

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072, as amended to date, this notice is to advise you that the City of Palo Alto has prepared an Initial Study on the following project to evaluate the environmental impacts of the project identified below. The Initial Study concludes that the project described below would not have a significant effect on the environment, and therefore, the City proposes to adopt a Mitigated Negative Declaration (MND). The purpose of this notice is to inform the public of the City's intent to adopt a MND for the project, and to provide an opportunity for public comments on the draft MND/Initial Study.

TO: AGENCIES, ORGANIZATION, + INTERESTED PARTIES	The City of Palo Alto requests comments and concerns from agencies, organizations and interested parties regarding the environmental issues associated with construction and operation of the proposed project.
PROJECT TITLE	3223 Hanover Street
PROJECT APPLICANT	Steep Slope Property Company/Sand Hill Property Company
PROJECT LOCATION	3223 Hanover Street, Palo Alto, CA 94304
PROJECT DESCRIPTION	

PUBLIC HEARING / QUASI-JUDICIAL. 3223 Hanover Street [16PLN-00190]: Major Architectural Review to allow the demolition of two existing office / R&D buildings and the construction of a new two-story 110,000 square foot office / R&D Building, two-level parking structure, and associated site improvements on the site located at 3223 Hanover Street. Zoning District: Research Park RP; and Research Park with Landscape Combining District; RP(L).

PUBLIC REVIEW PERIOD

This NOI and the Draft Initial Study and Mitigated Negative Declaration are available for public review and comment pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072. The comment period begins on Wednesday, February 22, 2017 and ends on Monday, March 13, 2017. This NOI and the Draft Initial Study and Mitigated Negative Declaration may be reviewed at the Planning and Community Environment office at 250 Hamilton Avenue in Palo Alto or online at

http://www.cityofpaloalto.org/planningprojects.

The Architectural Review Board (ARB) is anticipated to consider the project as part of its regularly scheduled meeting on March 2, 2017. The meeting will start at 8:30 AM and will be held at the City of Palo Alto Council Chambers, located in City Hall at 250 Hamilton Avenue The meeting agenda will be posted to the ARB's website. Interested parties should check the ARB agenda on the City's website to confirm the meeting time, date, and location:

http://www.cityofpaloalto.org/gov/boards/architectural.asp

Please send comments by mail or email, before 5:00 PM on March 13, 2017, to:

Graham Owen, Associate Planner

COMMENTS

PUBLIC HEARING

City of Palo Alto 250 Hamilton Avenue Palo Alto, CA 94301 Graham Owen <u>graham.owen@cityofpaloalto.org</u>

If you require additional project information, please contact Graham Owen at 650-329-2552

Associate Planner Graham Oven Sianature (Public Agency) Date

3223 Hanover Street Office Project

Initial Study



Planning Project #16PLN-00190

February 2017

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SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study (IS) of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of Palo Alto. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from implementation of the proposed 3223 Hanover Street Office Project.

Mitigation measures are identified for all potentially significant project impacts. Mitigation Measures are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guideline 15370). Measures that will be required by the City of Palo Alto as project Conditions of Approval are also listed, as appropriate.

The City of Palo Alto is the Lead Agency under CEQA and has prepared this Initial Study to address the environmental impacts of implementing the proposed project.

SECTION 2.0 PROJECT INFORMATION

2.1 **PROJECT TITLE**

3223 Hanover Street Office Project

2.2 PROJECT LOCATION

The approximately 10.17-acre project site is located in the Stanford Research Park in western Palo Alto on Assessor's Parcel Number (APN) 142-17-039. Regional and vicinity maps of the site are shown on Figures 1 and 2, and an aerial photograph of the project site and surrounding area is shown on Figure 3.

Please Note: The project site was formerly part of the property designated as 3251 Hanover Street. This address included several buildings occupied by Lockheed Martin Corporation, including the buildings on the project site (Lockheed Buildings 204 and 205). In 2016, a new lease line was established to separate the 10.17-acre project site from the southern 12.5-acre portion of the former parcel 142-17-017. The adjacent building to the south on the parcel will retain the 3251 Hanover Street address (Lockheed Building 203) on APN 142-17-038 (refer to Figure 3). The new site address is 3223 Hanover Street.

