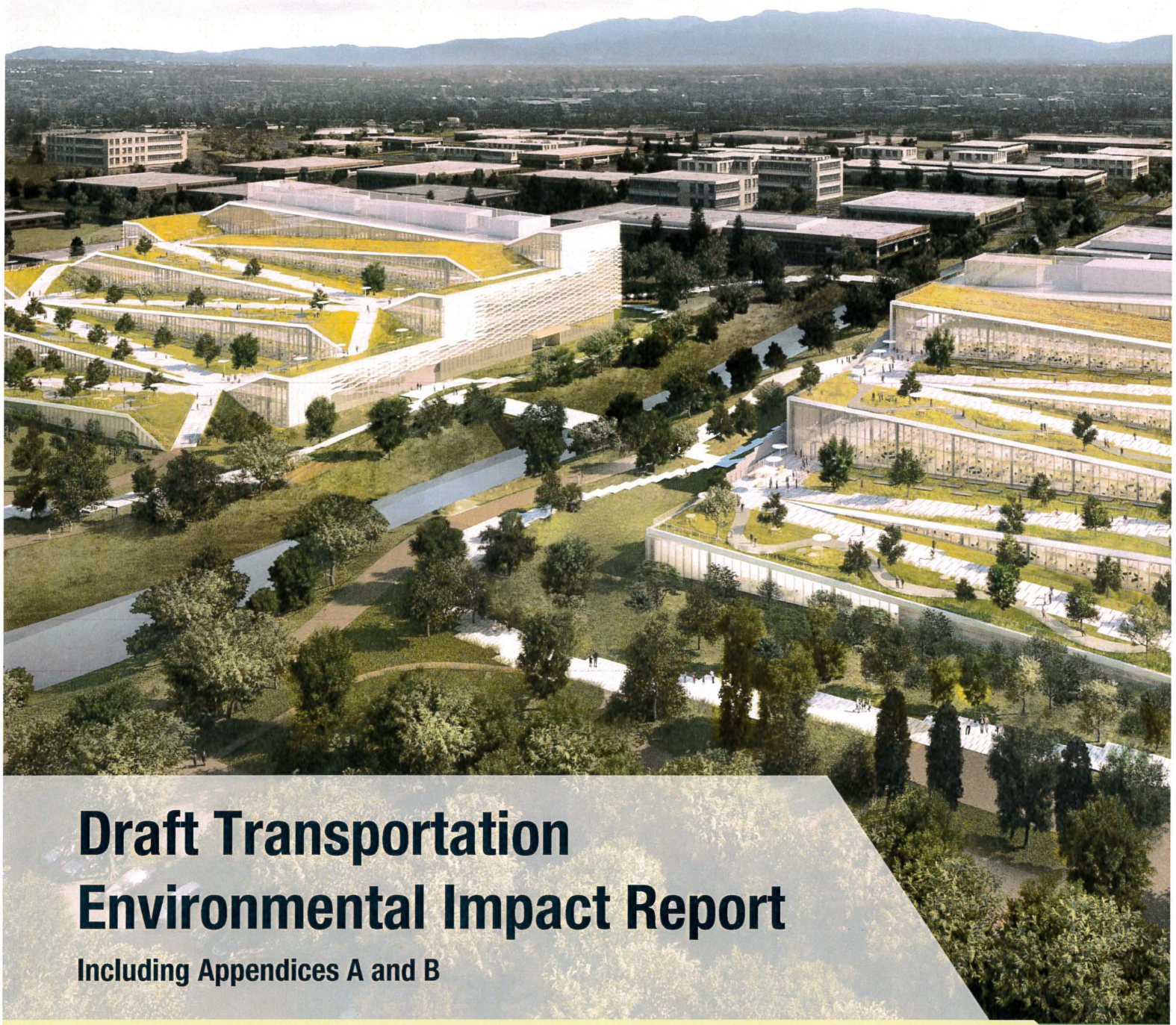


2001052121



# Draft Transportation Environmental Impact Report

Including Appendices A and B

## Google Caribbean Campus

Planning Project #2107-8042

SCH# 2007052121

November 2019



Sunnyvale





## 2.0 EXECUTIVE SUMMARY

### 2.1 INTRODUCTION

This summary is provided in accordance with California Environmental Quality Act Guidelines (State CEQA Guidelines) Section 15123. As stated in Section 15123(a), “an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical.” As required by the guidelines, this chapter includes (1) a summary description of the Google Caribbean Campus (“proposed project” or “project”), (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, (4) a discussion of the areas of controversy associated with the project, and (5) issues to be resolved.

This document is entitled a Transportation EIR (TEIR) because it focuses on impacts related to transportation. Through the Initial Study process using the CEQA Initial Study Checklist, impacts to all other environmental resource areas were found to be less than significant. Accordingly, this TEIR has been prepared in conformance with CEQA (California Public Resources Code [“PRC”] §21000 et seq.), the CEQA Guidelines (California Code of Regulations [CCR], Title 14, §15000 et seq. (“CEQA Guidelines”)), and the rules, regulations, and procedures for the implementation of CEQA.

