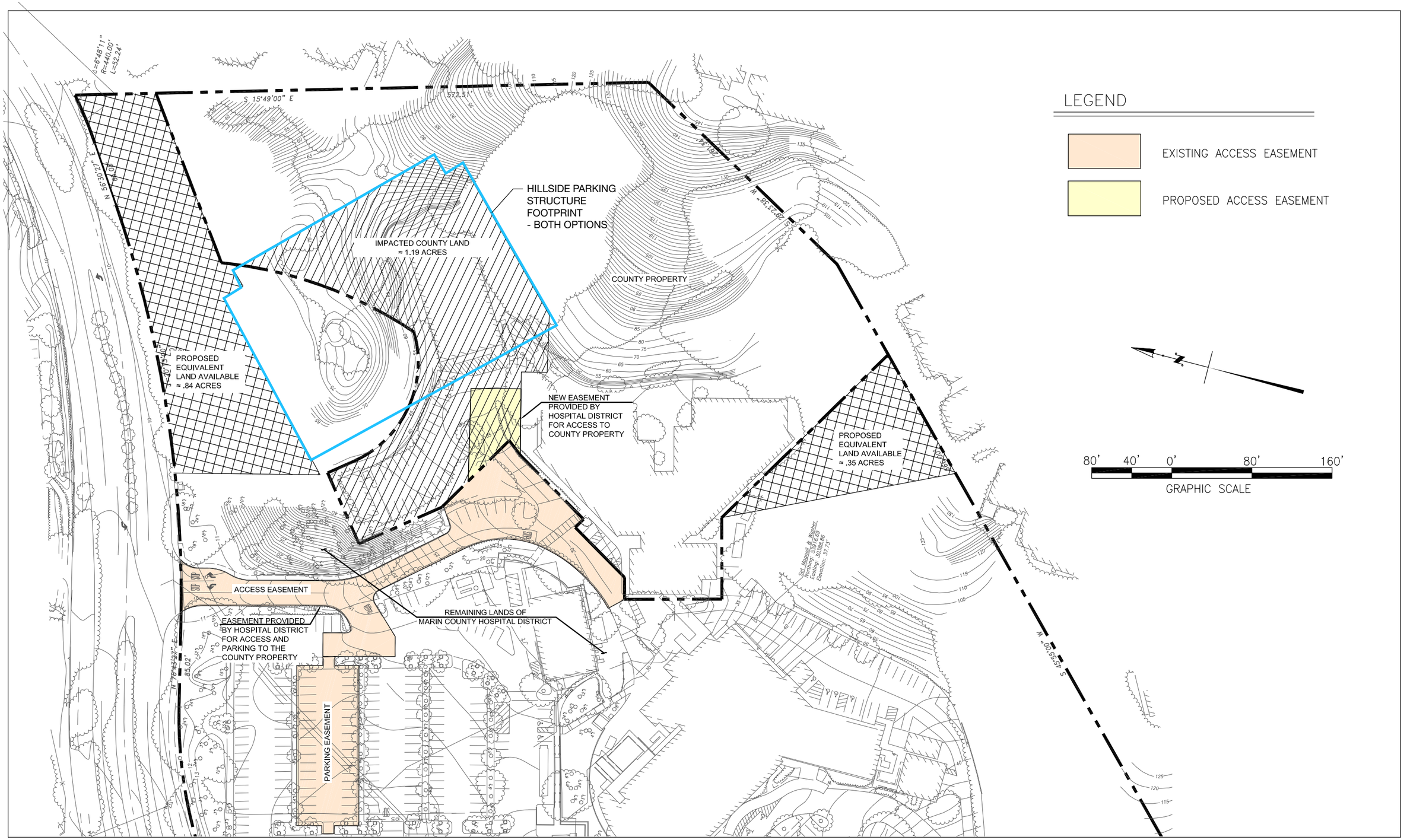
- The centerline of the 4-lane north access driveway would be double yellow striping and lane lines would generally be standard "skip" white striping from Bon Air Road to the Hillside Parking Structure;
- Within about 100 feet of Bon Air Road, the outbound (westbound) left-turn and right-turn lanes would be separated by a solid white stripe; and
- Directional pavement arrows indicating specific left and right-turn lanes would be provided at the Bon Air Road approaches along the north access driveway.

Hillside Garage and Surface Turnaround/Drop-off Circle

Option A-12A Layout and Access. The internal circulation plan for Hillside Parking Structure Option A-12A is shown in **Figure 3-8**, **Internal Ground Level Parking Plan – Option A-12A**.

The garage would havetwo (2) entry lanes and two (2) exit lanes. The inside entry lane would be required to turn left, with the outside entry lane continuing straight into the garage. The first east-west drive aisle (internal to the garage) would include a stop-sign control at the entry/exit points to allow for vehicle right-of-way. Signage would be provided at the in-bound lanes to the garage to specify that priority parking would be provided for physicians and/or medical patients on the first/second floors, and remaining employees and visitors would typically park on higher garage floors.

Also with Option A-12A, **Figure 3-9**, **Access Circulation Plan – Option A-12A**, shows a turnaround/drop-off circle located in front of the garage on its southwest quadrant. This turnaround/drop-off area would stem from the access driveway to the garage and could be



SOURCE: KPFF

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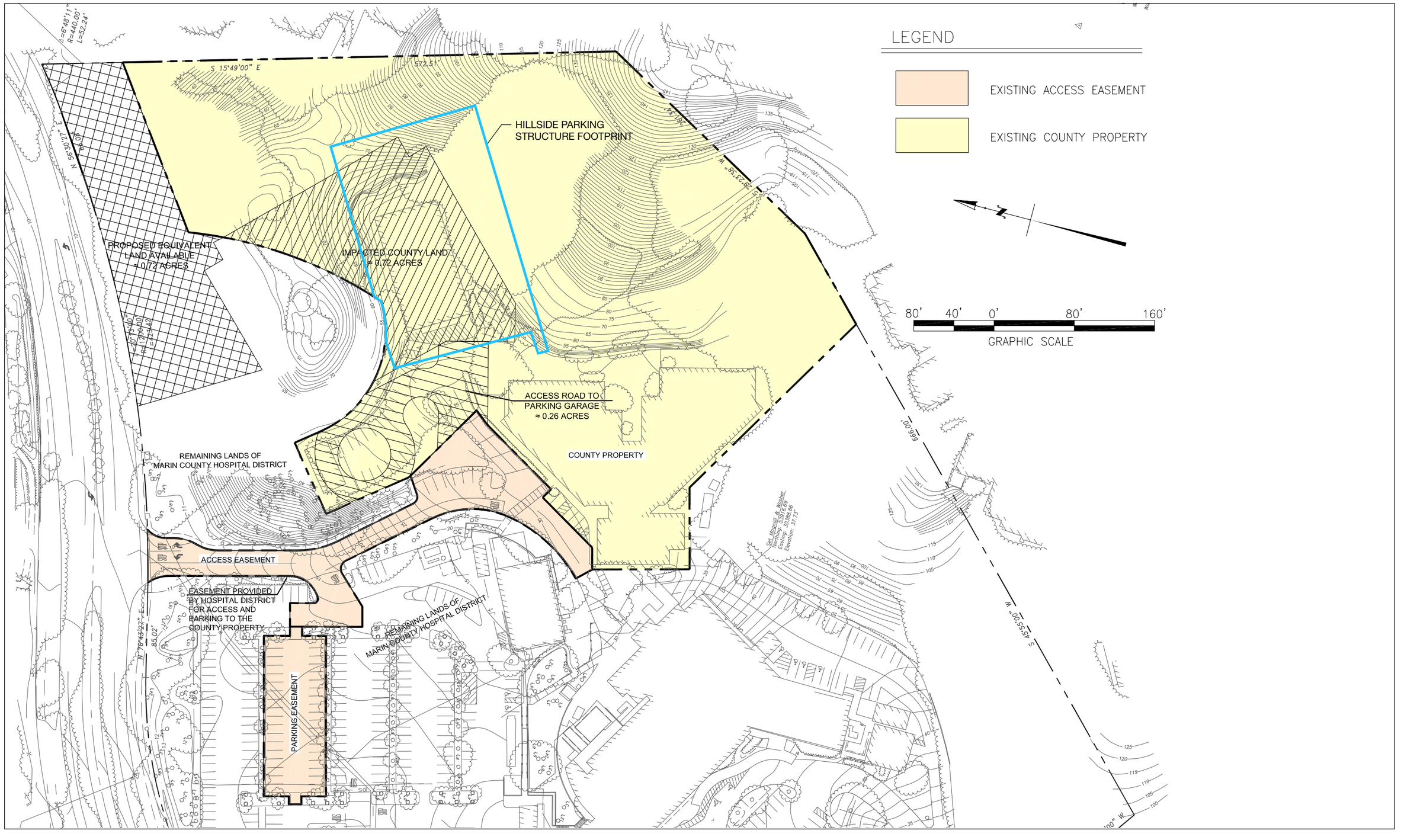
Figure 3-6

Marin County Property and Access Parking Easement - Modified Project



SOURCE: KPFF

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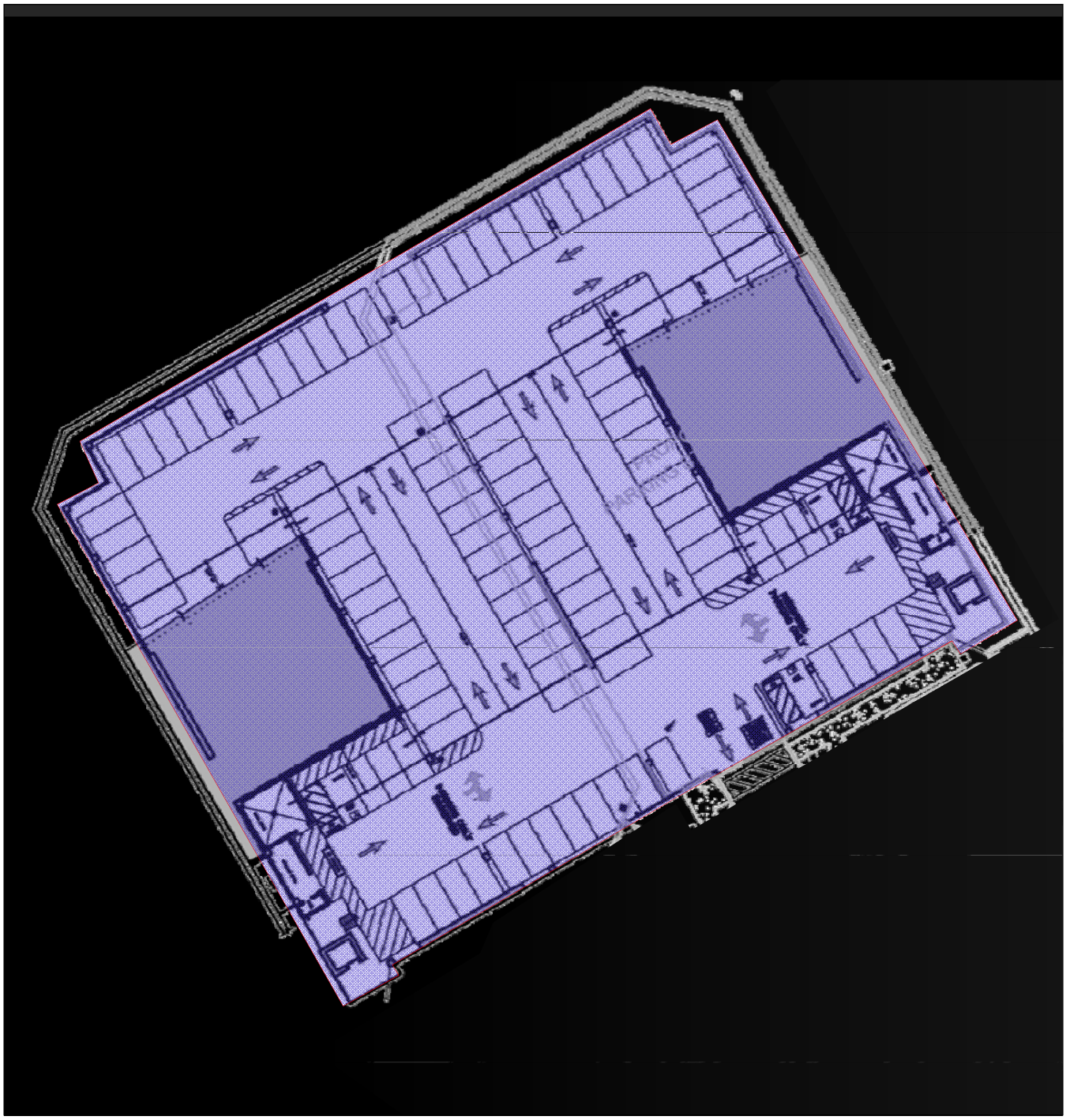
Figure 3-7

Marin County Property and Access Parking Easement - Approved Project



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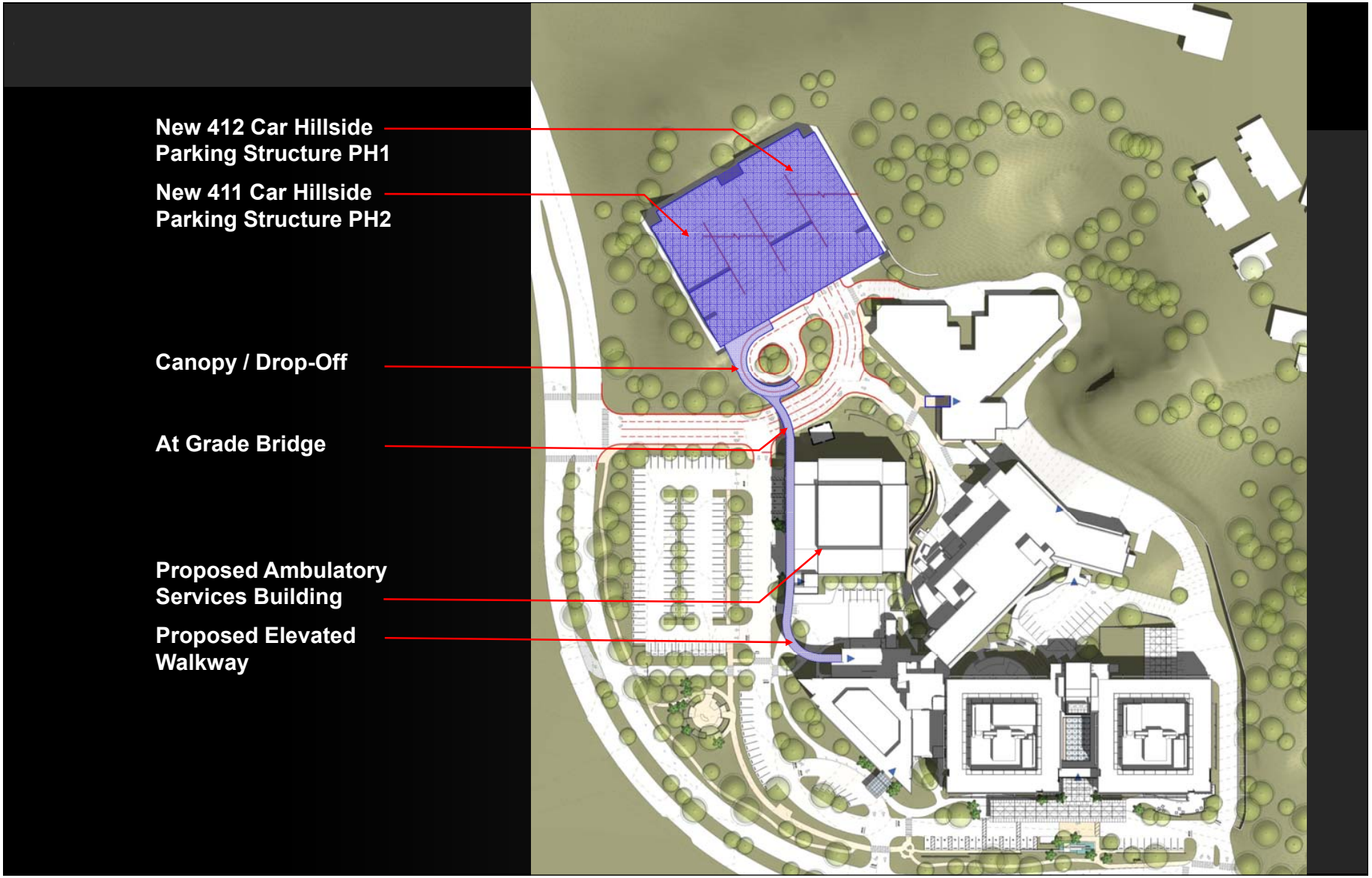
SOURCE: Lee Burkhart, Liu, Inc.

Figure 3-8
Internal Ground Level Parking Plan - Option A-12A



SOURCE: Lee Burkhart, Liu, Inc.

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Figure 3-9

Access Circulation Plan - Option A-12A

accessed before entering the garage (by turning left from the inside/left entry lane) or after exiting the garage (by turning right from the outside/right exit lane). Vehicles would circulate through the turnaround/drop-off circle, and a stop bar would be installed for traffic exiting the traffic circle. Signage would also be installed on the main four-lane internal driveway indicating access to the turnaround/drop-off circle with proper lane markings (turn arrows).

Option A-12B Layout and Access. The internal circulation plan for Hillside Parking Structure Option A-12B is shown in **Figure 3-10, Internal Ground Level and Typical Parking Plan – Option A-12B**. Like for Option A-12A, the garage would have two (2) entry lanes and two (2) exit lanes, however, the entrance/exit would be located further toward the southeast quadrant of the structure. Inside the garage, the inside/left entry lane would be required to turn left, and the outside/right entry lane would continue straight into the garage. The internal east-west parking aisles within the garage would have stop-sign control. As with Option A-12A, signage would be provided at the in-bound lanes to the garage to specify that priority parking would be provided for physicians and/or medical patients on the first/second floors, and remaining employees and visitors would typically park on higher garage floors.