As discussed in Chapter 1.0, Introduction, three prior EIRs analyzed and mitigated potentially significant effects related to the proposed project, and accordingly inform the analysis presented in this TEIR: (1) the 2016 Land Use and Transportation Element (“LUTE”) of the Sunnyvale General Plan (“LUTE EIR”) (State Clearinghouse No. 2012032003); (2) the 2013 Valley Water (VW)<sup>1</sup> East and West Channels Flood Protection Project EIR (“VW EIR”)<sup>2</sup> (State Clearinghouse No. 2013012041); and (3) the 2016 Mathilda Avenue Improvements at SR 237 and US 101 Project (“Caltrans EIR”) (State Clearinghouse No. 2015082030).

The LUTE EIR is a program EIR that considers the environmental effects of the City's planned land uses, development density, transportation, and projected buildout by 2035. The LUTE EIR analyzed permitted uses, development density, and projected transportation impacts at the project site. The VW EIR is a project EIR that analyzes a series of flood protection and water quality improvements, including for the West Channel that bisects the project site. The Caltrans EIR is also a project EIR that analyzes the reconfiguration of the State Route 237 and US 101 interchanges with Mathilda Avenue, including: modification to on and off ramps; removal, addition, and signalization of intersections; and provision of new left turn lanes. Its analysis accordingly covers certain potentially significant transportation impacts

<sup>1</sup> The official name of the agency is the Santa Clara Valley Water District (SCVWD); however, the new moniker is Valley Water (VW) and will be used as a shorter reference.

<sup>2</sup> At the time the East and West Channels Flood Protection Project EIR was certified, the agency was using its previous name, Santa Clara Valley Water District.

the proposed project may produce related to the Mathilda Avenue interchanges with State Route 237 and Highway 101.

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## 2.2 PROJECT LOCATION

The proposed project is located within the Moffett Park Specific Plan (MPSP) area in the City of Sunnyvale (City). Regionally, the proposed project is in Santa Clara County in the Silicon Valley and in the northwestern area of the City. The Silicon Valley is generally defined as that portion of the Santa Clara Valley that is known for being a technology center. In addition to technology-based companies, Santa Clara County and the Silicon Valley has a diverse urban and natural landscape unique to the southern region of the San Francisco Bay area. The proposed project is located on the southern edge of the San Francisco Bay but is part of a nearly continuous urban landscape extending to the east, south, and west with the neighboring cities including Mountain View, Los Altos, Cupertino, Palo Alto, , San Jose, and Santa Clara. The Silicon Valley is highly urbanized, with concentrations of high-technology centers, old and new residential areas, transportation infrastructure, and downtown settings. On the boundaries of these urbanized and high density uses there are large natural areas including the San Francisco Bay to the north, Santa Cruz Mountains to the southwest, and the Diablo Mountain Range to the east. These natural features generally define the borders of the Silicon Valley. *Figure 3-1: Regional Location Map*, and *Figure 3-2: Local Vicinity Map* shows the project site in relation to its position within the City and major transportation routes. *Figure 3-3: Aerial Photograph of the Proposed Project Site*, provides a view of the overall characteristics of the project site.

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## 2.3 PROJECT DESCRIPTION

The proposed project would result in the demolition of the existing 13 structures and hardscape and redevelopment of the project site with two modern five-story mid-rise structures totaling approximately 1,041,890 sf and housing a total of approximately 4,500 employees. The new buildings have been designed to be consistent with existing as well as future redevelopment efforts in the MPSP. The two proposed structures would be five stories each, and the buildings would share use of the proposed four-story parking garage, surface parking lots totaling 2,092 spaces. Other project amenities including landscaped courtyards, walkways, and alternative transportation elements. The proposed buildings would include office space, amenities/meeting rooms, food service, fitness areas, restrooms and other areas needed for structural circulation and accessibility for employees. The building uses are consistent with other projects in the area and project features are designed to integrate to the existing landscape and surrounding developments, as well as conform with the redevelopment guidelines of the MPSP.

The project site would be re-addressed, and the buildings would be known as 100 West Caribbean Drive and 200 West Caribbean Drive. The westerly structure would be addressed 200 West Caribbean Drive and occupy the portion of the project site west of the West Channel, and the easterly structure would be addressed 100 West Caribbean Drive and occupy the portion of the site east of the West Channel. As mentioned above, the proposed project also includes numerous other amenities and elements that would support operations including shipping and receiving, maintenance areas, health and safety, storage areas,

vehicles and machinery needed to support operations. that are discussed in additional detail in *Chapter 3.0, Project Description*. The proposed site plan is shown in *Figure 3-4: Proposed Site Plan*.

## **Design Concept**

The proposed project has been designed to blend into the existing environment, create greater visual variety, a sense of place, and be unobtrusive to visual interest while establishing its own individual character within the MPSP. The project proposes to use differentiated roof lines that would provide diverse but compatible textures, colors, and materials that would break up the visual building massing that is generally associated with the facades of a five-story building and parking structure. Project design also incorporates sustainability elements that would reduce the overall project footprint. For example, the project's office buildings are designed with unique stepped and sloped green roof lines that would provide a walkable landscaped environment for use by campus personnel. The project's office buildings are designed with unique stepped and sloped green roof lines. The proposed design concepts are shown in *Figure 3-5: Landscape Site Plan*, *Figure 3-6: Project Rendering*, and *Figure 3-7: Proposed Design Concepts*.

## **Transportation and Circulation**

The proposed project does not include the construction of any new roadways but does include an internal circulation plan, access improvements, and installation of a new signalized intersection at the 200 West Caribbean Driveway that would also serve crossings for pedestrians and cyclists and connect to existing and proposed local and regional trails. The project would include an internal network of access roads and driveways needed for vehicle and shuttle bus turnarounds, drop-off pick-up areas, access to the parking structure and surface parking, product delivery and shipping, and access for waste hauling. The project includes two permanent bridge crossings over the Sunnyvale West Channel including one located at the north end (the Pedestrian Bridge) and one at the south end (the Caspian Bridge) that will provide internal connection within the project area. The north channel crossing provides a connection between the 100 and 200 West Caribbean buildings. The south channel crossing provides a pathway connection between the open space area in the southern portion of the site with connectivity to a proposed shuttle stop located off of Bordeaux Drive in the southwest corner of the site. The Caspian Bridge will be constructed of cast-in-place concrete. It will be open to the public for pedestrian and bicycle use, and will accommodate emergency vehicle access.

It should be noted that a third, temporary construction channel crossing is proposed adjacent to the south side of the existing Caribbean Drive channel crossing. This temporary channel crossing would be removed once construction is completed. Additional details regarding vehicle circulation, accessibility and roadway configuration for the proposed project are discussed in *Chapter 3.0, Project Description*.

## **Valley Water's West Channel**

The VW's West Channel bisects the project site from north to south. As part of the project, flood protection along the approximate 1,300 feet of the West Channel would be improved. The improvements

to the West Channel would be similar to those identified within the certified VW EIR but have been modified slightly from the approved design to accommodate the proposed project and enhance flood control, aesthetics, and habitat functionality. Improvements would require approximately 7,843 cubic yards of cut and 69,857 cubic yards of fill. The channel would be reestablished to include two westward meanders of approximately 24 feet and 49 feet and to replicate a natural streambed flow. The reestablished channel would be designed to match the existing low-flow channel and ultimately this would provide enhanced ecological function and deliver enhanced flood protection.

The original Valley Water project proposed to use vertical floodwalls along the channel for freeboard standards and to meet the FEMA 100-year storm event flood protections. The proposed redesign of the levees would provide the same level of flood (100-year protection with 2 feet of sea level rise and an additional 4+ feet of freeboard). The proposed project would maintain sections of floodwalls at the upstream extent of the project reach to conform to Valley Water's floodwall design elevations and would maintain the bridge and culvert modifications. The box culvert also would be extended with new headwall/floodwall to accommodate a sidewalk along West Caribbean Drive (as required by the City of Sunnyvale) and meet the grade and elevation to the new earthen levee top. The proposed project would; however, modify the originally proposed use of vertical floodwalls along the length of the channel and instead, would widen the existing bank to bank width of the channel to between 52 to 65 feet and the total width of the channel from 127 to 187 feet. The top levee would be raised to an elevation of 18 feet.

The levees would be laid back and contour graded with meanders to facilitate native vegetation growth and to create a functional habitat for plants and wildlife. Improvements would allow for the average channel velocities to be reduced from 0.92 to 0.78 foot per second. The disturbed areas would be revegetated and a habitat mitigation/restoration plan for the enhancement of wetland and riparian habitat would be implemented.

The proposed improvements would require some additional grading to accommodate the low-flow storm drainage channel and associated flood plains, and for construction of two new pedestrian bridge crossings (one bridge crossing would accommodate emergency vehicles). VW maintenance vehicles would still be authorized to use the proposed pathways on the levee tops. In addition, an existing 54-inch stormwater pipe that runs along the West Channel will be relocated approximately 110 feet to the west of its current location.

To accommodate the improvements, the proposed project would require temporary diversion of flows within the project reach of the West Channel. The channel would be dewatered using an AquaDam system and an earthen coffer dam spanning the full width of the channel. High-density polyethylene (HDPE) piping would be used to convey the water around the construction reach and a riprap or equivalent energy flow dissipater device would be installed at the system discharge point. This design is intended to prevent erosion, sedimentation and siltation from occurring. If groundwater seepage occurs within the dewatered reach, pumps would be used to discharge the seepage flows to intakes HDPE trunk line. In accordance with standard best management practices, water quality monitoring and testing with contingency plans for parameter exceedances or system upsets two days prior to and one day installation and removal of the dewatering system, respectively.

Construction of the proposed West Channel improvements would primarily occur over the course of two construction seasons (April 15-October 31) in 2021 and 2022. Dewatering is anticipated to occur from April 15-October 31 during this time. The proposed design requires final approval by Valley Water and would provide at a minimum, an equivalent level of flood protection through the project reach and will not compromise flood protection at this location or any other reach of Valley Water's overall project.

In sum, these modifications to the original design are intended to enhance the creek corridor and improve habitat value while providing flood protection and enhancing campus aesthetics, recreational opportunities and environmental resources for wildlife. Overall, the channel has been designed to integrate into the existing regional flood control and drainage plan and would be adaptable to future climate conditions.