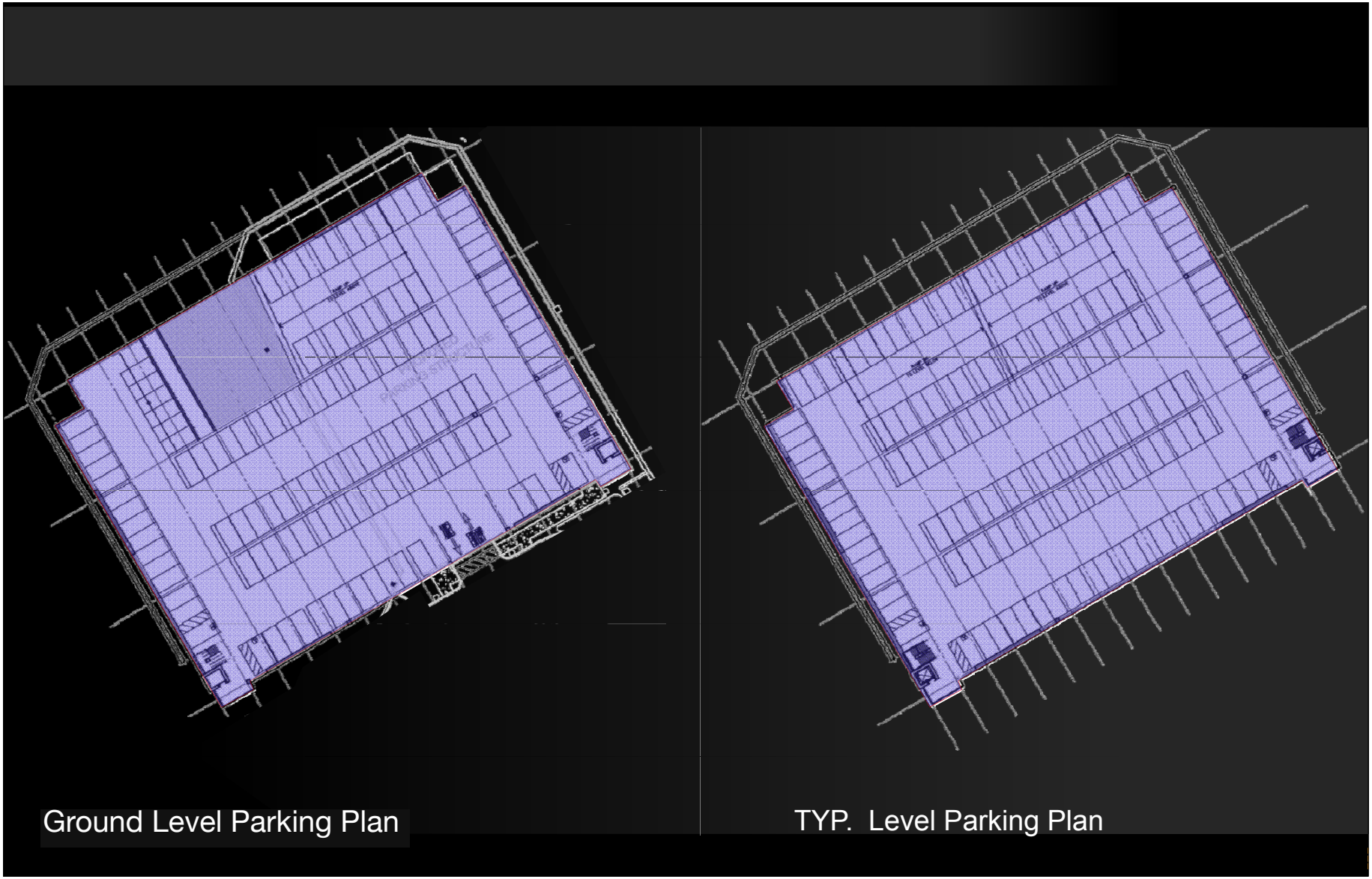
Figure 3-11, **Access Circulation Plan - Option A-12B**, shows that there would be a turnaround/drop-off circle located in front of the garage, on its southwest quadrant. The overall configuration, access and egress to and from the turnaround/drop-off circle would be the same as described above for Option A-12A.

Improved Surface Parking Lot (Replacing Proposed Bon Air Road Parking Structure)

As previously described, the the Bon Air Road Parking Structure would no longer be constructed with the Modified Project. Instead, under both Hillside Parking Options, the existing surface parking lot, where the Approved Project proposed to develop the new Bon Air Road Parking Structure, would be improved (repaved and striped). The improved parking lot would have 160 spaces compared to approximately 121 spaces in the area where the improved lot is proposed, and 507 spaces in the previously proposed Bon Air Road Parking Structure. Access to the improved parking lot would continue to be from points internal to the project site, however, unlike the Approved Project, the parking lot would not have direct new vehicular egress to Bon Air Road, as shown in Figure 3-1 (Approved Project) compared to Figures 3-9 and 3-11 above (Modified Hillside Parking Options).

Emergency Response Access

Emergency vehicle access would remain largely unchanged from conditions described in the June 2013 EIR. As described there and shown in Figure 3-1, a dedicated emergency response vehicles access driveway would be created off Bon Air Road, and to accommodate this new road, the Approved Project included a new median cut to provide left turn access from Bon Air Road to the ambulance access road. The Modified Project incorporates more specificity regarding this driveway and includes that where emergency vehicles cross the campus internal driveway, north-south traffic movements would be stop-sign controlled or “Yield to Emergency Vehicles” signs



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SOURCE: Lee Burkhart, Liu, Inc.

Figure 3-10

Internal Ground Level and Typical Parking Plan - Option A-12B

SOURCE: Lee Burkhart, Liu, Inc.

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Figure 3-11

Access Circulation Plan - Option A-12B

would be installed. This supplements the "emergency response vehicles only" signage that would be installed at the right lane–turn lane from Bon Air Road identified in the June 2013 EIR.

Pedestrian Access

As described for the Approved Project in the June 2013 EIR, the proposed project would include pedestrian walkways within the project site that provide safe and efficient connections between all public buildings and parking areas within the campus.

Ground-level Pedestrian Circulation: Option A-12A and A-12B. With the Hillside Parking Structure Options, pedestrian circulation within the campus would be enhanced by new sidewalks linking all main project site driveways to/from Bon Air Road with internal walkways/sidewalks. From the north access driveway, a pedestrian sidewalk would extend east along its south side (north of the surface parking lot) to the main campus north-south internal drive aisle. There would be no pedestrian sidewalk on the north (upper hill) side of the driveway. As with the Approved Project, pedestrian crosswalks would then link access across Bon Air Road and across the internal campus drive. Sidewalks and internal paths would continue north-south along Bon Air Road and internal campus drive to provide access to various surface parking areas and internal campus buildings.

From the Hillside Parking Structure, pedestrians would access out the east and/or west side of the structure to a pedestrian sidewalk. Pedestrians exiting on the east side would then walk to the rear of the Ambulatory Services Building and down the hill to access the main campus buildings.

Elevated Pedestrian Bridge. The Approved Project analyzed in the June 2013 EIR discussed an option under which the project would develop an elevated pedestrian bridge that would originate from the southeastern corner of the Bon Air Road Parking Structure at the third floor (above grade) and would span the on-site circulation and parking areas between the parking structure, the Hospital Replacement Building, and the Ambulatory Services Building. This option would accommodate the American with Disabilities Act (ADA) patients/visitors (by providing more gradual grades) and separate pedestrian flow from vehicle traffic, thus providing greater pedestrian safety by removing pedestrian flows from vehicle traffic/crossings. This option depended on the District's ability to secure adequate funding for it, but was considered in the EIR analysis, as was the covered ground-level walkway scenario.

The Modified Project also provides a dedicated elevated pedestrian bridge walkway, but in a different location. The pedestrian bridge would be installed from the southwest quadrant of the Hillside Parking Structure and link to the Ambulatory Services Building, with a potential option to extend the bridge further to the West Campus Hospital Wing, but not the Hospital Replacement Building, as shown in Figures 3-4 and 3-5.

Pedestrian Bridge Phasing. Under Option A-12A, with both portions of the two-garage Hillside Parking Structure constructed at once; and under Option A-12B, where a single Hillside Parking Structure is proposed, the pedestrian bridge would be constructed at the same time as the Hillside Parking Structure. The south end of the pedestrian bridge would cross the north access driveway

and be serviced with an elevator and stairway to grade level until the Ambulatory Service Building is constructed in a later phase. The pedestrian bridge would then be connected to the Ambulatory Service Building.

Section 3.7.1, *Construction Schedule,* further in this chapter describes an alternative phasing scenario in which the two sections of Option A-12A would be constructed at different times. Under this alternative scenario, the western garage and the pedestrian bridge would be developed later, before the Ambulatory Services Building to which the bridge would connect (see revised construction phasing from the Approved Project shown in Tables 3-3 and 3-4 in Section 3.7.1). ADA access during Phase I under this scenario would be through the existing Central Wing of the hospital; the eastern garage constructed in Phase I would primarily provide staff-only parking. Visitor parking would be provided at the surface parking lot closest to the hospital's main entrance.

Other Access

Under the Modified Project, bicycle access, delivery access, and transit access to and from the project site would remain largely unchanged from the Approved Project as described and evaluated in the June 2013 EIR.

3.6.3 Parking Supply

On-Site Parking

As presented in the June 2013 EIR and shown in **Figure 3-12, Approved Project Parking Option**, the Approved Project would provide a total of 1,102 parking spaces compared to a demand of 1,105 spaces, resulting in a deficit of three (3) parking spaces at Year 2018, when all development affecting project parking would be constructed and operational.

Under Hillside Parking Option A-12A, as previously shown in Figure 3-4, a total of 1,081 parking spaces would be provided compared to the demand of 1,105, resulting in a deficit of 24 spaces. This is because the second Hillside Parking Structure would provide fewer spaces than the approved Bon Air Road Parking Structure would have provided, even with this Option providing more surface parking than the Approved Project.

Under Modified Hillside Parking Option A-12B, as previously shown in Figure 3-5, a total of 1,144 parking spaces would be provided compared to the demand of 1,105, resulting in a surplus of 39 spaces. This is because the single, larger Hillside Parking Structure and the proposed surface lot would provide more spaces than the approved Bon Air Road Parking Structure and the approved Hillside Parking Structure combined.

2018 PARKING DEMAND

Hospital Use	629
Health & Human Services	76
Ambulatory Services Building (ASB)	400
2018 Total Future Demand	**1,105**

2018 PROPOSED SUPPLY

Surface Parking	183
Hill Parking Structure (3B)	412
Bon Air Parking Structure (3A)	507
400 Spaces For ASB + Displaced Surface Parking	
Total Capacity	**1,102**

Delta = (-3 Spaces)

SOURCE: Lee Burkhart, Liu, Inc.

Marin General Hospital . 210606

Figure 3-12

Approved Project Parking Plan

Table 3-1 summarizes the change in parking supply with the Modified Project compared to the Approved Project. As no part of the development program is changed with the Modified Project, parking demand is not changed from that established in the June 2013 EIR.

The project would restrict the use of surface parking lots on the project site for patients and persons requiring ADA access. The Hillside Parking Structure would primarily provide parking for staff and visitors.

TABLE 3-1
PARKING SUMMARY – MODIFIED AND APPROVED PROJECTS

Parking Demand – Approved Project and Modified Project		Approved Project Parking Supply		Modified Project Option A-12A Supply		Modified Project Option A-12B Supply	
Hospital	629	Surface Parking	183	Surface Parking	258	Surface Parking	258
Health & Human Services	76	Hillside Parking Structure	412	Hillside Parking Structure 1	412	Hillside Parking Structure	886
Ambulatory Services Building	400	Bon Air Parking Structure	507	Hillside Parking Structure 2	411	-	-
TOTAL	**1,105**		**1,102**		**1,081**		**1,144**
(Deficit)/ Surplus compared to Parking Demand			(3)		(24)		39

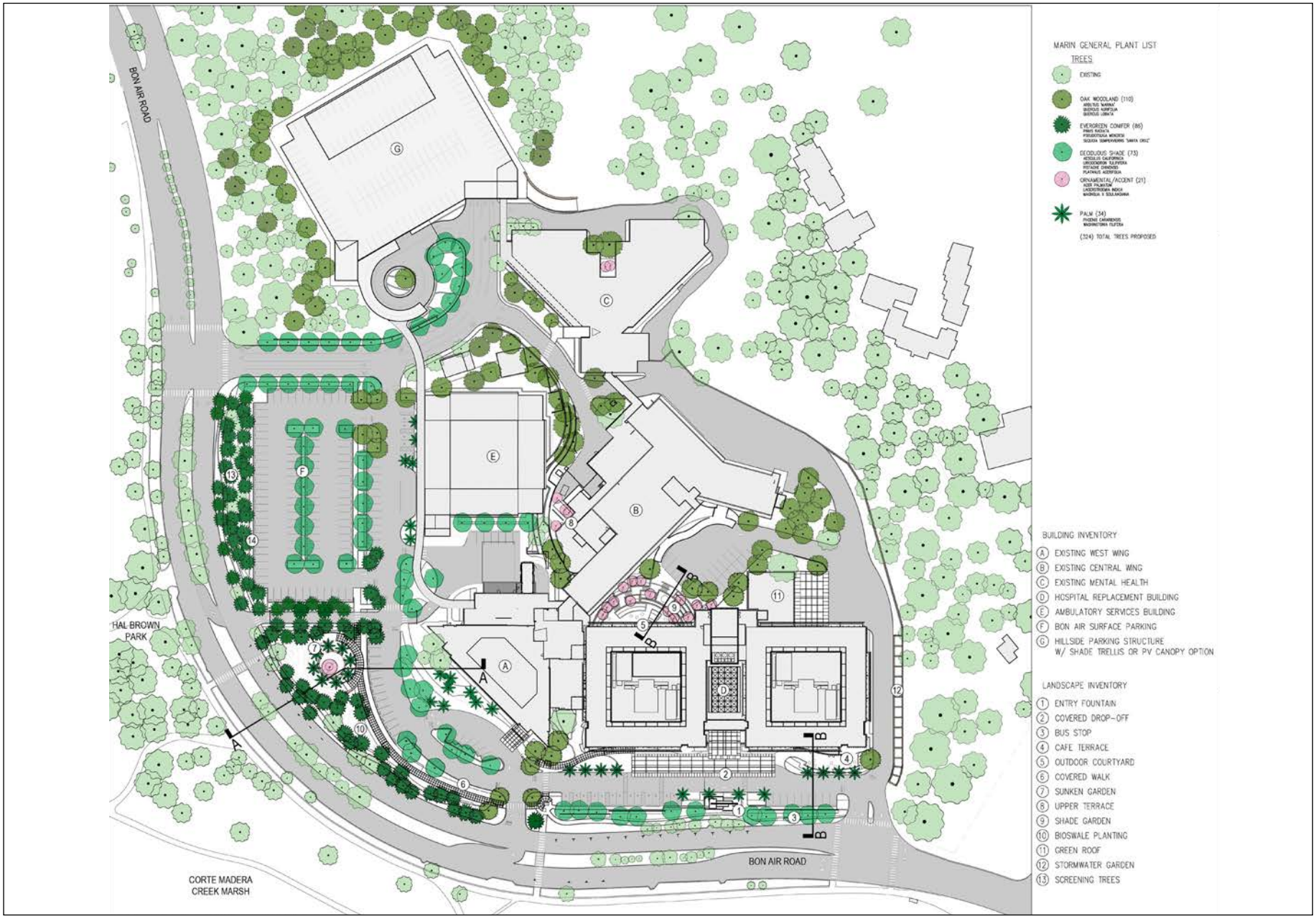
SOURCE: Lee Burkhart, Lui, Inc., 2013

Right-of-Way Parking Spaces

With the Approved Project, the outbound-only driveway from the approved Bon Air Road Parking Structure would have limited vehicle sight distance due to its location on the northern apex of the curvature on Bon Air Road. Up to two (2) parking spaces on the east side of Bon Air Road, between the approved garage's outbound-only driveway and the planned inbound-only ambulance driveway, would have been removed with the Approved Project to reduce this safety hazard. These two spaces would no longer be affected since, as previously described, the Modified Project would not introduce a new outbound-only driveway to Bon Air Road. The Modified Project would, however, continue to remove up to three (3) parking spaces along the east side of Bon Air Road to accommodate the proposed new driveways to the project site.

3.6.4 Landscape Concept

The proposed landscape design concept for the Modified Project is depicted in **Figure 3-13**, **Modified Project Landscape Plan**, and **Figure 3-14**, **Modified Project Groundcover Plan**. These concepts are revised in the area where the Bon Air Road Parking Structure was previously approved, where surface parking would occur under the Modified Project, as well as in the areas surrounding the proposed Hillside Parking Structure.



SOURCE: Lee Burkhart, Liu, Inc.

Marin General Hospital . 210606

Figure 3-13

Modified Project Landscape Plan

SOURCE: Lee Burkhart, Liu, Inc.

Marin General Hospital . 210606

Figure 3-14

Modified Project Groundcover Plan

The expanded development area required for the Hillside Parking Structure Options would potentially require the removal of up to approximately 148 additional trees that were not previously surveyed for the Approved Project (see *Tree Survey Addendum 2013* in Appendix C to this Addendum). Also, the Modified Project would involve the planting of approximately 20 additional trees (see Figure 3-13 in this Addendum compared to Figure 3-14R, Landscape Concept Plan, in the Final Addendum to the Response to Comments / Final EIR, May 2013).

As shown in Figure 3-13, the same landscape palette would be used with the Modified Project, and in particular, oak woodland landscaping, which is comprised of evergreens and deciduous native oaks, would be planted along the perimeter of the proposed Hillside Parking Structure, either Option. The Modified Project also proposes a more formalized planting of deciduous shade trees along the north access driveway and access to the garage entrance and turnaround/drop-off circle.

3.6.5 Storm Drainage and Erosion Control

The Modified Project would incorporate the stormwater management treatment features considered with the Approved Project, and to a greater extent given the increased impervious building area associated with the expanded Modified Hillside Parking Structure Options. These treatment features include infiltration swales, surface bioswales, infiltration planters, and porous pavement, and the Modified Project specifically proposes to add an additional 11,300 square feet of pervious pavement and infiltration planter areas than previously proposed. **Table 3-2** summarizes the comparison of the impervious conditions with the Modified Project and the Approved Project assessed in the June 2013 EIR. As shown there, approximately 49 percent of the project site would be impervious surface area, slightly more than the approximately 47 percent that would occur with the Approved Project.