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## **2.4 AREAS OF CONTROVERSY**

Pursuant to CEQA Guidelines Section 15123(b)(2), this EIR acknowledges the areas of controversy and issues to be resolved that are known to the City of Sunnyvale and/or were raised during the EIR scoping process. These issues were identified during the NOP review period. Five comment letters were received from agencies, organizations, and individuals in response to the NOP comment period (May 1, 2019 through May 31, 2019). These comments on the NOP are included in Appendix A.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters:

Issue Area:	Concerns Related To:
<p><b>Traffic</b> <b>(EIR Chapter 4.1)</b></p>	<ul style="list-style-type: none"> <li>• Include Transportation Demand Management (TDM) Program</li> <li>• Reduce parking significantly for consistency with MTRC's RTP/SCS goals</li> <li>• Incorporate measures listed in letter to promote smart mobility and reduce regional VMT</li> <li>• Provide connections to existing bike lanes and multi-use trails (Sunnyvale Bay Trail Class 1 Bike Path)</li> <li>• Consider fair share contributions to (2) Express Lane projects on SR237 and US 101</li> <li>• Municipal and CMP intersections with 10 or more project trips per approach lane should be analyzed</li> <li>• Analyze adequacy of Google's proposed parking plan-</li> </ul>
<p><b>Air Quality</b> <b>(Initial Study Checklist Section 4.3)</b></p>	<ul style="list-style-type: none"> <li>• EIR should evaluate AQ and GHG.</li> <li>• Air District urges City to evaluate AQ and GHG as key environmental issue in EIR.</li> <li>• Transportation impacts associated with demo of 1362 Borregas Ave building should be included in Project description, project location, AQ and GHG analysis.</li> <li>• Estimate and evaluate the potential health risk to existing and future sensitive populations within the Project area from toxic air contaminants (TAC) and fine particulate matter (PM<sub>2.5</sub>) as a result of the project's construction and operation.</li> <li>• Executive Order (EO) S-13-08 directs state agencies planning construction projects in areas vulnerable to sea level rise to begin planning for potential impacts by considering a range of sea level rise scenarios for years 2050 and 2100.</li> </ul>
<p><b>Public Services</b> <b>(Initial Study Checklist Section 4.19)</b></p>	<ul style="list-style-type: none"> <li>• Emergency response during peak traffic hours should be analyzed</li> <li>• EIR should measure the combination of additional traffic trips generated by this project over current conditions and those trip's impacts on response times</li> <li>• Analyze impacts to response times and workloads due to high-rise buildings.</li> <li>• Avoid piecemeal approach to development and incorporate plans for residential and further commercial development into analysis/ cumulative impacts of development</li> </ul>



## 2.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2 (b) of the CEQA Guidelines requires an EIR to “describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”

The specific mitigation measures summarized in Table ES-1 would reduce the level of project-specific significant impacts to less than significant. Similarly, many impacts are identified that would be less than significant without the need for additional mitigation measures. Significant and unavoidable impacts were identified in the analysis.

### SIGNIFICANT PROJECT-LEVEL EFFECTS

#### Transportation

Significant traffic impacts associated with the proposed project would be significant and unavoidable for impacts associated with a cumulatively significant and unavoidable intersection impact at Mathilda Avenue/Sunnyvale Saratoga Road-Talisman Drive.

There is no feasible mitigation to reduce this impact to less than significant. To reduce impacts, restriping of the westbound approach to a two left-turn lane and one shared-left through-right lane would be needed to improve cumulative operations to an acceptable LOS for PM peak hour conditions. This improvement; however, is not considered feasible as it would require signal timing changes that would disrupt the current signal coordination of the Mathilda Avenue-Sunnyvale Saratoga Road corridor and create new and additional significant traffic impacts along the corridor. There is no other feasible mitigation that is available to reduce this impact because this project is located in a developed urban area and there is limited right-of-way available to add capacity to the intersection. Per Chapter 3.50 of the Sunnyvale Municipal Code, the proposed project would be required to pay the City's Transportation Impact Fee (TIF). The purpose of the TIF is to help provide adequate transportation-related improvements to serve cumulative development within the city. However, with payment of the fee, the impact at the intersection would remain. Therefore, this impact would be significant and unavoidable.

## 2.6 ALTERNATIVES TO THE PROJECT

Chapter 6 of this TEIR evaluates alternatives to the proposed project in accordance with the CEQA Guidelines Section 15126.6. The analysis of project alternatives takes into consideration the base assumption that all applicable mitigation measures associated with the project would be implemented with the appropriate alternatives. However, applicable mitigation measures may be scaled to reduce or avoid the potential impacts of the alternatives under consideration and may not precisely match those identified for the project. If a specific impact is not raised within the discussion of an alternative, it is because the effect is expected to be the same as that associated with the implementation of the proposed

project. Detailed descriptions and analyses of the project alternatives can be found in Chapter 6 (Alternatives). The following is a summary of the alternatives evaluated in this TEIR.