TABLE 3-2
IMPERVIOUS SURFACE AREA –
MODIFIED AND APPROVED PROJECTS

	Approved Project (June 2013 EIR)	Modified Project
Impervious Area	249,024 SF	259,994 SF
Total Site Area	530,678 SF	530,678 SF
Percent Impervious Area	47 %	49 %

SOURCE: KPFF, 2013

3.7 Construction Activity Modifications to the Approved Project

3.7.1 Construction Schedule

The Modified Project does not substantially change the duration and activities assessed with the Approved Project in the June 2013 EIR. The total duration of project construction would not materially change. As depicted below in **Tables 3-3** and **3-4**, the primary changes are as follows:

- The Modified Hillside Parking Structure Options that would be developed in Phase I would be larger than with the Approved Project, and the construction duration for that phase would be extended by four months, from 12 to 16 months.

- The approximately 17-month construction required to develop the Bon Air Road Parking Structure under Phase II of the Approved Project would not occur; instead, approximately two months of site preparation and resurfacing would be required for the improved surface parking lot.

- The Ambulatory Services Building (previously Phase III) and the Hospital Replacement Building (previously Phase IV) would switch order; however, the duration of construction for both would remain the same as considered with the Approved Project.

- The Elevated Pedestrian Bridge would be largely constructed with and linked to the Hillside Parking Structure in Phase I, rather than building with the Hospital Replacement Building, as was considered in the Approved Project. The Modified Project also considers the alternative scenario where the pedestrian bridge would be completed in late Phase II, immediately prior to its other connecting building, the Ambulatory Service Building. Connecting the pedestrian bridge to the Hospital Replacement Building remains an option that the District is considering with the Modified Project. (See description of elevated pedestrian bridge under *Pedestrian Access*, in Section 3.6.2 above.)

The interior construction associated with the Central and East Wing Renovations and/or the Nursing Unit Infill Project remain the final components of the project and could continue to occur up to four (4) years after completion of each of the aforementioned project components.

Alternative Phasing Scenario for Two-Phase Hillside Parking Structure (Option A-12A). As shown in Tables 3-3 and 3-4, the District is also considering an alternative phasing scenario of the Modified Project in which the western of the two garages that make up Option A-12A would be developed later to coincide with development of the Ambulatory Services Building. The sequence of the alternative phasing scenario would be (1) grading for and construction of eastern garage of the Hillside Parking Structure and grading for western garage, (2) Bon Air Surface Parking Lot, (3) Hospital Replacement Building, (4) construction of western garage of the Hillside Parking Structure, (5) Ambulatory Services Building and Elevated Pedestrian Bridge, and (6) Central and East Wing Renovations and/or the Nursing Unit Infill Project.

TABLE 3-3
SUMMARY OF REVISED CONSTRUCTION PHASING –MODIFIED AND APPROVED PROJECTS

Approved Project		Modified Project: One-Phase Hillside Parking Structure (Either Option)		Modified Project: Alternative Phasing Scenario for Two-Phase Hillside Parking Structure Option A-12A	
Phase I (12 mo)	Hillside Parking Structure (2012-2013)	Phase I (16 mo)	Hillside Parking Structure Options and Elevated Pedestrian Bridge (2014-2015)	Phase I (13 mo)	Grading for entire Hillside Parking Structure and Construction of Eastern Garage (2014-2015)
Phase II (17 mo)	Bon Air Road Parking Structure (2013-2015)	Phase II (2 mo)	Bon Air Road Surface Parking Lot (2015)	Phase II (2 mo)	Bon Air Road Surface Parking Lot (2015)
Phase III (27 mo)	Ambulatory Services Building (2013-2015)	Phase III (57 mo)	Hospital Replacement Building (2015-2018)	Phase III (57 mo)	Hospital Replacement Building (2015-2018)
Phase IV (57 mo)	Hospital Replacement Building and Possible Elevated Pedestrian Bridge (2015-2018)	Phase IV (27 mo)	Ambulatory Services Building (2019-2021)	Phase IV (10 mo)	Hillside Parking Structure – Western Garage (2018-2019)
Phase V / Phase VI[a]	Central and East Wing Renovations (2019 – 2020) / Nursing Unit Infill Project (2023 – 2025)	Phase V / Phase VI[a]	Central and East Wing Renovations (2019 – 2020) / Nursing Unit Infill Project (2023 – 2025)	Phase V (27 mo)	Ambulatory Services Building and Elevated Pedestrian Bridge (2019-2021)
				Phase VI / Phase VII[a]	Central and East Wing Renovations (2019 – 2020) / Nursing Unit Infill Project (2023 – 2025)
Total	113 months	Total	102 months	Total	109 months

[a] No exterior construction duration involved.

SOURCE: Marin Healthcare District and KPFF, 2013

This alternative phasing scenario would have the same overall six- to seven-year construction duration described for the Approved Project and the Modified Project, under which the entire Hillside Parking Structure is constructed in a single phase (either Option). Also, the construction duration of each project component is not changed, even though the sequence for development may be changed. The newly added phase to construct the western hillside garage simply moves work that would have previously occurred in Phase I to within later phases, thus the durations are not extended. Therefore, no construction-period effects would be worse than previously analyzed in the June 2013 EIR.

TABLE 3-4
CONSTRUCTION ACTIVITIES SCHEDULE – MODIFIED PROJECT

Phase	Start Activity (Quarter [Q]-Year)	Duration (projected number of months [mo])[a]
Phase I Hillside Parking Structure – Either Option / Elevated Pedestrian Bridge (only with One-Phase Hillside Parking Structure) (2014 - 2015)[b]		
a) Site Make Ready	Q2 – 2014	1 mo
b) Demolition	Q2 – 2014	1 mo
c) Excavation[c]/Foundations	Q3 – 2014	6 mo
d) Superstructure	Q4 – 2014	6 mo
e) Finish Work	Q1 – 2015	2 mo
Phase II Site Preparation and Bon Air Surface Parking Lot (2015)[b]		
a) Site Make Ready and Lot Surfacing	Q1 – 2015	2 mo
Phase III Hospital Replacement Building (2015 – 2018)		
a) Site Make Ready	Q2 – 2015	4 mo
b) Utility Relocation	Q3-2015	2 mo
c) Demolition	Q3 – 2015	2 mo
d) Excavation	Q4-2015	3 mo
e) Substructure	Q1-2016	5 mo
f) Superstructure	Q3 – 2016	7 mo
g) Exterior Skin	Q1 – 2017	10 mo
h) Interior Construction	Q3 – 2017	18 mo
i) Owner Fit Up	Q1 - 2019	6 mo
Phase IV Ambulatory Services Building / Elevated Pedestrian Bridge (only with Two-Phase Hillside Parking Structure) (2019 –2021)[b,d]		
a) Site Make Ready	Q3 – 2019	2 mo
b) Utility Relocation	Q4 – 2019	4 mo
c) Demolition	Q1 – 2020	1 mo
d) Excavation	Q2 – 2020	2 mo
e) Substructure	Q2 – 2020	2 mo
f) Superstructure	Q3 – 2020	4 mo
g) Exterior Skin	Q4 – 2020	4 mo
h) Interior Construction	Q1 – 2021	8 mo
Phase V Central and East Wing Renovations (2019 – 2020) / Phase VI Nursing Unit Infill Project (2023 – 2025)		
a) Interior Construction		
b) Finish Work		

[a] Demolition activities include all preparation and post-demolition activities in addition to actual structural demolition activity.
[b] An alternative phasing scenario would construct the western garage of Option A-12A during 10 months prior to construction of the Ambulatory Services Building (Q3-2018 through Q2-2019), which would reduce the construction duration of Phase I (eastern garage only) from 16 months to 13 months.
[c] Phase I Excavation activities occur for 3.5 months within the total 6-month Excavation/Foundation activities during Phase I.
[d] The Ambulatory Services Building is only in the conceptual design stage and therefore the associated construction schedule and activities are preliminary, yet based on conservative estimates for EIR purposes.

SOURCE: Lee Burkhart, Lui, Inc.

3.7.2 Grading, Excavation, and Demolition

Grading/Excavation

Total Project. The Approved Project was estimated to require a total of 133,000 cubic yards (CY) of excavation, and the Modified Project is estimated to require a total of 144,700 CY of excavation. **Table 3-5** below shows that a net increase of approximately 11,700 CY of additional excavation would be required for the entire Modified Project.

TABLE 3-5
EXCAVATION VOLUMES (CUBIC YARDS, CY) –
MODIFIED AND APPROVED PROJECTS

	Approved Project	Modified Project
Total Excavation Volume	133,000 CY	144,700 CY
Fill Volume	800 CY	600 CY
Net Volume to Excavate	132,200 CY	144,100 CY

BREAKDOWN OF TOTAL VOLUME CHANGE

	Approved Project	Modified Project
Total Excavation Volume	133,000 CY	144,700 CY
Hospital Replacement Building	101,000 CY	101,000 CY
Bon Air Parking Structure	17,000 CY	0 CY
Hillside Parking Structure (east section)	15,000 CY	15,000 CY
Hillside Parking Structure (west section)	-	28,700 CY

NOTE: The Modified Project considers a Hillside Parking Structure with two sections (Option A-12A) or a single structure that combines both sections.

SOURCE: KPFF, 2013

Hillside Parking Structures. This Addendum focuses specifically on the change in excavation volumes associated with changes to the Hillside Parking Structure in the Modified Project compared to the Approved Project. A total of 43,700 CY of excavation is required to develop the Hillside Parking Structure Options. As shown in Table 3-4, the duration of Phase I excavation work for the Modified Project would be approximately 3.5 months (74 construction work days); in comparison, the duration of Phase I excavation work for the Approved Project was approximately 1.5 months (32 construction work days). See a summary of excavation, durations, and related truck trips (discussed below in Section 3.7.3) in **Table 3-6**.

Demolition Debris

The Modified Project would not alter the estimated volume of debris from demolition that would be generated and removed from the project site with the Approved Project, since the Modified Project does not notably change the amount of demolition involved. The same structures would be demolished.

TABLE 3-6
SUMMARY OF EXCAVATION VOLUMES (CUBIC YARDS, CY), DURATIONS, AND RELATED TRUCK TRIPS – MODIFIED AND APPROVED PROJECTS

	Approved Project – Hillside Parking Structure	Modified Project – Hillside Parking Structure (Both Options)	Approved Hospital Replacement Building
Total Excavation Volume	15,000 CY	43,700 CY	101,000
Excavation Duration	1.5 months (32 construction work days)	3.5 months (74 construction work days)	4 mo (84 construction work days)
Excavation Volume per Day	471 CY	598 CY	1,202 CY
Truck Trips per Hour (in/out)	8 (4 in/4 out)	10 (5 in/5 out)	20 (10 in/10 out)

SOURCE: Marin Healthcare District, KPFF, 2013

3.7.3 Construction Vehicle Trips

As discussed above for *Grading/ Excavation*, approximately 43,700 CY of excavation and fill would be involved with the Modified Project Hillside Parking Structure Options and would occur over approximately 3.5 months (or 74 days), compared to 15,000 CY and 1.5 month (or 32 days) required to excavate for the Hillside Parking Structure under the Approved Project. As a result, up to ten (10) truck trips per hour (5 in/5 out) during the construction day would be required to off-haul excavation from the project site. As detailed in the comparative analysis in Chapter 4 (Section 4.M, *Transportation and Circulation*) of this Addendum, this is slightly more than the rate of truck trips required to construct the approved Hillside Parking Structure (2 additional truck trips per hour, 1 in/1 out, each construction day), but less than the rate of truck trips associated with the approved Hospital Replacement Building in the Draft EIR, the most intensive construction phase analyzed for the Approved Project in the June 2013 EIR (10 fewer truck trips per hour, 5 in/5 out, each construction day).

3.7.4 Parking During Construction

The Modified Project alters the on-site parking for hospital users during all construction activities. Considering the phasing of the Hillside Parking Structure Options and resulting parking supply, the project would continue to ensure adequate on-site parking for patients, visitors and staff throughout construction.

However, as with the Approved Project analyzed in the June 2013 EIR, if the entire Hillside Parking Structure is constructed at once (Phase I), the construction contractor would secure an off-site parking location and shuttle construction workers to the project site during Phase I. For all other phases of construction the contractor would park onsite. If under Option A-12A the Hillside Parking Structure is constructed in two separate phases (see Tables 3-3 and 3-4), construction workers could park onsite, utilizing the area immediately east of Bon Air Road near the Hillside Parking Structure and/or possibly an off-site location.

3.7.5 Access and Circulation During Construction

As with the Approved Project analyzed in the June 2013 EIR, vehicular access onto the project site with the Modified Project would be maintained through the two existing main driveways (at the north and south access roads) and through all phases of construction. Fire lane access would also be maintained during construction in accordance with the latest fire and building codes and would continue to particularly be a requirement during construction of the Hillside Parking Structure.

Similarly, the Modified Project would not substantially change the site logistics for each phase of construction, including work that would affect existing right of ways, primarily Bon Air Road and the existing north access driveway, during construction. As discussed in Section 3.6.2, *Access and Circulation*, the Modified Project adds to the work proposed in the right of way with the addition of another Bon Air Road southbound left-turn lane into the project site at the north access driveway.

3.7.6 Utilities Work During Construction

The Modified Project would not substantially change the modifications necessary to existing publicly-owned utilities or Marin General Hospital-owned utilities, most of which would be modified to serve all development on the project site. Neither the change in the proposed construction nor other site changes associated with the proposed Hillside Parking Structure under either Option of the Modified Project would affect the work necessary regarding ensuring potable water supply and adequate fire flows, sanitary sewer, natural gas and electricity, or telecommunication systems.

3.8 Modified Project Entitlements and Approvals

The District is the Lead Agency primarily responsible for preparation of this Addendum, which is intended to be used to address all required zoning and other permits and other discretionary actions for the Modified Project. This Addendum, together with the June 2013 EIR, will provide the environmental review for all discretionary actions and other considerations and approvals necessary for the Modified Project, discussed below.

The specific changes proposed by the Modified Project do not require additional approvals by the District, the County of Marin, or other Trustee Agencies to those identified in the June 2013 EIR. However, because the Modified Project changes the Approved Project by adding two additional Hillside Parking Options, the District must amend its previous approval. The required approvals for the Modified Project are listed below, without limitation:

3.8.1 Lead Agency

Marin Healthcare District

As the Lead Agency pursuant to CEQA *Guidelines* § 15051, the District shall consider the following for the Modified Project:

- Approval of this Addendum to the Certified June 2013 EIR;
- Approval of an amended Mitigation Monitoring and Reporting Plan (MMRP);
- Approval of the Modified Project with incorporation of the options to develop either of the two proposed Modified Hillside Parking Structure Option A-12A or Option A-12B.

3.8.2 Responsible and Trustee Agencies

County of Marin

Marin County is a Responsible Agency pursuant to CEQA *Guidelines* § 15381 because it has the authority to grant other discretionary approvals required before the Marin Healthcare District can implement the proposed project. The project site is located in unincorporated Marin County. The County would continue to make decisions on the following discretionary actions (and other considerations and approvals) that have been identified at the time this Addendum was prepared:

- Approval of Modified Property Swap or Lease Agreement for construction of Modified Hillside Parking Structure Option A-12A or Option A-12B (County Administrator);

And as identified in the June 2013 EIR:

- Design Review (pursuant to Development Code section 22.14.040, Special Purpose District Development Standards) (County Community Development Agency);
- Any work in the Bon Air Road Right of Way (County Public Works); and
- Building Permit for Parking Structures and Ambulatory Services Building (County Building Department); and
- Elimination of parking spaces on Bon Air Road.

Although the project does not propose or anticipate any temporary public road closures, the approval of such, if warranted, must be granted by the Marin County Board of Supervisors.

CHAPTER 4
Environmental Issues

4.1 Introduction

As discussed in Chapter 1, *Introduction*, pursuant to CEQA Guidelines Section 15162, this Addendum is prepared to demonstrate the following:

1) whether the proposed Modified Project involves a substantial change to the Approved Project that would require major revisions to the June 2013 EIR;

2) whether there is a substantial change in circumstances under which the Modified Project is being undertaken that would cause new or substantially more severe impacts than previously identified in the June 2013 EIR; and

3) whether there is new information of substantial importance, which was not known and could not have been known when the June 2013 EIR was prepared, that results in the identification of new or more severe significant impacts than previously identified in the June 2013 EIR, or that results in new or different feasible mitigation measures or alternatives than previously identified in the June 2013 EIR. (CEQA Guidelines Section 15162.)

Condition #1 (substantial changes to the previous project) is primarily addressed in Chapter 3, *Project Description*, of this Addendum, and this chapter demonstrates whether any such changes would require major revisions to the June 2013 EIR.

This chapter provides sufficient analysis and updates necessary to confirm Condition #2 (changes in circumstances) and Condition #3 (new or substantially more severe impacts) and to substantiate that preparation of a Supplemental or Subsequent EIR is not required to address the Modified Project.

4.2 Environmental Analysis by Topic

A. Aesthetics

Relevant Project Changes and Resulting Effects

The Modified Project would develop one or two Hillside Parking Structures (Hillside Parking Options A-12A or A-12B) that would be nearly twice the footprint area and the same height as the Hillside Parking Structure analyzed with the Approved Project. Both Hillside Parking Options

would be five stories (six parking levels), tucked within the contours of the hillside in the northeast portion of the project site.

The Modified Project would not develop the four-story (five-parking-level) Bon Air Road Parking Structure that is part of the Approved Project; instead, the Modified Project would maintain a surface parking lot where that parking structure would have been developed.

(See Addendum Figures 3-4 and 3-5 of the Modified Project compared to Figure 3-2 of the Approved Project.)

All design and operational characteristics of the Hillside Parking Structure considered with the Approved Project would continue to apply to the Modified Project. Regarding aesthetics effects in particular, this includes the standards for the proposed light poles on the top parking level, potential solar panel trellises, other interior and exterior lighting, landscaping, size and location of the exterior façade openings, and roof access after dusk and until dawn.

Both Hillside Parking Options would expand westward from the previously analyzed structure, and the increased building mass would occur within approximately 85 feet of Bon Air Road; the Hillside Parking Structure with the Approved Project was approximately 180 feet from Bon Air Road. However, compared to the Approved Project, the increased building mass would not be developed closer to or higher in elevation than the nearest adjacent residential uses – the Via Hidalgo apartments to the north and the Spyglass Hill and Corte Oriental apartments to the east and southeast. No point of the Hillside Parking Options would be constructed closer to these sensitive receptors or private viewpoint locations than with the Approved Project. Thus, the effects regarding light and glare and shadow would not be substantially changed or more severe than previously identified.

Regarding scenic vistas and resources, the Hillside Parking Options' increased building area, grading and tree removal on the hillside, and removal of the approved Bon Air Parking Structure on the flatland of the project site, would not worsen the effects identified in the June 2013 EIR.

Compared to the Approved Project, the Hillside Parking Structure Options would double the width of the garage and extend it closer to Bon Air Road, likely removing portions of an existing hill (and trees) that slopes steeply upward from the roadway (see partial existing topography relative to the proposed turnaround/drop-off circle to the garage shown in Figure 3-7 in this Addendum). The added portions of the Modified Project Hillside Parking Options extend directly from the Approved Project Hillside Parking Structure, and its uppermost point would not be higher in elevation than previously analyzed. Also, the proposed landscaping treatment around and above the Hillside Parking Structure, both Options, would be the same as described in the May 2013 Final Addendum to the Response to Comments / Final EIR: oak woodland landscaping comprised of evergreens and deciduous native oaks that would mature to at least 15 to 30 feet tall would be planted and substantially and adequately screen both the garage openings and most, if not all, of the rooftop parking of the Hillside Parking Structure, as viewed from hillside private residences. Figure 3-13 in this Addendum shows the conceptual landscaping for the Modified Project, which depicts new oak woodland landscaping planted between the structure and Bon Air Road. While full screening of the

structure from Bon Air Road is not necessary to address potentially adverse environmental aesthetics effects (discussed below), the new oak woodland species on the Bon Air Road side would provide suitable screening consistent with the existing visual context along Bon Air Road that includes development and mix of designed and natural landscaping.

Taken together, the increased building area, the changes in grading/elevation and tree removal/replacement on the hillside, as well as the removal of the approved Bon Air Parking Structure on the flatland of the project site, would not worsen the effects to scenic vistas and visual resources identified in the June 2013 EIR and the March 2013 Response to Comments / Final EIR, as discussed below in the comparisons of previously considered viewpoints and simulations.

As established in the August 2012 Draft EIR, the assessment of scenic vistas was considered from public viewpoints that encompassed views of the following scenic resources: (1) expansive views across the low-lying open space provided along Creekside Marsh and Corte Madera Creek; (2) distant hillsides and ridgelines to the north, south and east of the project site (as viewed primarily from the marsh and creek and from Sir Francis Drake Boulevard west of the project site); and (3) intermittent views of the marsh and creek from viewpoints east and above the project site.

Comparison to Public Viewpoints Previously Considered. Simulations from Viewpoints A, B, D, E, G, H and I (Figures 4.A-5; 4.A-6; 4.A-8; 4.A-9; 4.A-11; 4.A-12; and 4.A-13 in the August 2012 Draft EIR) depict the approved Bon Air Parking Structure in the context of nearby scenic vistas and resources that would be removed. Existing and/or proposed buildings or open spaces beyond the approved structure would be visible with the Modified Project.

Simulations from Viewpoints E and I (Figures 4.A-9 and 4.A-13 in the August 2012 Draft EIR) show the approved Hillside Parking Structure. The determination that no new or more severe aesthetics effects would result can be supported by visualizing the westward extension of the structure with the Modified Project in these viewpoints. While the Hillside Parking Structure Options would likely be more visible in these views, it would not become substantially more prominent within the existing context or rise above the horizon line of distant hillsides and ridgelines, as described below. The structure would be closer to Bon Air Road, as discussed above, and thus be more visible from this thoroughfare, but it would not worsen any public street-level views previously identified, particularly compared to the less-than-significant effect of the approved Bon Air Road Parking Structure that would have been developed substantially closer to Bon Air Road than the Modified Project Hillside Parking Structure Options.

The Hillside Parking Structure was not shown in Viewpoint G looking southeast across the Marin Catholic High School baseball field from the major public thoroughfare of eastbound Sir Francis Drake Boulevard toward the project site (Figure 4.A-11 in the August 2012 Draft EIR, and re-published as **Figure 4-1** below to support this assessment). While this Addendum does not alter the viewpoints carefully selected for the Draft EIR analysis, this assessment recognizes that if widened or turned slightly to the left, this important public viewpoint would capture the area of the Hillside Parking Structure, as shown in the existing conditions photograph in **Figure 4-2** below. This is considered as follows.

First, the Existing Central-East Wing of the hospital will not change with the project and is therefore a shared point of reference in both Figures 4-1 and 4-2.

Second, as shown in Viewpoint G in Figure 4-1, the roof of the Existing Central-East Wing of the hospital (102 feet 11 inches above mean sea level [amsl]) and the approved Ambulatory Services Building (85 feet 11 inches amsl) appear relative to and well below the hillside and ridgeline in the background. Visualizing the parapet / roof level of the Modified Project Hillside Parking Structure at its proposed height (99 feet 2 inches amsl, which is the same elevation level as the approved Hillside Parking Structure) relative to the heights of the Existing Central-East Wing and the approved Ambulatory Services Building, as well as to the parapet levels of the approved Bon Air Road Parking Structure (58 feet 8 inches above amsl) allows the viewer to visualize that the Modified Project Hillside Parking Structure also would not appear above the surrounding hillsides and ridgelines (as shown in the aforementioned Viewpoints A, B, D, E, G, H and I) and hillside residences to the east (see Viewpoint F, Figure 4.A-10 in the August 2012 Draft EIR).

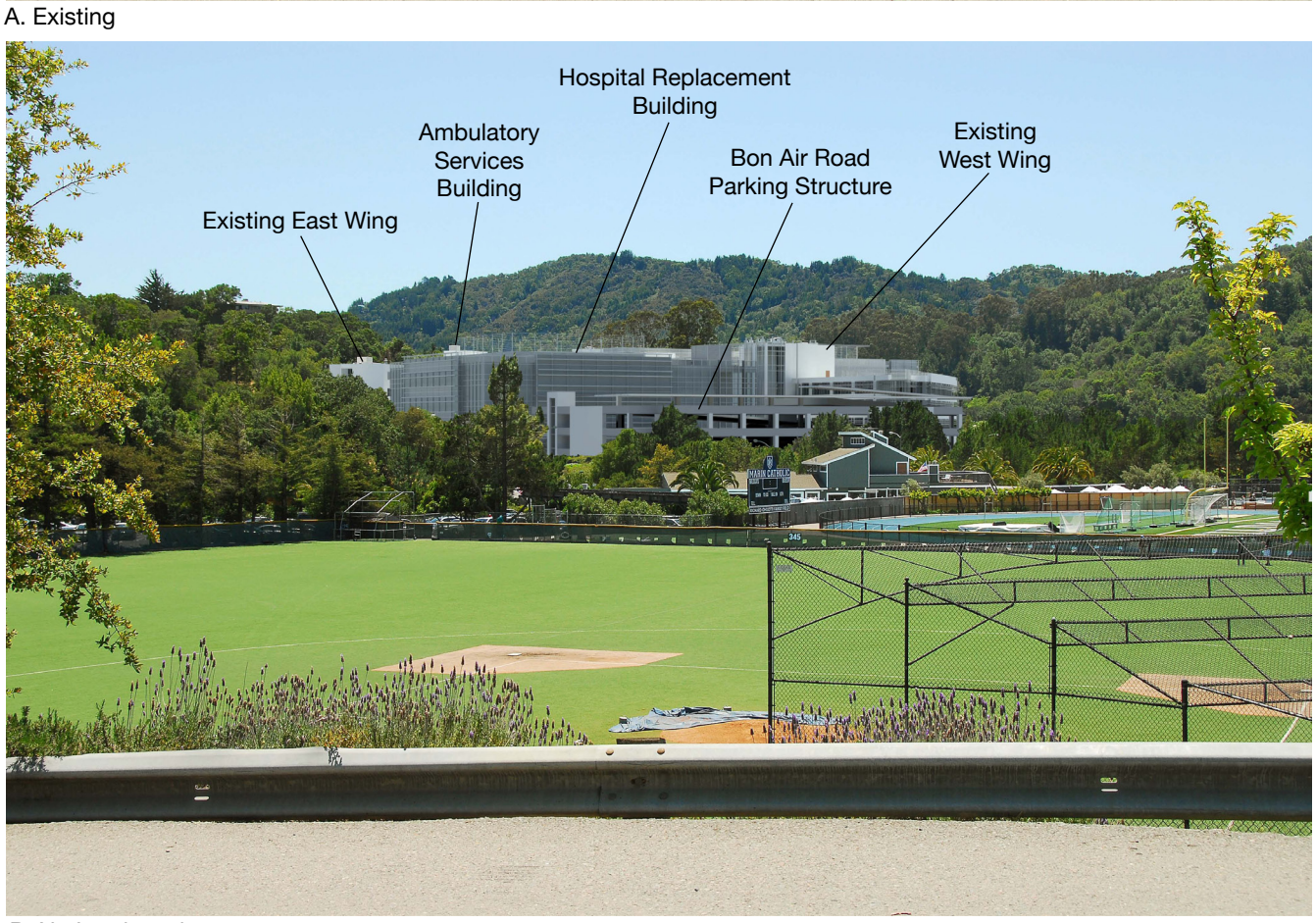
Third, Figure 4-1 (Viewpoint G) and Figure 4-2 (existing conditions photograph looking slightly left from Viewpoint G) show a dense row of existing trees on the far edge of the baseball field, and these trees would not be changed by the proposed project. These trees screen most development beyond and across the church parking lot and Bon Air Road. The hillside residences (Via Hidalgo and Spyglass Hill) that are partially visible in Figure 4-2 provide reference against which to demonstrate that the new Hillside Parking Structure Options (as well as the approved structure) and the additional trees that would be removed to accommodate the structure, would continue to be substantially screened from this fleeting but public view toward the project site from Sir Francis Drake Boulevard.

Fourth, each of the above points together reconfirm that the proposed Hillside Parking Structure Options with the Modified Project would not appear noticeably prominent within the existing context, nor would it rise above the horizon line of distant hillsides and ridgelines, resulting in a significant adverse effect to existing scenic vistas and resources. Overall, the effect would not be substantially different or greater than previously determined for the Approved Project.

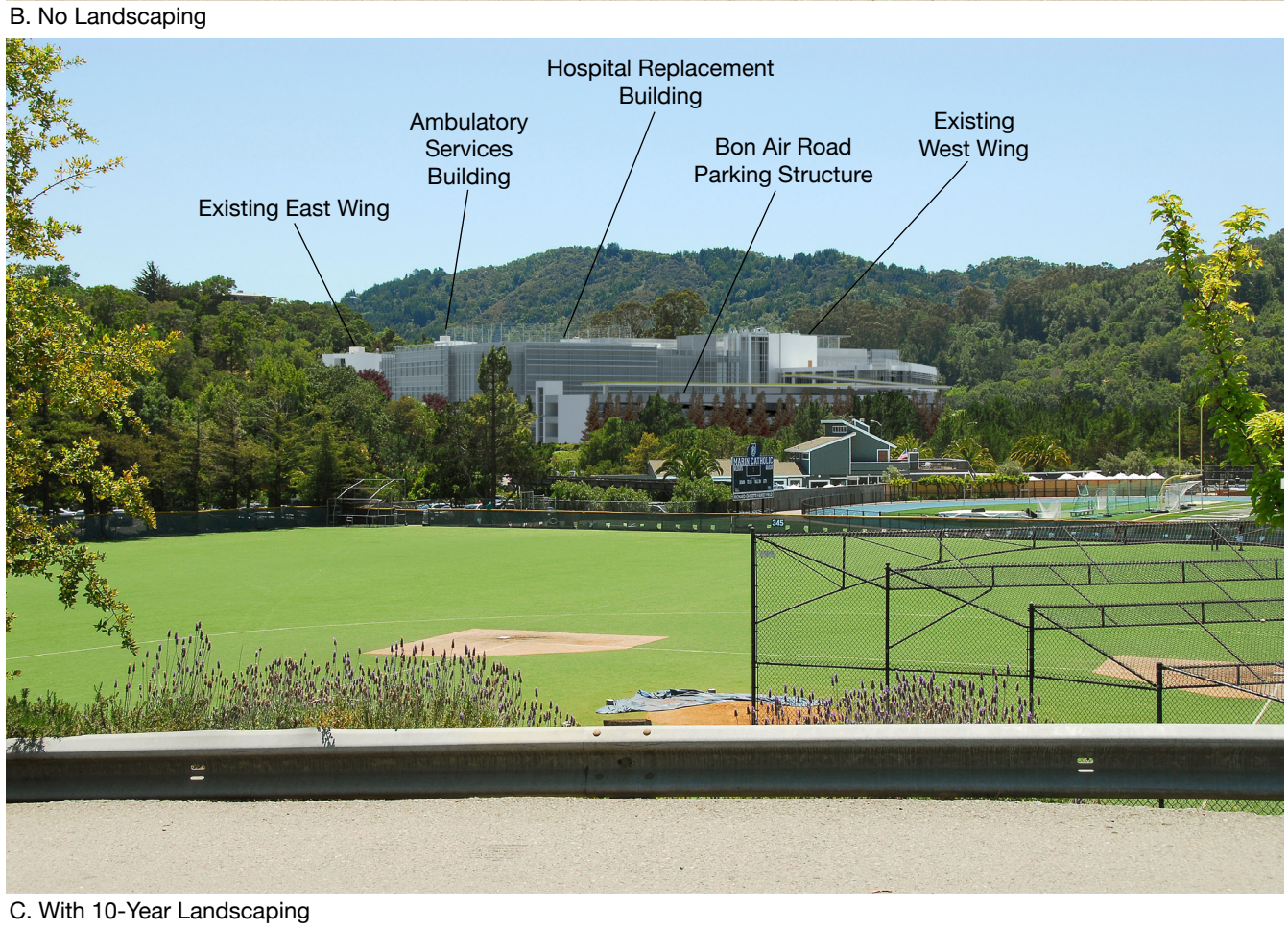
Comparison to Private Viewpoints Previously Considered. As mentioned above, there is no other substantially different public or private viewpoints from which the degree of change with the Hillside Parking Options could potentially result in an adverse aesthetics effect, thus this Addendum does not alter the hillside viewpoints carefully selected for the Final EIR analysis.

Simulations from Viewpoints 1, 2 and 5 (Figures 2-11, 2-12, and 2-15 in the March 2013 Response to Comments / Final EIR for the Approved Project) show the less-than-significant effect of the approved Hillside Parking Structure on existing scenic vistas and resources, as viewed from public and private viewpoints on the hillside. The Hillside Parking Options would extend the structure and likely obscure more of the high school playfields and nearby buildings, which can be imagined by looking at public Viewpoint 1 and private Viewpoint 2. Neither the school playfields nor other nearby buildings are considered visual resources.

A. Existing



B. No Landscaping



C. With 10-Year Landscaping

SOURCE: Visual Impact Analysis LLC, 2012

Marin General Hospital . 210606

Figure 4-1 (Same as DEIR Figure 4.A-11)
Existing and Proposed Views of Project Site from Sir Francis Drake Boulevard - Looking South (Viewpoint G)

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Marin General Hospital . 210606

SOURCE: ESA

Figure 4-2

Existing View of Modified Hillside Parking Structure Area
from Sir Francis Drake Blvd - Looking Southeast

As discussed in the Final Addendum to the Response to Comments / Final EIR, May 2013), Viewpoint 5 simulates a notable change in what Via Hidalgo units at and immediately adjacent to this viewpoint would experience. This includes blockage of a small portion of Corte Madera Creek that shows in the existing conditions photo from Viewpoint 5. The larger Hillside Parking Structure Options would extend to the background of the photos and thereby block views of the high school playfields and nearby buildings (neither of which are visual resources, as noted above). As can be shown by imagining the view from Viewpoint 5, the larger Hillside Parking Structure Options would not substantially and adversely affect views of distant hillsides, ridgelines and unbroken horizon lines. Moreover, the views that could be affected are relatively few and from private units. The EIR adequately recognizes potential effects on private views, even though CEQA and court guidance does not require that they be treated as a potential significant effect, as discussed in the March 2013 Response to Comments / Final EIR for the Approved Project.

Modified Elevated Pedestrian Bridge

The elevated pedestrian bridge that was assessed with the Approved Project would be relocated with the Modified Project. As described in Chapter 3, *Project Description*, and shown in Figures 3-2 compared to Figures 3-4 and 3-5 in this Addendum, the bridge in the Modified Project would connect from the southwest quadrant of the Hillside Parking Structure to the Ambulatory Services Building and then possibly to the Existing West Wing of the hospital in both Options. The difference is that the bridge would connect to the Hillside Parking Structure and the north access driveway with the Modified Project, whereas with the Approved Project the bridge would only connect to project buildings south of the north access driveway.

As described in the June 2013 EIR for the Approved Project, the clearance under the elevated bridge with the Modified Project would be at least approximately 16 feet, 8 inches at the West Wing of the hospital building and the Ambulatory Services Building; where it crosses internal roadways, the clearance would range from 16 feet, 8 inches to 18 feet, 1 inch; and at the proposed Hillside Parking Structure Options, the bridge would be at grade (given the higher elevation of the garage compared to the other project buildings).

Considering this with the simulations from Viewpoints 1 through 5 (Figures 2-11 through 2- 15) in the March 2013 Response to Comments / Final EIR prepared specifically to assess the potential aesthetics effects of the Hillside Parking Structure, the realignment of the elevated pedestrian bridge would not result in a new or more severe effect on nearby scenic vistas and resources. This is because the bridge either would not be visible, or because its elevation would be lower than any notable vistas or resources around the project site (i.e., distant hillsides and ridgelines to the north, Corte Madera Creek, and Creekside Marsh, as described in the June 2013 EIR) viewed from public (or private) viewpoints.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential aesthetics effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Aesthetics)

The Modified Project would not result in a new significant impact with respect to aesthetics, or have a substantial increase in the severity of aesthetics impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Aesthetics impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum).

B. Air Quality

Relevant Project Changes and Resulting Effects

Operations

The development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site. By developing a larger Hillside Parking Structure, reconfiguring the north driveway access, adding a southbound left-turn lane from Bon Air Road, and by not developing the Bon Air Road Parking Structure, the Modified Project does not alter characteristics that would affect operational air quality effects. Neither the on-site population (visitors and employees) and the demands or effects associated with that population (e.g., vehicle trips) would change, nor would the operation of the proposed uses substantially change with the Modified Project. The parking structures are not vehicle trip generators.

Operational air quality effects specifically associated with the Hillside Parking Structure (primarily vehicles inside the garage) were considered in the June 2013 EIR given the proximity of the proposed structure to nearby residences. With the Modified Project, the Hillside Parking Options would not be located closer to residences or other sensitive receptors than previously analyzed. The Hillside Parking Options would construct the new garage area to the west, toward Bon Air Road which is the opposite and downhill direction from existing residences.