## **ALTERNATIVE 1: NO PROJECT ALTERNATIVE**

The No Project Alternative assumes the proposed project would not be implemented and land uses and other improvements would not be constructed. The existing project site would remain unaltered and in its current condition. All infrastructure improvements including water, wastewater, drainage, and roadway improvements identified in the proposed project would not be constructed. Because the project site would remain unchanged, few or no environmental impacts would occur. This alternative serves as the baseline against which the effects of the proposed project and other project alternatives are evaluated. Under this alternative none of the proposed improvements would occur. The project would remain undeveloped.

- None of the impacts associated with the project would occur.
- Baseline growth (without project) would still occur.
- No improvement to the West Channel and environmental enhancements of biological resources or functionality would occur.
- Increases in vehicular traffic would not occur.
- Continuing redevelopment efforts under the MSPS would not occur.

## **ALTERNATIVE 2: SINGLE BUILDING ALTERNATIVE**

The Single Building Alternative is proposed as an alternative that would reduce the amount of traffic generated from the project. This alternative proposes one single office building or approximately half of the traffic generating development compared to the proposed project. Similar to the proposed project, all of the existing buildings onsite would be demolished. Under this alternative, the building located at 200 West Caribbean would not be constructed, nor would the proposed parking garage. This portion of the property would be developed for surface parking with up to 1,000 parking spaces to support the proposed building at 100 West Caribbean. As with the proposed project, this building would be approximately 536,750 square feet with a maximum building height of 120.5 feet. The building would support approximately 2,200 employees. Under this alternative the two proposed bridges over the Sunnyvale West Channel would not be constructed. Pedestrian access from the parking lots would be from existing sidewalks along Caribbean Avenue. The remaining development at the 100 West Caribbean site would be the same of the proposed project. The temporary construction office and construction parking would be located on the 200 West Caribbean site and a temporary construction office and construction parking located offsite would not be required or constructed.

The environmentally superior alternative to the proposed project is the one that would result in the fewest or least significant environmental impacts. Based on the evaluation undertaken, Alternative 2: Single Building Alternative is the environmentally superior alternative.

## 2.7 TRUSTEE AND RESPONSIBLE AGENCIES

For the purpose of CEQA, the term *trustee agency* means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the state of California. Specifically, the following trustee agencies may have an interest in the proposed project and its implementation:

- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- California Department of Transportation

In CEQA, the term *responsible agency* includes all public agencies other than the lead agency that may have discretionary actions associated with the implementation of the proposed project or an aspect of subsequent implementation of the proposed project. Since potential future implementation decisions may occur years from now, they cannot be known with certainty. However, the following agencies may have some role in implementing the proposed project and have been identified as potential responsible agencies:

- Valley Water
- Bay Area Air Quality Management District
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- United States Army Corps of Engineers
- Federal Aviation Administration
- Occupational Safety and Health Administration
- United States Fish and Wildlife Service
- California Department of Transportation
- San Francisco Bay Conservation and Development Commission

## 2.8 ENVIRONMENTAL IMPACT SUMMARY

Table ES-1, *Project Impacts and Proposed Mitigation Measures*, has been organized to correspond with the environmental issues discussed in Chapter 4 of this TEIR. The summary table is arranged in four columns:

- Environmental impacts ("Impact").
- Level of significance without mitigation ("Significance Before Mitigation").
- Mitigation measures ("Mitigation Measure").



- The level of significance after implementation of mitigation measures (“Significance After Mitigation”).

If an impact is determined to be significant or potentially significant, mitigation measures are identified, where appropriate and feasible. More than one mitigation measure may be required to reduce the impact to a less-than-significant level. This TEIR assumes that all applicable plans, policies, and regulations would be implemented, including, but not necessarily limited to, City General Plan policies, laws, and requirements or recommendations of the City planning staff or City Council.

Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each issue area and within the relevant impact analysis. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in *Chapter 1.0, Introduction*.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Chapter 4.1 – TRANSPORTATION</b>			
<b>Impact TRANS-1:</b> Would the proposed project result in impacts on intersection operating conditions (including unsignalized intersections)?	Less Than Significant	<b>No mitigation measures are required.</b>	Less than Significant
<b>Impact TRANS-2:</b> Would the proposed project result in impacts on freeway segment operations?	Less Than Significant.	<b>No mitigation measures are required.</b>	Less Than Significant.
<b>Impact TRANS-3:</b> Would the proposed project result in impacts on freeway ramp operations?	Less Than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TRANS-4 –</b> Would the proposed project result in impacts on Project Access Driveways, Throat Lengths, and Sight Distance?	Less Than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TRANS-5:</b> Would the proposed project result impacts on transit facilities?	Less than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TRANS-6:</b> Would the proposed project result impacts on bicycle facilities?	Less than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TRANS-7:</b> Would the proposed project result impacts on pedestrian facilities?	Less Than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Impact TRANS-8:</b> Would the proposed project result impacts on emergency services and access?	Less Than Significant Impact	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Cumulative Impacts</b>	Potentially Significant Impact	<b>No feasible mitigation measures have been identified.</b>	Significant and Unavoidable





Source: Google Maps, 2019

**FIGURE 3-1:** Regional Location Map  
Google Caribbean Campus




Not to scale

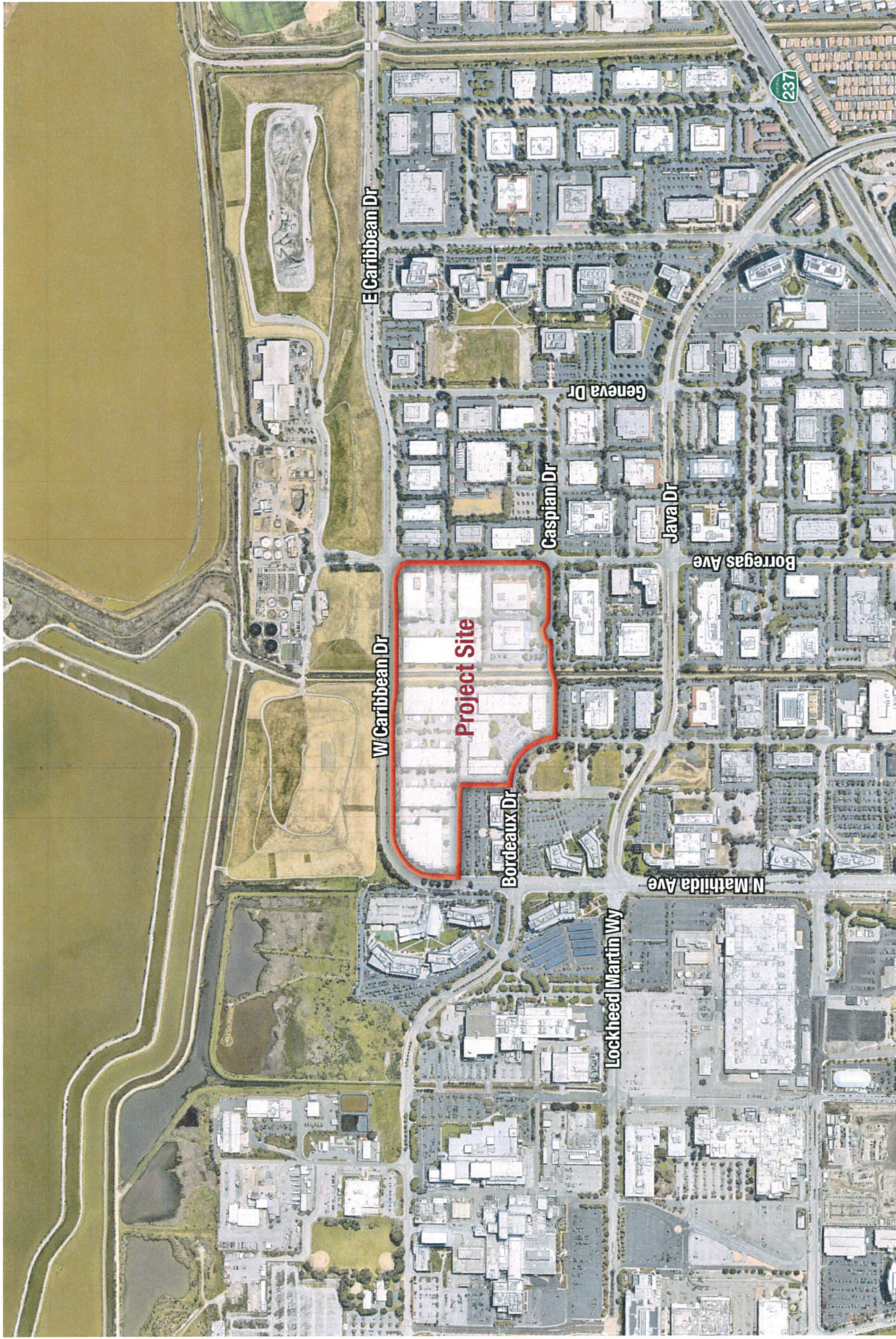
**Kimley»Horn**





 Not to scale





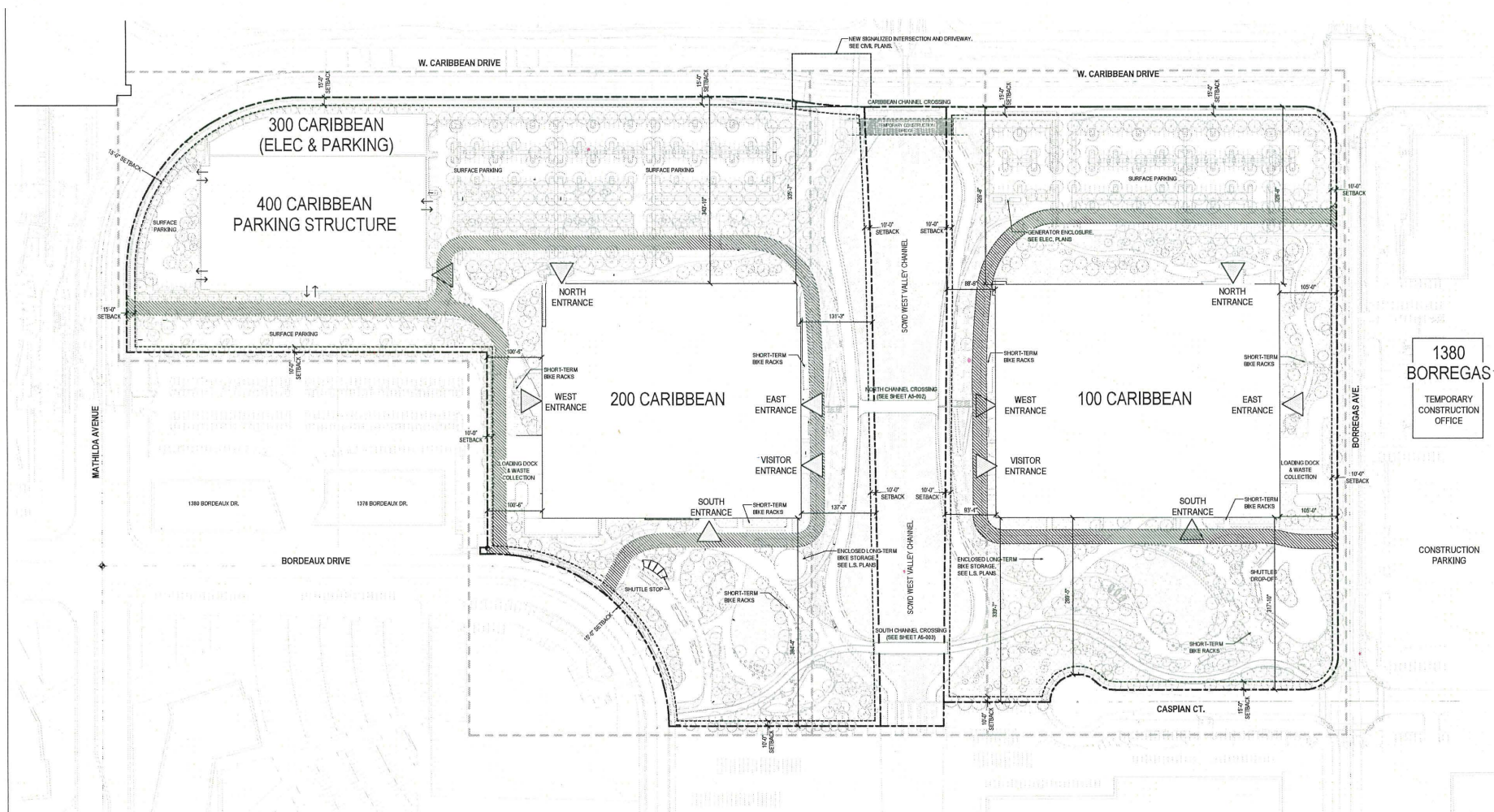
Source: Google Maps, 2019

**FIGURE 3-3:** Aerial Photograph  
Google Caribbean Campus