Overall, the Modified Project would not result in substantially more operational air quality emissions compared to the Approved Project. Therefore, it would have the same or similar operational air quality impacts previously identified in the June 2013 EIR.

Construction

Overview. Construction activity with the Modified Project differs from that analyzed in the June 2013 EIR for the Approved Project because more activity would be involved to construct the larger Hillside Parking Options, and less activity would be involved since the Bon Air Road Parking Structure would not be constructed. As described in Chapter 3, *Project Description*, a net increase of approximately 11,700 CY of excavation would be associated with the entire Modified Project compared to the Approved Project (see Table 3-5 in this Addendum).

For the Modified Project Hillside Parking Structure Options specifically, approximately 28,700 CY of additional excavation and fill would be required and would occur over approximately 3.5 months (or 74 days). The Approved Project Hillside Parking Structure involves 15,000 CY of excavation and 1.5 months (or 32 days) of excavation activity. As shown in Table 3-6 in this Addendum, the Modified Project Hillside Parking Structure Options would involve approximately two (2) more truck trips per hour for off-hauling compared to the rate of trips required for the Approved Project. However, Modified Project Hillside Parking Structure Options involve approximately ten (10) fewer truck trips per hour than assessed for the Hospital Replacement Building (also see Section 4.M, *Transportation and Circulation*) of this Addendum.

Comparative Analysis. As discussed above for operational air quality effects, the construction air quality effects specifically associated with the Hillside Parking Structure (primarily dust and emissions) were considered in the June 2013 EIR. The expanded overall construction activity would be more intense in the approved Phase I (Hillside Parking Structure) and less in approved Phase II (Bon Air Road Parking Structure) than previously considered. Specifically, the Modified Hillside Parking Structure Options that would be developed in Phase I would be larger than with the Approved Project, and the construction duration would be extended by four months – from 12 to 16 months. As discussed in the June 2013 EIR (Impact AIR-2, *Construction Emissions*), several factors are considered in the estimate of construction exhaust emissions, including building area, excavation volumes and construction durations.

Regarding actual building construction activity, the proposed Hillside Parking Options would add approximately 133,500 square feet (Option A-12A) to 141,790 square feet (Option A-12B) to the 136,700 square-foot Hillside Parking Structure evaluated in the June 2013 EIR for the Approved Project. This increase is compared to the 175,000 square-foot Bon Air Road Parking Structure that would not be built. There would be a net reduction (approximately 33,210 or 41,500 square feet) in actual building area construction between the Modified Project and the Approved Project. (See the floor area summation charts for the Hillside Parking Options in **Appendix A** to this Addendum compared to the floor area summation charts in Figure 3-9 for the approved Hillside Parking Structure and Figure 3-10 for the approved Bon Air Road Parking Structure in the August 2012 Draft EIR.)

The June 2013 EIR reported that construction emissions during Phase I for the Approved Project would not exceed BAAQMD significance thresholds, and in fact would be substantially below the applicable threshold for each pollutant (see Draft EIR Table 4.B-4). The construction of the proposed Hillside Parking Structure Options would be essentially double that of the approved Hillside Parking Structure, since the garage is doubled in size; also more construction activity would occur each day since the total duration of Phase I construction would increase by four months - from 12 to 16 months - with the Modified Project.

However, it is reasonable to deduce that the Modified Project's net increase of excavation volume 11,700 CY) and extended construction duration (four months) would not increase emissions to levels that would exceed any significance thresholds. Even assuming the Phase I daily emission levels from the June 2013 EIR were doubled from the daily emissions reported in Table 4.B-4 in

that document, the emission for ROG, PM10 and PM2.5 would continue to be 14 percent, 4 percent and 6 percent of their applicable significance thresholds, respectively. Daily NOx emissions in Phase I was 67 percent of the applicable significance threshold, so a conservative and theoretic doubling of emissions (for purposes of qualitatively describing relative emissions) could exceed the 54 pounds per day threshold, however Mitigation Measure AIR-2 in the DEIR would apply to Phase I NOx emissions and ensure a less-than-significant impact as previously identified.

Moreover, the most intensive construction activity for the project continues to be development of the new Hospital Replacement Building which did not exceed BAAQMD significance thresholds for construction exhaust emissions. Construction of the Hillside Parking Structure Options under the Modified Project would still involve less intensity than that associated with the new Hospital Replacement Building; this is deduced by comparing the theoretically-doubled emissions (described above) associated with the Modified Project Hillside Parking Structure, with the Phase IV emissions reported in Draft EIR Table 4.B-7 for the approved Hospital Replacement Building; and by comparing the construction activity durations for each in Table 3-4 in this Addendum), further substantiating that Phase I of the Modified Project would not result in significant construction exhaust emissions since the worst case scenario (Hospital Replacement Building construction) did not do so.

Under Phase II, the approximately 17-month construction required to develop the Bon Air Road Parking Structure would not occur with the Modified Project. Instead, approximately two months of site preparation and resurfacing would be required for the improved surface parking lot. Therefore, the construction exhaust emissions for Phase II would be substantially lower than the less-than-significant levels reported in the June 2013 EIR for the Approved Project.

As with the Approved Project, construction activity would occur at distances greater than 100 feet from residences.

Overall, the Modified Project would involve more construction-related activity compared to the Approved Project, but would not exceed applicable thresholds for operational or construction emissions or the most intensive construction phase of the project – development of the Hospital Replacement Building, as analyzed in the June 2013 EIR. Therefore, the Modified Project would have the same or similar construction-related air quality impacts as identified in the June 2013 EIR.

As shown in Table 3-3, actual construction time for the Approved Project would require a total of 113 months of construction activity (not including Phases V and VI interior renovation). By comparison, the Modified Project with the Hillside Parking Structure built all in one phase would take 102 months while building the Hillside parking Structure in two stages would take 109 months– both less total construction duration than the Approved Project. Therefore, construction-period air quality effects would not be worse than previously analyzed in the June 2013 EIR.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential air quality effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

While not a changed circumstance or significant new information affecting the environmental analysis, as discussed in Chapter 1, *Introduction,* to this Addendum, since certification of the June 2013 EIR, the California Court of Appeal reversed the Alameda County Superior Court judgment that invalidated the Bay Area Air Quality Management District (BAAQMD) 2010 CEQA thresholds of significance that a lower court had called into question on March 5, 2012. This change does not affect the assessment in this Addendum or in the June 2013 EIR because the District had determined substantial evidence existed to support use of the 2010 thresholds in the June 2013 EIR.

Summary (Air Quality)

The Modified Project would not result in a new significant impact with respect to air quality, or have a substantial increase in the severity of air quality impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Air quality impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum).

C. Biological Resources

Relevant Project Changes and Resulting Effects

The Modified Project would develop one of two proposed Hillside Parking Options that would be nearly twice the footprint area of the Hillside Parking Structure analyzed in the June 2013 EIR. The expanded development area would require the removal of up to approximately 148 additional trees that are six (6) inches or greater in diameter at breast height (DBH) and not previously surveyed for the Approved Project. As was found for the trees surveyed for the June 2013 EIR, this stand of additional trees shows symptomatic leaves of Sudden Oak Death (SOD). The overall condition of this stand of additional trees is considered "poor" and does not include specimen trees of any special status species or notable habitat value. (See *Tree Survey Addendum 2013* in Appendix C to this Addendum.)

The expanded construction area for the Hillside Parking Options (to accommodate the construction of an approximately 26,000 square-foot building footprint) is within the project site, as established in the June 2013 EIR for the Approved Project. Therefore, the area where the Hillside Parking Options would be constructed for the Modified Project was previously surveyed and determined not to have notable habitat value or the existence of special status species. As discussed in Sections A. *Aesthetics* and B. *Noise*, in this chapter, the proposed Hillside Parking Options would not result in substantial increases in light/glare or noise that may adversely affect

biological resources. Further, the construction area for the Modified Project would not extend closer than previously analyzed to the wetland habitat in Creekside Marsh or the aquatic and riparian habitat in Corte Madera Creek.

Also, the Modified Project would involve the planting of 20 additional trees (see Figure 3-13 in this Addendum compared to Figure 3-14R, Landscape Concept Plan, in the Final Addendum to the Response to Comments / Final EIR, May 2013). The same landscape palette would be used with the Modified Project, and in particular, oak woodland landscaping which is comprised of evergreens and deciduous native oaks, would be planted along the perimeter of the proposed Hillside Parking Structure, either Option.

Overall, the Modified Project would not result in substantially different or greater activities or development compared to the Approved Project. Therefore, it would have the same or similar biological resources impacts as identified in the June 2013 EIR

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential biological resources effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Biological Resources)

The Modified Project would not result in a new significant impact with respect to biological resources, or have a substantial increase in the severity of biological resources impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Biological resources impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum).

D. Cultural Resources

Relevant Project Changes and Resulting Effects

As shown in Addendum Figures 3-4 and 3-5 of the Modified Project compared to Figure 3-2 of the Approved Project, the proposed Hillside Parking Options would be developed in the northern area of the project site, proximate to the area previously analyzed in the June 2013 EIR. The only CEQA historic resource identified in the June 2013 EIR was the Halprin Gardens. Thus, development of the Modified Project would not change the potential for adverse effects to cultural resources. The historic Halprin Gardens would continue to be demolished on the southern portion of the project site, resulting in a significant impact to historic resources (**Impact CUL-1**).

Regarding potential effects to archaeological and paleontological resources and human remains, the expanded development area for the Hillside Parking Options is within the project site established in the June 2013 EIR, and was therefore previously considered in the assessment of the potential existence of these resources on the project site. The development activity with the Modified Project that would potentially affect these subsurface resources would be the same as would occur with the Approved Project, and the potentially significant impacts would also continue to occur (**Impacts CUL-2, CUL-3 and CUL-4**).

Overall, the Modified Project would not result in substantially different or greater activities or development compared to the Approved Project. Therefore, it would have the same or similar cultural resources impacts as identified in the June 2013 EIR.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential cultural resources effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Cultural Resources)

The Modified Project would not result in a new significant impact with respect to cultural resources, or have a substantial increase in the severity of cultural resources impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Cultural resources impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum).

E. Geology and Soils

Relevant Project Changes and Resulting Effects

The changes posed by the Modified Project that could affect geology and soils effects include the expanded construction and grading area and the net increase in the volume of excavation that would occur. As previously addressed in B. *Air Quality*, in this chapter, the Hillside Parking Options would involve a net increase of approximately 11,700 CY of excavation, compared to the Approved Project analyzed in the June 2013 EIR. These changes affect the area where the proposed Hillside Parking Structure Options would be developed and where the Bon Air Road Parking Structure would no longer be developed. Thus, the Modified Project would not change the potential effects regarding geological or seismic risk, such as being located in a Fault-Rupture Hazard Zone or on unstable soils.

Overall, the change in excavation volume and construction area conditions would not change the effects to geology and soils identified in the June 2013 EIR for the Approved Project, and the

Modified Project would continue to adhere to all related regulatory requirements and codes previously assumed.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential geology and soils effect of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Geology and Soils)

The Modified Project would not result in a new significant impact with respect to geology and soils, or have a substantial increase in the severity of geology and soils impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Geology and soils impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum), and no mitigation measures are required.

F. Greenhouse Gases and Climate Change

Relevant Project Changes and Resulting Effects

Operations and Construction

As previously discussed under Section B. *Air Quality*, in this chapter the development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site. By developing a larger Hillside Parking Structure, reconfiguring the north driveway access, adding a southbound left-turn lane from Bon Air Road, and by not developing the Bon Air Road Parking Structure, the Modified Project does not alter characteristics that would affect operational greenhouse gas emissions. Neither the on-site population (visitors and employees) and the demands or effects associated with that population (e.g., vehicle trips) would change, nor would the operation of the proposed uses substantially change with the Modified Project. The parking structures are not vehicle trip generators nor would the expanded Hillside Parking Structure have a noticeable change in energy use or area source emissions.

Regarding greenhouse gas emissions from construction activity, there would be a net increase in Phase I construction activity and related truck trips (see Section M. *Transportation and Circulation*, in this chapter), which is partially offset by the elimination of construction activity and trips associated with the Bon Air Road Parking Structure that would no longer be developed. The Modified Project would not noticeably change the construction-related greenhouse gas emissions (annualized over 40 years). While there is no significance threshold for construction-related GHG emissions, this assessment applies the same methodology used in the June 2013 EIR

analysis for comparison. Phase I of the Modified Project, assuming *double* emissions reported in the June 2013 EIR, would have approximately 15.7 annual metric tons (MT) of CO_2 compared to the BAAQMD operational threshold of 1,100 annual MT of CO_2e and compared to 520 annual MT of CO_2e for the entire Approved Project.

Overall, the Modified Project would not result in substantially more greenhouse gas emissions compared to the Approved Project. Therefore, it would have the same or similar greenhouse gas impacts previously identified in the June 2013 EIR

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential greenhouse gas emissions effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Greenhouse Gases and Climate Change)

The Modified Project would not result in a new significant impact with respect to greenhouse gas emissions, or have a substantial increase in the severity of greenhouse gas emissions impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Greenhouse gas emissions impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum).

G. Hazards and Hazardous Materials

Relevant Project Changes and Resulting Effects

The changes posed by the Modified Project that could affect hazards and hazardous materials effects are primarily the expanded construction area (to accommodate the construction of an approximately 26,000 square-foot building footprint) on the northern hillside of the project site.

The proposed Hillside Parking Options are estimated to involve the handling and movement of a greater volume and area of soil and debris as analyzed with the Approved Project (see B. *Air Quality* in this chapter). Also, as with the Approved Project, the condition of on-site soils and groundwater could be impacted from the abandoned-in-place underground storage tank considered in the June 2013 EIR. The Modified Project would not alter the existing bulk oxygen area located northwest of the Mental Health Building.

The expanded construction area with the proposed Hillside Parking Options would place construction activities closer to the nearby school, but would not substantially affect distances or routes required to transport hazardous materials. The Modified Project would continue to adhere

to the same laws, regulations and standards, as well as local permit requirements to reduce the risk of hazardous materials effects.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential hazards and hazardous materials effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Hazards and Hazardous Materials)

The Modified Project would not result in a new significant impact with respect to hazards and hazardous materials, or have a substantial increase in the severity of hazards and hazardous materials impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Hazards and hazardous materials impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum), and no mitigation measures are required.

H. Hydrology and Water Quality

Relevant Project Changes and Resulting Effects

There are changes posed by the Modified Project that could affect hydrology and water quality effects compared to the Approved Project analyzed in the June 2013 EIR. These include the expanded construction area (see Addendum Figures 3-4 and 3-5 of the Modified Project compared to Figure 3-2 of the Approved Project). The Modified Project would not change the potential effects regarding flood hazards, as development still would not be located in an area of flood hazard risks. Also, the expanded construction area would continue to involve steep slopes similar to those previously considered.

The Modified Project would increase the ratio of pervious to impervious surface area on the project site compared to the Approved Project (see Table 3-2 in this Addendum). The Approved Project involved approximately 47 percent impervious surface area throughout the project site, whereas the Modified Project is estimated to be up to 49 percent impervious surfaces. This difference is primarily the result of the increased building area with the proposed Hillside Parking Options, but also factors in the addition of approximately 11,000 square feet of pervious pavement or flow-through planter area than was previously proposed. Increased impervious surface area affects the volume, velocity and quality of storm water runoff. Like the Approved Project, the Modified Project would incorporate the stormwater management treatment features, including infiltration swales, surface bioswales, infiltration planters, and porous pavement. The slight increase in the percentage of impervious surface area on the project site with the Modified Project does not constitute a change that would result in a substantially more severe effect than previously identified. The increase does not require new or different treatment features.

Overall, the changes with the Modified Project would not change the potential hydrology and water quality effects identified in the June 2013 EIR for the Approved Project, and the Modified Project would continue to adhere to all related regulatory requirements regarding surface water quality.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential hydrology and water quality effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Hydrology and Water Quality)

The Modified Project would not result in a new significant impact with respect to hydrology and water quality, or have a substantial increase in the severity of hydrology and water quality impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Hydrology and water quality impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum), and no mitigation measures are required.

I. Land Use and Planning

Relevant Project Changes and Resulting Effects

The Modified Project does not involve changes that would affect existing land uses, zoning, or general plan policies differently than identified in the June 2013 EIR. The Modified Project would involve the same development program and land uses as the Approved Project. While the construction area would be expanded slightly to accommodate the proposed Hillside Parking Options, the development still would not affect an area governed by a habitat conservation plan and would not involve different land uses, zoning designations, or general plan land use designations or policies than previously considered.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding land use and planning effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Land Use and Planning)

The Modified Project would not result in a new significant impact with respect to land use and planning, or have a substantial increase in the severity of land use and planning impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Land use and planning impacts of the Modified Project would be the same as those identified in the June 2013

EIR (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum), and no mitigation measures are required.

J. Noise

Relevant Project Changes and Resulting Effects

Operations

The development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site. The parking structures are not vehicle trip generators, so development of a larger Hillside Parking Options (and not developing the Bon Air Road Parking Structure) would not notably change the level of operational noise compared to the Approved Project. Neither the on-site population (visitors and employees) and the demands or effects associated with that population (e.g., vehicle trips) would change, nor would the operations of the proposed uses substantially change with the Modified Project.

Operational noise effects specifically associated with the Hillside Parking Structure (primarily vehicles inside the garage, car horns, vehicle passbys, door slams, engine starts) were considered in the June 2013 EIR given the proximity of the proposed structure to nearby residences - namely the apartments on Via Hidalgo to the north and the Spyglass Hill and Corte Oriental apartments to the east and southeast. While the proposed Hillside Parking Options would not be located closer to residences or other sensitive receptors than analyzed in the June 2013 EIR for the Approved Project, increased noise levels could be more perceived at these uphill residences because the expanded portion of the Hillside Parking Structure Options is closer to the residences than was the previously proposed Bon Air Road Parking Structure. However, the location of the expanded garage would still be located westward, downhill, and opposite the direction of existing residences (toward Bon Air Road) and more than 100 feet from all residences. Thus, the effect of maximum instantaneous noise levels or operational noise levels on the nearby sensitive receptors would not increase substantially. Overall, the Modified Project would not result in substantially more operational noise compared to the Approved Project. Therefore, it would have the same or similar operational noise impacts previously identified in the June 2013 EIR

Construction

As similarly discussed under Section B. *Air Quality*, in this chapter, construction activity with the Modified Project differs from that analyzed in the June 2013 EIR for the Approved Project. More excavation (net increase of 11,700 CY) and a longer duration of Phase I construction activity (four months) would be involved for the Modified Project. As shown in Tables 3-3 and 3-4 of this Addendum, less and a notably shorter duration of construction activity also would result since the Bon Air Road Parking Structure (Phase II) would not be constructed. Overall, more activity would occur in a longer, continuous phase (Phase I) rather than two shorter phases (Phase I and II).