Not to scale

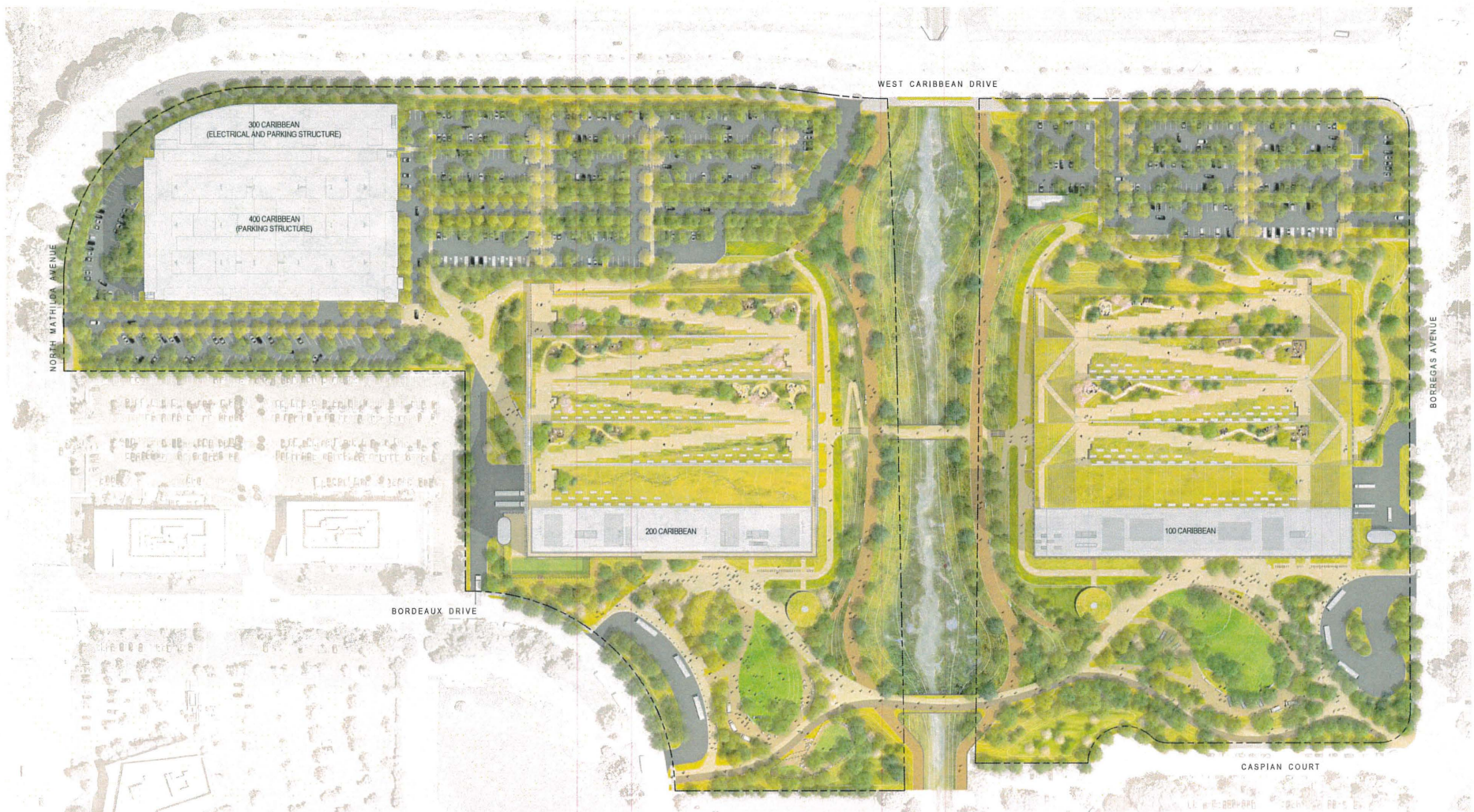




**FIGURE 3-4:** Proposed Site Plan  
Google Caribbean Campus







**FIGURE 3-5:** Landscape Site Plan  
Google Caribbean Campus



Not to scale

**Kimley»Horn**



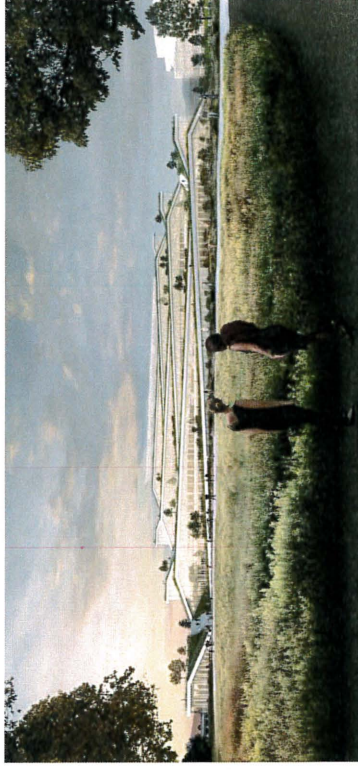


**FIGURE 3-6:** Project Rendering  
Google Caribbean Campus