Regarding actual building construction activity, the proposed Hillside Parking Options would add approximately 133,500 square feet (Option A-12A) to 141,790 square feet (Option A-12B) to the 136,700 square-foot Hillside Parking Structure evaluated in the June 2013 EIR for the Approved Project. This increase is compared to the 175,000 square-foot Bon Air Road Parking Structure that would not be built. There would be a net reduction (approximately 33,210 to 41,500 square feet) in actual building area construction between the Modified Project and the Approved Project, and the building construction noise therefore would not be substantially different. (See the floor area summation charts for the Hillside Parking Options in **Appendix A** to this Addendum compared to the floor area summation charts in Figure 3-9 for the approved Hillside Parking Structure and Figure 3-10 for the approved Bon Air Road Parking Structure in the August 2012 Draft EIR.)

Regarding noise specifically from construction truck trips, the net increase in the volume of excavation would result in approximately two (2) more truck trips per hour for off-hauling compared to the rate of trips required for the Approved Project. However, Modified Project Hillside Parking Structure Options involve approximately ten (10) fewer truck trips per hour than assessed for the Hospital Replacement Building (see Table 3-6 in this Addendum; also see Section 4.M, *Transportation and Circulation*, in this chapter).

Overall, as discussed under *Operations*, the potentially greater construction period noise levels associated with the Modified Project Hillside Parking Options could result in more noise being perceived at uphill residences during construction because the expanded hillside construction area is closer to the residences than the previously proposed Bon Air Road Parking Structure. However, the expanded construction activity for the proposed Hillside Parking Options would still occur westward, downhill, and opposite the direction of existing residences. Also, as with the Approved Project, all construction activity would occur at distances greater than 100 feet from residences.

As with the Approved Project however, the duration of construction activity for other components of the project (the Hospital Replacement Building and the Ambulatory Services Building) would result in a significant construction noise impact (**Impact NOI-2**), and Mitigation Measure NOI-2 identified in the June 2013 EIR would continue to apply to the Modified Project and ensure less-than-significant effects. The Modified Project would have the same or similar construction-related noise impacts as identified in the June 2013 EIR.

As discussed in Section 3.7.1 (and shown in Table 3-3), an alternative phasing scenario of the Modified Project is considered in which one of the two garages that make up Option A-12A would be developed in a later phase than the other of the two garages. As discussed there, this alternative phasing scenario would have the same overall six- to seven-year construction duration described for the Approved Project and the Modified Project, under which the entire Hillside Parking Structure is constructed in a single phase (either Option). The construction durations of each project component are not changed, even though the sequence for development may be changed. The newly added phase to construct the western hillside garage simply moves work that would have previously occurred in Phase I to within later phases, thus the durations are not extended. Therefore, construction-period noise effects would not be worse than previously analyzed in the June 2013 EIR.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding potential noise effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Noise)

The Modified Project would not result in a new significant impact with respect to noise, or have substantial increase in the severity of noise impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Noise impacts of the Modified Project would be the same as those identified in the June 2013 EIR, and all previously-identified mitigation measures would apply (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum).

K. Population and Housing

Relevant Project Changes and Resulting Effects

The development program relevant to the generation of on-site population and employees, and the residual demand for housing, would be the same as described and evaluated in the June 2013 EIR for the Approved Project. Specifically, no changes are proposed to the number of hospital beds proposed or the size of the Ambulatory Services Building. Thus, the Modified Project would not change the effects regarding unanticipated population growth or the potential displacement of housing units of people. Overall, the Modified Project would have the same population and housing impacts as identified in the June 2013 EIR

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding population and housing effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Population and Housing)

The Modified Project would not result in a new significant impact with respect to population and housing, or have a substantial increase in the severity of population and housing impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Population and housing impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary*, of this Addendum), and no mitigation measures are required.

L. Public Services and Recreation

Relevant Project Changes and Resulting Effects

As discussed under K. *Population and Housing*, above, the development program relevant to the generation of on-site population and employees, and the residual demand for public services and recreation would be the same as described and evaluated in the June 2013 EIR for the Approved Project. Specifically, no changes are proposed to the number of proposed additional hospital beds or the size of the Ambulatory Services Building analyzed, both of which would affect on-site population and the potential demand for police and fire services at the project site. Thus, the Modified Project would not change the effects regarding public services and recreation. Overall, the Modified Project would have the same public services and recreation impacts as identified in the June 2013 EIR

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding public services and recreation effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Public Services and Recreation)

The Modified Project would not result in a new significant impact with respect to public services and recreation, or have a substantial increase in the severity of public services and recreation impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Population and housing impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum), and no mitigation measures are required.

M. Transportation and Circulation

Relevant Project Changes and Resulting Effects

Operations

The development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site that generate vehicle trips. By developing a larger Hillside Parking Structure, reconfiguring the north driveway access and the southbound left-turn lane from Bon Air Road, and by not developing the Bon Air Road Parking Structure, the Modified Project does not alter characteristics that would affect traffic volumes. The parking structures are not vehicle trip generators.

To summarize from Chapter 3, *Project Description*, of this Addendum, the Modified Project would still have three primary driveways including the north access driveway (full access), central driveway (limited access), and south access driveway (full access) (see Figures 3-4, Figure 3-5, and Figure 3-10 in this Addendum). However, the Modified Project does involve changes to the Approved Project that would affect traffic circulation patterns at project site driveways, emergency access, and pedestrian circulation, as discussed below. These changes in traffic circulation patterns would be due to the approved Hillside Parking Structure being increased from 412 parking spaces to 823 spaces (Option A-12A) or 886 spaces (Option A-12B) and the Bon Air Road Parking Structure being eliminated and replaced by less surface parking. (See Addendum Figures 3-4 and 3-5 of the Modified Project compared to Figure 3-2 of the Approved Project.)

The June 2013 EIR indicated that approximately 58 percent of the project vehicle trips would use the main north access driveway to/from the campus under the Approved Project. With the enlarged Hillside Parking Options, it is estimated that approximately 75 percent of the project site's vehicle trips would use the main north access driveway. Based on this shift in traffic circulation, modifications are required to address the internal site circulation and intersection operation along Bon Air Road.

Bon Air Road Intersection Operation (at North Access Driveway). As with the June 2013 EIR analysis of the Approved Project, the Modified Project would result in AM and PM peak hour weekday operations at the three project study intersections along Bon Air Road that would be acceptable (level of service [LOS] D or better) with planned project improvements. This would apply to both Existing plus Project and Cumulative Year 2035 plus Project conditions.

Since the Modified Project would cause a greater percentage (75 percent compared to 58 percent) of project trips to shift to use the north access driveway closest to the entrance of the proposed expanded Hillside Parking Structure (under both Options), a vehicle queuing analysis was performed for the North Access Driveway/Bon Air Road intersection to ensure acceptable traffic flow. (See LOS calculation sheets for the Modified Project in Appendix B to this Addendum.) The vehicle queuing analysis indicated that there would be inadequate vehicle storage for the southbound left-turn from Bon Air Road into the north access driveway. Existing storage capacity for the southbound left-turn lane on Bon Air Road is 160-175 feet based on aerial measurement. The vehicle queuing analysis indicates there would be a 189-191 foot vehicle queue under Existing plus Project conditions during the AM peak hour.

Based on the results of the queuing analysis, the District has incorporated into the Modified Project the following design characteristics to ensure safe and adequate traffic flow and avoid potential queuing impacts at the north access driveway.

To summarize from Chapter 3, *Project Description*, of this Addendum, the Modified Project includes:

- An additional Bon Air Road southbound left-turn lane (for two total) into the project site.

- Intersection lane geometries and signalization at the North Access Driveway/Bon Air Road intersection as follows:

    - Southbound Bon Air Road: Two (2) left-turn lanes and one (1) through-lane;
    - Northbound Bon Air Road: One (1) through-lane and one (1) right-turn lane;
    - Westbound north access driveway: One (1) left-turn lane and one (1) right-turn lane; and
    - An overlap signal phase for the westbound right-turn movement from the north access drive onto northbound Bon Air Road.[1]

North Access Driveway Operations. The increased traffic using the north access driveway would not result in any additional traffic safety hazards (**Impact TRA-2**) because the Modified Project would implement the following striping and lane designations along the north roadway:

- The centerline of the 4-lane north access driveway would be double yellow striping and lane lines would generally be standard "skip" white striping from Bon Air Road to the Hillside Parking Structure;
- Within about 100 feet of Bon Air Road, the outbound (westbound) left-turn and right-turn lanes would be separated by a solid white stripe; and
- Directional pavement arrows indicating specific left and right-turn lanes would be provided at the Bon Air Road approaches along the north access driveway.

Emergency Vehicle Access / Public Traffic Conflicts. Emergency vehicle access would remain largely unchanged from conditions described in the June 2013 EIR. As described there and shown in Figure 3-1 in this Addendum, a dedicated emergency response vehicles access driveway would be created off Bon Air Road, and to accommodate this new road, the Approved Project included a new median cut to provide left turn access from Bon Air Road to the ambulance access road. The Modified Project incorporates that where emergency vehicles cross the internal driveway, north-south traffic movements would be stop-sign controlled or "Yield to Emergency Vehicles" signs would be installed. The Modified Project does not propose changes that would result in a new or worse impact regarding emergency access previously identified in the June 2013 EIR (**Impact TRA-3**).

Pedestrian Circulation Pattern Changes. As analyzed for the Approved Project in the June 2013 EIR, the proposed project would include pedestrian walkways within the project site that provide safe and efficient connections between all public buildings and parking areas within the campus. Although the Modified Project incorporates enhanced pedestrian facilities to accommodate safe and accessible pedestrian movement throughout the site, particularly to/from the proposed expanded Hillside Parking Structure located on the north portion of the project site, no new pedestrian safety impact is identified.

[1] Final configuration of the North Access Driveway/Bon Air Road intersection will ultimately depend on signal design analyses using VISSUM software.

As described in detail in Chapter 3, *Project Description*, of this Addendum, the Modified Project includes for both Hillside Parking Options a network of pedestrian sidewalks along the south side of the north access driveway, the main north-south campus drive, to/from the Hillside Parking Structure, pedestrian crosswalks across Bon Air Road and across the internal north-south campus drive, along Bon Air Road, and throughout the various surface parking areas and sidewalks to internal campus buildings. Also, the Modified Project also incorporates the elevated pedestrian bridge, which was an option (yet fully analyzed for environmental effects) in the June 2013 EIR; it would provide a direct route between the Hillside Parking Structure and other campus buildings, although not the Hospital Replacement Building, as was considered with the Approved Project.

Overall, the Modified Project does not propose changes that would result in a new or substantially worse impact regarding pedestrian safety previously identified in the June 2013 EIR **(Impact TRA-2**).

Operations Summary. In summary, the Modified Project would not result in substantially more operational traffic and circulation impacts compared to the Approved Project. Because the Modified Project would not generate increased total traffic volumes or distribution beyond the project driveways, it would not change or substantially increase impacts identified with the Approved Project, including the significant effects regarding traffic wait times at intersections along Sir Francis Drake Boulevard, the intersection of Bon Air Road/Sir Francis Drake Boulevard, and southbound segments on the 101 Freeway (**Impact TRA-1**, **Impact TRA-5**, and **Impact TRA-7**). Overall, the Modified Project would have the same or similar operational traffic impacts previously identified in the June 2013 EIR.

Construction

Construction activity with the Modified Project differs from that analyzed in the June 2013 EIR for the Approved Project because more activity would be involved to construct the larger Hillside Parking Options, and less activity would be involved since the Bon Air Road Parking Structure would not be constructed.

As previously described in Chapter 3, *Project Description* 43,700 CY of excavation would be associated with the Hillside Parking Structure Options. This difference affects a change in required construction truck trips and potential traffic impacts. Specifically, the increase in excavation results in approximately ten (10) truck trips (5 in/5 out) for off-haul per hour. The detailed truck trip calculation for comparative scenarios are shown below and summarized in Table 3-6 in this Addendum. Since trucks represent a potentially higher traffic impact (due to their greater length and slower acceleration characteristics), a Passenger Car Equivalent (PCE) factor of 1.5 was applied to the truck trips to calculate the total trips:

Modified Hillside Parking Structure Options - Daily and Peak Hour Truck Trips

- 43,700 CY / 74 construction work days (3.5 months) = 598 CY per day
- 598 CY per day / 20 CY per truck x 2 one-way trips = 60 truck trips per day

- 60 truck trips per day / 8-9 hours = 7 truck trips per hour (4 in/3 out)
- 7 truck trips per day x 1.5 PCE factor = **10 truck trips per hour (5 in/5 out)**.

For comparison, this would represent ten (10) fewer truck trips per hour (10 compared to 20 trips) than calculated for the most intensive project phase in the June 2013 EIR, and over a shorter period of time (74 days compared to 84 days), as explained below.

Approved Hospital Replacement Building - Daily and Peak Hour Truck Trips

The Approved Project analysis of site construction traffic in the June 2013 EIR was based on the most intensive construction phase of the project, which was the four-month period during which approximately 101,000 CY of excavation would occur to develop the new Hospital Replacement Building. A total of 20 truck trips per hour (10 in/10 out) was estimated for that most intensive construction phase for the Approved Project, using the same methodology applied above:

- 101,000 CY / 84 construction work days (4 months) = 1,202 CY per day
- 1,202 CY per day / 20 CY per truck x 2 one-way trips = 120 truck trips per day
- 120 truck trips per day / 8-9 hours = 14 truck trips per hour (7 in/7 out)
- 14 truck trips per day x 1.5 PCE factor = **20 truck trips per hour (10 in/10 out)**.

Approved Project Hillside Parking Structure - Daily and Peak Hour Truck Trips

- 15,000 CY / 32 construction work days (1.5 months) = 471 CY per day
- 471 CY per day / 20 CY per truck x 2 one-way trips = 47 truck trips per day
- 47 truck trips per day / 8-9 hours = 5.2 truck trips per hour (2.6 in/2.6 out)
- 5.2 truck trips per day x 1.5 PCE factor = **8 truck trips per hour (4 in/4 out)**

In summary, the Modified Project would require more truck trips than the Approved Project given the net increase in excavation required for the Hillside Parking Structure Options. However, because the Modified Project would have fewer truck trips per hour and for a shorter duration of time compared to the Hospital Replacement Building excavation reported in the June 2013 EIR, it is not considered a new or substantially worse impact regarding construction period traffic previously identified in the June 2013 EIR (**Impact TRA-6**).

Internal Vehicle Circulation (Planning-Related Non CEQA Issue)

Internal vehicle circulation on the project site with the Modified Project would remain unchanged from the Approved Project. There is a potential for some project related traffic to use the internal aisle (that link the north and south driveways) to bypass vehicle traffic at the north access driveway during peak commute periods. This would not create a new impact under CEQA. Moreover, as indicated above, the North Access Driveway/Bon Air Road intersection is projected to operate at LOS D or better with Modified Project. Therefore, any traffic diverting from the north access driveway due to delays would likely be minimal and would only apply to those project trips to/from the south.

Parking (Planning-Related Non CEQA Issue)

The Modified Project would result in different parking conditions compared to the Approved Project assessed in the June 2013 EIR. To summarize from Chapter 3, *Project Description*, of this Addendum:

- Hillside Parking Option A-12A would result in a deficit of 24 spaces (compared to a deficit of 3 spaces with the Approved Project). This is because the second Hillside Parking Structure would provide fewer spaces than the approved Bon Air Road Parking Structure would have provided, even with this Option providing more surface parking than the Approved Project.

- Hillside Parking Option A-12B would result in a surplus of 39 spaces. This is because the single, larger Hillside Parking Structure and the proposed surface lot would provide more spaces than the approved Bon Air Road Parking Structure and the approved Hillside Parking Structure combined.

(See Table 3-1 in this Addendum.)

While the parking deficit that would occur with Option A-12A is greater than that identified in the June 2013 EIR, this is not considered a new or substantially worse effect compared to the previously analysis. Of a total supply of 1,081 spaces with Option A-12A, an additional 21-space shortfall is not considered to result in new potentially significant secondary effects (i.e., cars circling and looking for a parking space). As discussed in the previous analysis, limited parking supply is typically a temporary condition, often offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Hence, any secondary environmental impacts that might result from a shortfall in parking in the vicinity of the proposed project are considered less than significant.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding transportation and circulation of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Transportation and Circulation)

The Modified Project would not result in a new significant impact with respect to transportation and circulation, or have a substantial increase in the severity of transportation and circulation impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Transportation and circulation impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum).

N. Utilities and Service Systems

Relevant Project Changes and Resulting Effects

As discussed for several previous topics in this chapter, the development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site. By developing a larger Hillside Parking Structure, reconfiguring the north driveway access, adding a southbound left-turn lane from Bon Air Road, and by not developing the Bon Air Road Parking Structure, the Modified Project does not alter characteristics that would substantially affect the demand for utilities and service systems. Neither the development area and uses proposed, or the on-site population (visitors and employees) and its demand for public service systems, such as energy, sewage, and water), would be substantially different with the Modified Project compared to the Approved Project analyzed in the June 2013 EIR.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding utilities and service system effects of the Modified Project or the Approved Project since certification of the June 2013 EIR.

Summary (Utilities and Service Systems)

The Modified Project would not result in a new significant impact with respect to utilities and service systems, or have a substantial increase in the severity of utilities and service systems impacts previously identified in the June 2013 EIR. No changes or significant new information exists. Utilities and service systems impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum), and no mitigation measures are required.

O. Cumulative Effects

Relevant Project Changes and Resulting Effects

As discussed for several previous topics in this chapter, the development program and all other major operational components of the Modified Project would be similar or the same as described and evaluated in the June 2013 EIR for the Approved Project. No changes are proposed to the Hospital Replacement Building, the Ambulatory Services Building, or any other functions on the project site. Overall, compared to the Approved Project, the Modified Project would develop a larger Hillside Parking Structure, reconfigure the north driveway access, add a southbound left-turn lane from Bon Air Road, and not develop the Bon Air Road Parking Structure.