5 AERIAL VIEW OF BUILDINGS AND LAND



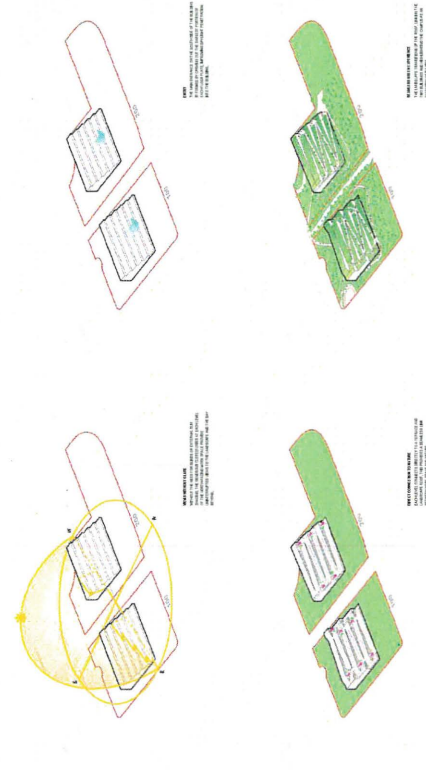
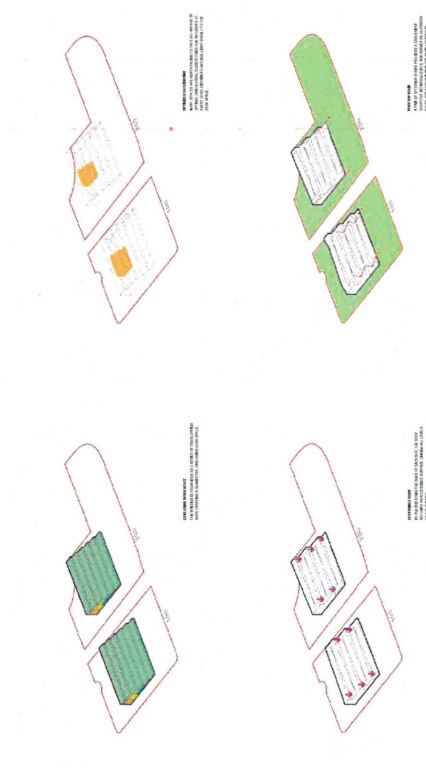
4 NORTH FACADE - BUILDING 100



3 GREEN ROOF - BUILDING 100



2 SOUTH VIEW OF BUILDING 100



**FIGURE 3-7:** Proposed Design Concepts  
Google Caribbean Campus