Resulting potential environmental effects specifically addressed throughout the aforementioned sections in this chapter for the Modified Project include aesthetics (scenic views); biological resources (additional tree removal and planting); construction-related air quality, noise, and truck trips associated with a net increase in soil excavation; and operational air quality and noise associated with the expanded area of the Hillside Parking Structure Options (compared to the previously proposed Bon Air Road Parking Structure). None of these environmental topics result in new or substantially increased significant impacts compared to the findings in the June 2013 EIR. Moreover, there have not been any changes in circumstances – specifically cumulative setting conditions created by past, present and other reasonably foreseeable future development in the area – for any environmental topics addressed in the June 2013 EIR. Therefore, no new cumulative impact exists to which the Modified Project would have a cumulative considerable contribution not previously identified.

The June 2013 EIR identified one cumulative impact for the Approved Project related to increased traffic volumes at local study intersections along Bon Air Road/Sir Francis Drake Blvd and freeways (**Impact TRA-7**). As discussed under Section M. *Transportation and Circulation*, above, the Modified Project would not alter characteristics that would affect traffic volumes, thus these impact would be the same as previously identified with the Approved Project.

Changes in Circumstances and New Significant Information

There are no changes in circumstances and no new significant information regarding any cumulative effects since certification of the June 2013 EIR.

Summary (Cumulative Effects)

The Modified Project would not result in a new or substantially increased cumulative environmental effects for previously identified for the Approved Project in the June 2013 EIR any environmental topic. No changes or significant new information exists. Cumulative impacts of the Modified Project would be the same as those identified in the June 2013 EIR (listed in Table 2-1 in Chapter 2, *Summary,* of this Addendum), and no new or changed mitigation measures are required.

CHAPTER 5
Report Preparers

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APPENDIX A

Hillside Parking Options - Parking Summation Charts

Option A – 12A Summation Chart

LEVEL	UNISTALL (8'-6" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
SIXTH	84	0	84	26,300	313
FIFTH	154	4	158	50,400	318
FOURTH	154	4	158	50,400	318
THIRD	154	4	158	50,400	318
SECOND	154	4	158	50,400	318
GROUND	110	3	113	42,380	375
TOTAL:	810	19	823	270,280	326

Option A – 12B Summation Chart

LEVEL	UNISTALL (8'-6" x 18'-0")	ACCESSIBLE (9'-0" x 18'-0")	TOTAL	SQ. FOOTAGE	SQ. FT. / STALL
SIXTH	141	0	141	44,370	314
FIFTH	152	2	154	47,500	308
FOURTH	150	4	154	47,500	308
THIRD	150	4	154	47,500	308
SECOND	150	4	154	47,500	308
GROUND	125	4	129	44,120	342
TOTAL:	868	18	886	278,490	314

APPENDIX B

Modified Project LOS Sheets and Vehicle Queuing Report

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1863	1583	3433	1863
Volume (vph)	90	123	369	118	318	578
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	134	401	128	346	628
RTOR Reduction (vph)	0	89	0	35	0	0
Lane Group Flow (vph)	98	45	401	93	346	628
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.8	15.3	18.4	18.4	10.5	32.9
Effective Green, g (s)	4.8	15.3	18.4	18.4	10.5	32.9
Actuated g/C Ratio	0.11	0.33	0.40	0.40	0.23	0.72
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	186	669	750	637	789	1341
v/s Ratio Prot	c0.06	0.02	c0.22		0.10	c0.34
v/s Ratio Perm		0.01		0.06		
v/c Ratio	0.53	0.07	0.53	0.15	0.44	0.47
Uniform Delay, d1	19.4	10.3	10.4	8.7	15.1	2.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.0	0.7	0.1	0.4	0.3
Delay (s)	22.1	10.4	11.1	8.8	15.5	3.0
Level of Service	C	B	B	A	B	A
Approach Delay (s)	15.3		10.6			7.4
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	23	464	20	52	616
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	504	22	57	670
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			778			571
pX, platoon unblocked	0.80	0.75			0.75	
vC, conflicting volume	1298	515			526	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1159	352			367	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			94	
cM capacity (veh/h)	163	517			892	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	25	526	57	670
Volume Left	0	0	57	0
Volume Right	25	22	0	0
cSH	517	1700	892	1700
Volume to Capacity	0.05	0.31	0.06	0.39
Queue Length 95th (ft)	4	0	5	0
Control Delay (s)	12.3	0.0	9.3	0.0
Lane LOS	B		A	
Approach Delay (s)	12.3	0.0	0.7	
Approach LOS	B			

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	30	18	466	19	54	562
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	20	507	21	59	611
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	1					
Upstream signal (ft)			419			930
pX, platoon unblocked	0.73	0.72			0.72	
vC, conflicting volume	1235	507			527	
vC1, stage 1 conf vol	507					
vC2, stage 2 conf vol	728					
vCu, unblocked vol	1251	312			341	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	96			93	
cM capacity (veh/h)	277	522			874	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	33	20	507	21	59	611
Volume Left	33	0	0	0	59	0
Volume Right	0	20	0	21	0	0
cSH	277	522	1700	1700	874	1700
Volume to Capacity	0.12	0.04	0.30	0.01	0.07	0.36
Queue Length 95th (ft)	10	3	0	0	5	0
Control Delay (s)	19.7	12.2	0.0	0.0	9.4	0.0
Lane LOS	C	B			A	
Approach Delay (s)	16.9		0.0		0.8	
Approach LOS	C					

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	449	433	280	327	349	1670	1666	123	113	315
Average Queue (ft)	276	259	82	309	323	1377	1149	64	53	162
95th Queue (ft)	396	376	199	354	374	2196	2123	105	100	276
Link Distance (ft)	1538	1538				1639	1639	784	784	
Upstream Blk Time (%)						25	4			
Queuing Penalty (veh)						0	0			
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		1	0	49	51					
Queuing Penalty (veh)		4	0	231	241					

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	T	T
Maximum Queue (ft)	108	74	332	76	199	170	157
Average Queue (ft)	51	33	145	41	113	30	40
95th Queue (ft)	90	60	291	91	191	100	108
Link Distance (ft)	852	852	498			784	784
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			18	1	2		
Queuing Penalty (veh)			21	5	4		

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	NB	SB	SB
Directions Served	R	TR	L	T
Maximum Queue (ft)	37	7	54	11
Average Queue (ft)	13	0	15	0
95th Queue (ft)	37	4	46	6
Link Distance (ft)	169	294	498	498
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	433	406	291	339	349	1660	1664	120	108	345
Average Queue (ft)	280	258	80	310	324	1393	1202	68	57	176
95th Queue (ft)	385	370	188	356	369	2210	2103	116	102	296
Link Distance (ft)	1538	1538				1639	1639	785	785	
Upstream Blk Time (%)						30	6			
Queuing Penalty (veh)						0	0			
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		1	0	47	56					0
Queuing Penalty (veh)		4	0	225	268					0

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	L	T
Maximum Queue (ft)	95	74	280	76	108	116	480
Average Queue (ft)	44	32	127	38	49	71	72
95th Queue (ft)	77	57	259	80	97	113	254
Link Distance (ft)	846	846	498			785	785
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			12	1			
Queuing Penalty (veh)			15	5			

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	SB	SB
Directions Served	R	L	T
Maximum Queue (ft)	37	58	32
Average Queue (ft)	13	14	1
95th Queue (ft)	37	43	17
Link Distance (ft)	169		498
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		50	
Storage Blk Time (%)		1	
Queuing Penalty (veh)		4	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1863	1583	3433	1863
Volume (vph)	106	307	666	73	123	471
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	334	724	79	134	512
RTOR Reduction (vph)	0	145	0	14	0	0
Lane Group Flow (vph)	115	189	724	65	134	512
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	7.6	15.7	31.2	31.2	8.1	43.3
Effective Green, g (s)	7.6	15.7	31.2	31.2	8.1	43.3
Actuated g/C Ratio	0.13	0.27	0.53	0.53	0.14	0.74
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	529	987	839	472	1370
v/s Ratio Prot	c0.06	c0.05	c0.39		0.04	0.27
v/s Ratio Perm		0.07		0.04		
v/c Ratio	0.50	0.36	0.73	0.08	0.28	0.37
Uniform Delay, d1	23.9	17.5	10.7	6.8	22.8	2.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	0.4	2.9	0.0	0.3	0.2
Delay (s)	25.6	17.9	13.5	6.8	23.1	3.0
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.9		12.9			7.2
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	58.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	52	687	13	23	554
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	57	747	14	25	602
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			778			571
pX, platoon unblocked	0.77	0.74			0.74	
vC, conflicting volume	1406	754			761	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1405	669			678	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	83			96	
cM capacity (veh/h)	114	340			679	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	57	761	25	602
Volume Left	0	0	25	0
Volume Right	57	14	0	0
cSH	340	1700	679	1700
Volume to Capacity	0.17	0.45	0.04	0.35
Queue Length 95th (ft)	15	0	3	0
Control Delay (s)	17.7	0.0	10.5	0.0
Lane LOS	C		B	
Approach Delay (s)	17.7	0.0	0.4	
Approach LOS	C			

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	35	50	650	11	17	537
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	54	707	12	18	584
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	1					
Upstream signal (ft)			419			930
pX, platoon unblocked	0.73	0.72			0.72	
vC, conflicting volume	1327	707			718	
vC1, stage 1 conf vol	707					
vC2, stage 2 conf vol	621					
vCu, unblocked vol	1425	594			611	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	85			97	
cM capacity (veh/h)	253	365			700	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	38	54	707	12	18	584
Volume Left	38	0	0	0	18	0
Volume Right	0	54	0	12	0	0
cSH	253	365	1700	1700	700	1700
Volume to Capacity	0.15	0.15	0.42	0.01	0.03	0.34
Queue Length 95th (ft)	13	13	0	0	2	0
Control Delay (s)	21.7	16.6	0.0	0.0	10.3	0.0
Lane LOS	C	C			B	
Approach Delay (s)	18.7		0.0		0.3	
Approach LOS	C					

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	352	358	98	186	234	263	281	566	808	450
Average Queue (ft)	215	208	50	103	106	136	133	124	400	368
95th Queue (ft)	319	312	85	154	169	232	229	406	967	518
Link Distance (ft)	1538	1538				1639	1639	784	784	
Upstream Blk Time (%)								0	8	
Queuing Penalty (veh)								0	38	
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		0				0				26
Queuing Penalty (veh)		1				0				39

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	T	T
Maximum Queue (ft)	146	321	482	82	159	103	116
Average Queue (ft)	59	104	260	25	71	25	34
95th Queue (ft)	109	223	520	74	130	74	89
Link Distance (ft)	754	754	498			784	784
Upstream Blk Time (%)			7				
Queuing Penalty (veh)			50				
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			32	0	0		
Queuing Penalty (veh)			23	1	0		

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	NB	SB
Directions Served	R	TR	L
Maximum Queue (ft)	97	106	45
Average Queue (ft)	39	40	11
95th Queue (ft)	108	203	36
Link Distance (ft)	169	294	498
Upstream Blk Time (%)	3	3	
Queuing Penalty (veh)	0	20	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	360	358	185	197	234	276	302	757	804	437
Average Queue (ft)	217	213	55	106	111	138	140	102	400	365
95th Queue (ft)	329	319	119	164	179	236	249	337	950	522
Link Distance (ft)	1538	1538				1639	1639	784	784	
Upstream Blk Time (%)								0	6	
Queuing Penalty (veh)								0	29	
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		0	0			0				26
Queuing Penalty (veh)		1	0			0				38

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	L	T
Maximum Queue (ft)	145	264	504	76	72	99	232
Average Queue (ft)	58	94	239	27	22	49	67
95th Queue (ft)	108	193	494	75	60	82	169
Link Distance (ft)	748	748	499			784	784
Upstream Blk Time (%)			5				
Queuing Penalty (veh)			36				
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			28	0			
Queuing Penalty (veh)			21	1			

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	NB	SB
Directions Served	R	TR	L
Maximum Queue (ft)	74	104	39
Average Queue (ft)	30	28	12
95th Queue (ft)	65	163	38
Link Distance (ft)	169	294	
Upstream Blk Time (%)		1	
Queuing Penalty (veh)		10	
Storage Bay Dist (ft)			50
Storage Blk Time (%)			0
Queuing Penalty (veh)			2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1863	1583	3433	1863
Volume (vph)	90	123	425	118	318	658
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	134	462	128	346	715
RTOR Reduction (vph)	0	90	0	30	0	0
Lane Group Flow (vph)	98	44	462	98	346	715
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.9	15.7	20.6	20.6	10.8	35.4
Effective Green, g (s)	4.9	15.7	20.6	20.6	10.8	35.4
Actuated g/C Ratio	0.10	0.33	0.43	0.43	0.22	0.73
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	180	646	795	675	768	1365
v/s Ratio Prot	c0.06	0.02	0.25		0.10	c0.38
v/s Ratio Perm		0.01		0.06		
v/c Ratio	0.54	0.07	0.58	0.15	0.45	0.52
Uniform Delay, d1	20.6	11.2	10.6	8.5	16.2	2.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.3	0.0	1.1	0.1	0.4	0.4
Delay (s)	24.0	11.3	11.6	8.6	16.6	3.2
Level of Service	C	B	B	A	B	A
Approach Delay (s)	16.7		11.0			7.5
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	48.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	23	520	20	52	696
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	565	22	57	757
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			778			571
pX, platoon unblocked	0.81	0.73			0.73	
vC, conflicting volume	1446	576			587	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1244	416			431	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			93	
cM capacity (veh/h)	145	462			819	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	25	587	57	757
Volume Left	0	0	57	0
Volume Right	25	22	0	0
cSH	462	1700	819	1700
Volume to Capacity	0.05	0.35	0.07	0.45
Queue Length 95th (ft)	4	0	6	0
Control Delay (s)	13.2	0.0	9.7	0.0
Lane LOS	B		A	
Approach Delay (s)	13.2	0.0	0.7	
Approach LOS	B			

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	30	18	522	19	54	642
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	20	567	21	59	698
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	1					
Upstream signal (ft)			419			930
pX, platoon unblocked	0.76	0.71			0.71	
vC, conflicting volume	1383	567			588	
vC1, stage 1 conf vol	567					
vC2, stage 2 conf vol	815					
vCu, unblocked vol	1302	389			418	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	96			93	
cM capacity (veh/h)	247	467			808	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	33	20	567	21	59	698
Volume Left	33	0	0	0	59	0
Volume Right	0	20	0	21	0	0
cSH	247	467	1700	1700	808	1700
Volume to Capacity	0.13	0.04	0.33	0.01	0.07	0.41
Queue Length 95th (ft)	11	3	0	0	6	0
Control Delay (s)	21.8	13.1	0.0	0.0	9.8	0.0
Lane LOS	C	B			A	
Approach Delay (s)	18.5		0.0		0.8	
Approach LOS	C					

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	472	458	356	332	337	1673	1660	150	121	397
Average Queue (ft)	265	246	76	316	328	1462	1150	69	54	184
95th Queue (ft)	395	371	205	337	354	2119	1994	117	100	320
Link Distance (ft)	1538	1538				1639	1639	785	785	
Upstream Blk Time (%)						32	4			
Queuing Penalty (veh)						0	0			
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		1	0	54	59					0
Queuing Penalty (veh)		3	0	258	281					0

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	L	T
Maximum Queue (ft)	118	73	369	76	115	129	691
Average Queue (ft)	50	33	137	34	44	71	79
95th Queue (ft)	89	57	287	82	93	114	312
Link Distance (ft)	846	846	498			785	785
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			16	0			
Queuing Penalty (veh)			19	2			

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	NB	SB
Directions Served	R	TR	L
Maximum Queue (ft)	37	7	54
Average Queue (ft)	17	0	15
95th Queue (ft)	41	4	44
Link Distance (ft)	169	294	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			50
Storage Blk Time (%)			0
Queuing Penalty (veh)			3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1863	1583	3433	1863
Volume (vph)	106	307	778	73	123	549
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	334	846	79	134	597
RTOR Reduction (vph)	0	110	0	11	0	0
Lane Group Flow (vph)	115	224	846	68	134	597
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	7.9	16.3	37.1	37.1	8.4	49.5
Effective Green, g (s)	7.9	16.3	37.1	37.1	8.4	49.5
Actuated g/C Ratio	0.12	0.25	0.57	0.57	0.13	0.76
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	214	491	1057	898	441	1410
v/s Ratio Prot	0.06	c0.06	c0.45		0.04	0.32
v/s Ratio Perm		0.08		0.04		
v/c Ratio	0.54	0.46	0.80	0.08	0.30	0.42
Uniform Delay, d1	27.0	20.8	11.2	6.4	25.8	2.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.7	4.4	0.0	0.4	0.2
Delay (s)	29.6	21.5	15.6	6.4	26.2	3.1
Level of Service	C	C	B	A	C	A
Approach Delay (s)	23.6		14.9			7.3
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	52	799	13	23	632
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	57	868	14	25	687
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			778			571
pX, platoon unblocked	0.79	0.74			0.74	
vC, conflicting volume	1612	876			883	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1580	832			842	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			96	
cM capacity (veh/h)	91	274			589	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	57	883	25	687
Volume Left	0	0	25	0
Volume Right	57	14	0	0
cSH	274	1700	589	1700
Volume to Capacity	0.21	0.52	0.04	0.40
Queue Length 95th (ft)	19	0	3	0
Control Delay (s)	21.5	0.0	11.4	0.0
Lane LOS	C		B	
Approach Delay (s)	21.5	0.0	0.4	
Approach LOS	C			

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	35	50	762	11	17	615
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	54	828	12	18	668
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	1					
Upstream signal (ft)			419			930
pX, platoon unblocked	0.76	0.72			0.72	
vC, conflicting volume	1534	828			840	
vC1, stage 1 conf vol	828					
vC2, stage 2 conf vol	705					
vCu, unblocked vol	1575	763			779	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	82	81			97	
cM capacity (veh/h)	215	293			606	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	38	54	828	12	18	668
Volume Left	38	0	0	0	18	0
Volume Right	0	54	0	12	0	0
cSH	215	293	1700	1700	606	1700
Volume to Capacity	0.18	0.19	0.49	0.01	0.03	0.39
Queue Length 95th (ft)	16	17	0	0	2	0
Control Delay (s)	25.4	20.1	0.0	0.0	11.1	0.0
Lane LOS	D	C			B	
Approach Delay (s)	22.3		0.0		0.3	
Approach LOS	C					

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection: 5: Sir Francis Drake Blvd. & Bon Air Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	T	L	L	R
Maximum Queue (ft)	350	348	152	194	202	276	314	776	812	454
Average Queue (ft)	230	217	54	109	119	144	153	155	686	414
95th Queue (ft)	330	316	106	167	176	239	263	533	1077	525
Link Distance (ft)	1538	1538				1639	1639	784	784	
Upstream Blk Time (%)								0	22	
Queuing Penalty (veh)								0	119	
Storage Bay Dist (ft)			325	295	295					410
Storage Blk Time (%)		0				0				50
Queuing Penalty (veh)		1				0				73

Intersection: 15: MGH N. Dr. & Bon Air Rd.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	R	L	L	T
Maximum Queue (ft)	476	564	530	76	71	75	304
Average Queue (ft)	108	233	430	27	26	49	78
95th Queue (ft)	346	522	669	83	62	77	206
Link Distance (ft)	748	748	499			784	784
Upstream Blk Time (%)		0	30				
Queuing Penalty (veh)		0	259				
Storage Bay Dist (ft)				50	175		
Storage Blk Time (%)			47	0			
Queuing Penalty (veh)			34	1			

Intersection: 16: MGH Mid Limited Acc. Drive & Bon Air Rd.

Movement	WB	NB	SB
Directions Served	R	TR	L
Maximum Queue (ft)	190	320	53
Average Queue (ft)	103	202	13
95th Queue (ft)	213	442	42
Link Distance (ft)	169	294	
Upstream Blk Time (%)	43	24	
Queuing Penalty (veh)	0	193	
Storage Bay Dist (ft)			50
Storage Blk Time (%)			2
Queuing Penalty (veh)			10

APPENDIX C

Tree Survey Addendum 2013

August 9, 2013

URBAN FORESTRY ASSOCIATES, INC.
8 Willow Street San Rafael, CA 94901
415 454 4212 info@urbanforestryassociates.com

Marin Healthcare Dist.
c/o Ron Peluso
100B Drakes Landing Road, Suite 250
Greenbrae, CA 94904

ADDENDUM
TO
TREE INVENTORY
for
Parking Facility at Marin General Hospital: 250 Bon Air Road, Greenbrae, California 94904

PURPOSE

Urban Forestry Associates, Inc. (UFA) was asked by Ron Peluso of Vertran Associates, on behalf of the Marin Healthcare district, to provide an addendum to our April, 2010 inventory of trees 6" DBH or greater (Diameter at Breast Height, 4.5 feet above grade) of one hundred and forty-eight (148) additional trees that are located within the potential construction zone of the proposed expanded parking garage. The survey will include:

- Labeling each subject tree with a pre-numbered metal tag.
- Identify tree species, size, location, condition, and suitability for preservation.
- Provide Addendum to report tree tallies with accompanying Arborist Map.

SITE LOCATION 250 Bon Air Road, Greenbrae, California 94904

SCOPE OF WORK AND LIMITATIONS

Urban Forestry Associates, Inc. (UFA) has no personal or monetary interest in the outcome of this investigation. All determinations reflected in this report are objective to the best of our ability. All observations regarding trees in this report were made by UFA, independently, based on our education and experience. Determinations of health condition, structural condition, or hazard potential of a tree or trees at issue are through visual inspection and based on our best professional judgement, unless otherwise indicated on a tree by tree basis.

The health and hazard assessments in this report are limited by the visual nature of the assessment, unless otherwise indicated and the current nature of the site. Defects may be obscured by aerial foliage, branches, multiple trunks or other trees. The probability of tree failure is dependent on a number of factors including: topography, geology, soil characteristics, wind patterns, species characteristics (both visually evident and concealed), structural defects, and the

characteristics of a specific storm. Structurally sound, health trees are wind-thrown during severe storms. Consequently, a conclusion that a tree does not require corrective surgery or removal is not a guarantee of no risk, hazard, or sound health. Currently the site of this August 2013 assessment is not developed. A standard risk assessment should be done after the development site and grading plans are approved for construction.

TREE INVENTORY ADDENDUM SUMMARY

*Refer to Appendix A of our original April 2010 report and subsequent addendums for the complete tree inventory data regarding individual trees. Appendix B has the Arborist Map demonstrating tree locations.

Note: Tree locations are **approximate** only because UFA was not provided a map with professionally surveyed tree locations at the time of issuance of our assignment and completion of field work. Locations were taken using a Garmin GPSmap 62st which, like any Global Positioning System (GPS) unit, has limited accuracy, especially under a canopy and can vary from hour to hour, depending on the availability of satellites. In an attempt to attain the greatest accuracy possible, UFA took way point averages (accurate to +/- 12') as opposed to a single GPS reading.

The overall condition of the native forest is poor. There are no specimen trees of any species in the stand. Given the time of year the survey was conducted, it is difficult to detect signs and symptoms of Sudden Oak Death (SOD) in the coast live oaks and California black oak. There are however symptomatic leaves in most of the California bays in the stand, which is a foliar host and major infection source of the disease. We also observed many SOD mortalities on this hill in the past. So it is safe to assume that the majority of the black oaks and coast live oaks are also infected. Many of the bays are also the product of second-growth sprouting from the stumps of old trees. These second-generation bays exhibit a form that is structurally compromised and prone to failure resulting from decay in the old stumps, trunk lean and canopy asymmetry.

Pacific madrone is also almost entirely absent from the stand. This is a result of the general characteristics of the species. Madrones are easily out-competed in the absence of fire and do not respond well to disturbance of the landscape. In a survey of 148 trees, only two living madrone over six inches (6") in diameter were found.

The general prognosis for this portion of the forested landscape is poor (even without development).

- It is likely that the that all of the local genotype coast live and black oaks will be lost to SOD and other problems such as poor form and decay.

- The valley oaks are immune to SOD and generally better health and structure than the coast live oaks and black oaks. Yet none of them were specimen trees.

- Most of the trees had poor form due to over-competition for available growing space and perhaps unknown factors in the stand life history.

The following tally is of trees within the proposed building envelope and adjacent land that are 6" or greater in diameter at DBH, 4.5 feet above grade.

Species	Number of Trees
Black oak (*Quercus kelloggii*)	6
California bay laurel (*Umbellularia californica*)	65
California buckeye (*Aesculus californica*)	2
Coast live oak (*Quercus agrifolia)*	46
Monterey pine (*Pinus radiata*)	1
Pacific madrone (*Arbutus menziesii*)	2
Toyon (*Arbutus heteromeles)*	1
Valley oak (*Quercus lobata*)	25
Total:	148

TREE SURVEY ITEMS

- Total DBH - Several trees were multi-stemmed at DBH. The Total DBH is a summation of the diameters of significant stem at DBH, or 4.5 feet above grade.

- # of Stems - Several trees were multi-stemmed at DBH. This is a count of the number of stems measured and assessed. Dead stems were not counted.

- Health - This column represents the overall "health condition" of the subject tree. UFA rated the trees on a scale of one (1) to five (5):

  1 = Dead- no living tissue present on the tree
  2 = Poor - compromised by disease, pests or competition
  3 = Fair - minor insect pest or disease problems

4 = Good - no significant health problems
5 = Excellent - no symptoms of pests or disease, vigorous

- Structural - This column represents the overall "structural condition: of the subject tree. UFA rated the trees on a scale of one (1) to five (5):

  1 = Imminent risk of failure
  2 = Poor - major structural defects
  3 = Fair - minor or early development stage defects
  4 = Good - no significant defects
  5 = Excellent - A specimen tree of near ideal form

- Suitability for Preservation - This column represents the overall 'Suitability for Preservation' of the subject tree. Factors such as health, structural condition, species characteristics, infrastructure conflicts, etc. were taken in consideration when awarding factors to each subject tree. UFA rated the trees on a scale of one (1) to three (3):

  1 = Poor
  2 = Fair
  3 = Good

- Conclusions / Comments - This column contains brief note regarding the subject tree. Abbreviations were used to simplify the scientific or common name of pests and/or disease. The following is a list of abbreviations and their translations are as follows:

  J-butt: Is a tree's response to slope movement or root ball rotation to up right future growth of the trunk and establish a more vertical stem.
  SOD: Sudden Oak Death (*Phytophthora ramorum)*
  WPGR: Western Pine Gall Rust (*Peridermium harknessii)*
  OEL: Over Extended Limb
  SPM: Sequoia Pitch Moth (*Synanthedon sequoiae*)
  RTB: Red Terpentine Beetle (*Dendroctonus valens)*
  Hypoxlyon: It is a fungal disease that decays the sapwood of the tree.
  Girdle Root: A wrapped root that constricts the vascular system of the tree.

Tree Replacement

If trees are to be replaced the more fire-prone bay laurels should be removed and any replacement species should be site adapted and SOD resistant (i.e. valley oak and interior live oak).

Addendum

The Addendum addressed only those trees that had not been surveyed in the original report or subsequent addendums and would be potentially impacted by the construction of the parking garage. Other trees in the April 2010 survey and additional addendums might be impacted by the construction work zone activity.

See attached Survey.

Performed August 2013

URBAN FORESTRY ASSOCIATES, INC.
8 Willow Street San Rafael, CA 94901
415 454 4212 info@urbanforestryassociates.com

Tree #	Species	Total DBH	# of Stems	Health	Str. Condition	Suit.	Conclusions/Comments	Waypoint
451	Coast live	16.4	1	2	2	1	Many cavities	552
452	Valley oak	14.4	1	4	4	3		551
453	Coast live	7.4	1	3	3	1		550
454	Bay	6.8	1	4	4	3		549
455	Bay	28.6	2	4	3	3	Hollow base	549
456	Valley oak	14.2	1	4	4	3		548
457	Bay	7	1	3	3	2		547
458	Bay	6.2	1	3	3	2		546
459	Bay	19.6	3	2	2	1	2 dead spars. Second growth. Heavy deer damage.	535
460	Coast live	21.8	1	4	3	3		534
461	Coast live	12	1	3	2	1	Potential to fall on sidewalk	543
462	Valley oak	22	1	3	2	1	Potential to fall on sidewalk	542
463	Bay	35.5	6	3	3	2	Second growth	541
464	Valley oak	13.6	1	4	4	3		541
465	Coast live	13.5	1	3	2	2		540
466	Bay	51.2	10	4	3	3	Second growth	539
467	Bay	24.7	5	4	3	3	Second growth	538
468	Bay	37.7	4	4	3	3	Second growth	537
469	Bay	14.1	2	4	3	3	Possible GPS problem	536
470	Buckeye	7	1	3	2	2		535
471	Valley oak	20.4	2	3	3	2		516
472	Bay	11.9	1	2	2	1	Severe decay at base	516
473	Bay	12.4	1	4	4	3	Small pocket of decay in base	516
474	Monterey pine	8	1	2	2	1		517
475	Valley oak	13	1	4	3	2		517
476	Bay	14.4	1	4	4	3		518
477	Bay	6.2	1	2	2	1		519
478	Valley oak	12.5	1	3	3	2		520
479	Valley oak	15.6	1	4	4	3		520
480	Valley oak	28	1	4	4	3		521
481	Valley oak	18.8	1	2	2	1	Covered in Algerian ivy	522
482	Black oak	8.1	1	3	3	2		522
483	Bay	28.2	3	4	3	2		523
484	Valley oak	20	1	4	4	3		523
485	Bay	23.1	2	4	3	2		524
486	Bay	19.7	2	4	3	2		525
487	Bay	20.2	1	3	3	2		526
488	Coast live	19.4	1	4	3	3	Needs safety prune	526
489	Valley oak	14.3	1	4	2	1		527
490	Coast live	6.2	1	4	4	3		528
491	Bay	12.8	1	4	3	3		529
492	Coast live	12.1	1	4	3	3		529
493	Valley oak	9	1	4	3	3		530
494	Bay	33.8	3	2	2	1	Many cavities	531
495	Bay	13.9	1	3	2	1	Reformed top	531
496	Coast live	7.6	1	3	2	1		531
497	Bay	16.6	2	3	2	1		532
498	Coast live	13.4	1	4	3	3		532
499	Black oak	15.8	1	4	2	1		533
500	Valley oak	12.5	1	4	3	3		534
503	Coast live	15	1	3	3	3		438
504	Valley oak	17.8	1	4	4	3		439

Tree #	Species	Total DBH	# of Stems	Health	Str. Condition	Suit.	Conclusions/Comments	Waypoint
505	Coast live	9.6	1	2	2	1		440
506	Coast live	22	1	2	2	1	Possible SOD	441
507	Coast live	17.3	1	3	3	2	Sparse foilage. May only be drought related.	442
508	Valley oak	12.5	1	3	3	2		444
509	Valley oak	12.1	1	3	2	1	Heavy lean	445
510	Coast live	12.1	1	3	2	1	Heavy lean	446
511	Bay	12	1	4	3	2		446
512	Coast live	8.6	1	2	2	1	Nearly dead	446
513	Valley oak	21.7	1	4	4	3	Sparse, likely weather related	447
514	Bay	10.7	2	4	3	2		448
515	Valley oak	11.6	1	2	2	1		448
516	Valley oak	14.2	1	3	2	1		448
517	Bay	22.4	2	3	2	1		449
518	Bay	34.9	4	3	2	1	Second growth with butt rot	450
519	Coast live	6	1	4	3	2	Near tank foundation	451
520	Black oak	7	1	2	2	1	Canker and decay at base and 4'	452
521	Bay	12.5	2	3	2	1		453
522	Coast live	9.2	1	2	2	1	Base is rotted out	453
523	Black oak	25.2	1	2	2	1	Rot throughout tree	454
524	Coast live	18.5	1	3	3	2		455
525	Coast live	15.5	1	2	2	1	Decay throughout	456
526	Coast live	12.9	1	2	2	1	Extensive rot	457
527	Coast live	17	1	2	2	1	Sounds hollow at base	457
528	Coast live	15.5	1	2	2	1		458
529	Coast live	13.5	1	2	2	1	Severe lean and decay	459
530	Coast live	11.9	1	2	2	1	Severe decay at base. Western oak bark borer	460
531	Coast live	11.3	1	2	2	1	Decay and staining of bark	461
532	Bay	10.3	1	4	3	3		462
533	Bay	8.5	1	4	3	3		463
534	Bay	7.7	1	3	2	1		465
535	Bay	18.8	2	4	3	3		464
536	Coast live	8.8	1	2	2	1		466
537	Toyon	15.2	3	2	2	1		467
538	Coast live	31.4	2	3	3	2		468
539	Coast live	12.6	1	2	2	1		469
540	Bay	7.2	1	3	3	2		470
541	Valley oak	13	1	3	3	2		471
542	Bay	13.7	2	4	3	2	Downhill stem sounds hollow at base	471
543	Coast live	12.5	1	2	2	1		472
544	Coast live	19.1	1	3	3	2		473
545	Bay	12.8	2	4	3	2		474
546	Bay	14	2	4	3	2		475
547	Valley oak	18.7	1	3	3	2		475
548	Bay	30.5	2	4	3	3		476
549	Bay	7.5	1	4	2	1	Previously topped	477
550	Bay	14.9	1	4	3	2		478
551	Valley oak	21	1	3	4	3		479
552	Bay	7.7	1	3	2	1	Strong lean	479
553	Bay	9.3	1	3	2	1	Strong lean	480
554	Bay	19.9	1	3	3	2	Decay at base	481
555	Bay	11.1	1	4	3	2		481
556	Bay	24.9	3	2	2	1	Decay at base	482
557	Coast live	11.3	2	2	2	1	One stem severely decayed	483
558	Bay	8.7	1	4	3	2		483
559	Bay	6.4	1	4	3	2		484
560	Madrone	27.2	1	2	2	1	Decay throughout	485
561	Coast live	8.1	1	4	3	2		486
562	Madrone	14.5	1	4	4	3		487
563	Bay	9.9	1	4	4	3		488
564	Bay	20.2	2	4	3	2		489
565	Black oak	14.4	1	2	2	1	Extensive decay	489

Tree #	Species	Total DBH	# of Stems	Health	Str. Condition	Suit.	Conclusions/Comments	Waypoint
566	Valley oak	10.2	1	2	2	1		490
567	Coast live	12.1	1	2	2	1	Broken top	491
568	Bay	15.7	1	4	4	3		492
569	Bay	16.2	1	4	4	3		492
570	Coast live	11.2	1	2	2	1		492
571	Coast live	21.8	1	2	2	1	Extensive decay	493
572	Bay	11.6	1	4	4	3		493
573	Bay	16.3	1	4	4	3	Two nests in canopy	494
574	Buckeye	16	1	2	2	1	Sheer fracture in scafold limb and severe lean	494
575	Coast live	21.2	1	2	2	1	SOD and ambrosia beetles	495
576	Coast live	11.3	1	2	2	1	Extensive decay	496
577	Coast live	10.7	1	2	2	1	Decay	497
578	Coast live	10.1	1	2	2	1		498
579	Coast live	8	1	4	4	3		499
580	Coast live	31.4	2	2	2	1		500
581	Bay	10.4	1	4	4	3	Hollow base	500
582	Bay	6.7	1	4	4	3		501
583	Bay	24.9	3	4	2	1	Second growth with severe lean	502
584	Bay	85.9	12	4	2	1	Second growth	503
585	Coast live	15.4	1	3	2	1	Butt rot	504
586	Valley oak	17.4	1	3	3	2	Exposed root system on downslope side	505
587	Bay	22.5	2	4	3	1	Downhill spar leaning on valley oak	506
588	Coast live	8.8	1	4	2	1	Heavy lean	506
589	Bay	9.2	1	4	4	3		507
590	Bay	9	1	4	3	2		507
591	Bay	8.3	1	4	3	2		508
592	Bay	7.9	1	3	3	2	Nest in canopy	508
593	Bay	17.6	4	2	2	1	Second growth	509
594	Black oak	13.7	1	3	2	1	Yellow jackets in cavity at 15' up stem	510
595	Coast live	13.1	1	3	2	1	Heavy lean	511
596	Bay	6.5	1	3	3	2		512
597	Bay	7.8	1	3	2	1		513
598	Bay	15.9	2	3	2	1		514
599	Bay	9.3	1	4	4	3		514
600	Coast live	8.5	1	2	2	1	Hollow sounding base	515