2.3 LEAD AGENCY CONTACT

Graham Owen, Associate Planner Planning and Community Environment Department City of Palo Alto 250 Hamilton Avenue Palo Alto, CA 94301 (650) 329-2552

2.4 **PROJECT PROPONENT**

Property Owner:

The Board of Trustees of the Leland Stanford Junior University 3160 Porter Drive, Suite 200 Palo Alto, CA 94304 Project Applicant: Allison Koo Steep Slope Property Company/ Sand Hill Property Company 2882 Sand Hill Road, Suite 241 Menlo Park, CA 94025

2.5 APPLICATION NUMBER

16PLN-00190

2.6 EXISTING COMPREHENSIVE PLAN AND ZONING DISTRICT

Comprehensive Plan: Research/Office Park

Zoning District: Research Park (RP) with Landscape Combining District (RP(L))

2.7 EXISTING SITE CONDITIONS

The 10.17-acre site is developed with two, single-story mid-century office/research and development (R&D) buildings containing approximately 110,384 square feet of space. Until recently, the buildings were occupied by Lockheed Martin Corporation, and represent a portion of the company's campus in Palo Alto.

The existing buildings are accessed from Hanover Street, and the site contains surface parking lots and landscaping. Approximately 316 trees are located on or immediately adjacent to the project site.

The site is located within an existing research industrial park with residential uses adjacent to the southeastern (rear) property line. Nearby properties in the research park are mostly comprised of similar two-story contemporary office/R&D buildings surrounded by surface parking lots.

The residential neighborhood to the east (rear) is characterized by large lots with single-family residences. The Bol Park bike path is located along the north property line and provides connection to the citywide bicycle network. There is currently no direct connection from the bike path to the property.







3.1 SITE DEVELOPMENT

3.1.1 <u>Project Description</u>

The project proposes to demolish two existing one-story office/R&D buildings containing approximately 110,384 square feet of developed space. The project would also remove existing surface parking lots, driveways, and a portion of the landscaping and trees on site.

The project would construct a new two-story, 115,500 square foot office building on the site. The new building would have approximately the same square footage as the existing building, including approximately 5,500 square feet of amenity space.¹ The project includes a two-level underground parking garage and surface parking above a portion of the garage.

New landscaping, trees, pedestrian paths, and pedestrian and bicycle access and courtyard would be installed as part of the project. The site is slightly sloping, and the new building would be constructed on the upper terrace, at the approximate location of the existing building, with the garage underground below the building on the mid-level terrace. The project includes a 50 foot special landscape setback from Hanover Street and a 50-foot *Landscaping Combining District (RP(L))* from the east (rear) property lines, and several mature trees would be preserved in this area. The proposed site plan includes landscape berms and hedges at portions of the southern and eastern boundaries.

The building's main roof would be at or below 35 feet above grade, which would be consistent with the zoning requirements for the *Research Park District (RP)*.

3.1.2 <u>Comprehensive Plan and Zoning</u>

The project site is designated *Research/Office Park* in the City's Comprehensive Plan. This land use is described as "office, research, and manufacturing establishments whose operations are buffered from adjacent residential uses," of which Stanford Research Park is an example. The maximum allowable floor area ratio (FAR)² for this designation ranges from 0.3 to 0.5, depending on site conditions.

The project site is located within the *Research Park (RP)* and *Research Park with Landscape Combining District (RP(L))* under the City's Zoning Ordinance. The (L) combining district functions as an overlay at the rear of the property, and extends for a distance of 50 feet parallel to the rear property line.

¹ Under the Palo Alto Municipal Code (18.04.030(65)(B)(v)), amenity space is exempted from the gross building floor area. These areas are designed and used solely for on-site employee amenities that would facility the reduction of employee vehicle usage. Such additions may include, but are not limited to, recreational facilities, credit unions, cafeterias day care centers, automated teller machines, convenience stores, and dry cleaners.

 $^{^{2}}$ Floor area ratio is defined as (FAR) is the ratio of a building's total floor area (gross floor area) to the size of the piece of land upon which it is built.

Properties to the west (across Hanover Street), south, and north have the same zoning designation as the subject site. To the east of the site, properties are zoned *Residential Estate District (RE)*.

The project does not propose a Comprehensive Plan amendment or rezoning.

3.1.3 <u>Access, Circulation, and Parking</u>

The existing driveway curb cut on Hanover Street would be retained for vehicle use. A driveway would provide vehicle access to a two-level underground parking garage with 360 vehicle spaces. The garage would have two entry points, one for each level. A 26-space surface lot is also proposed, for a site total of 386 parking spaces.

Pedestrians and bicyclists would access the site at a new mid-block access point from the sidewalk to a courtyard. The project would provide 30 long-term and seven short-term bicycle parking spaces. Bicycle routes are available in the vicinity of the project, including a direct connection to the neighboring Bol Park bike path from the site.

Bus stops for eastbound and westbound VTA, AC Transit, and Stanford Marguerite bus routes are located near the project site on Hanover Street. Access to the site from bus stops would continue to be provided by pedestrian facilities (sidewalks and crosswalks) on Hanover Street. As a component of the project, the two bus stations in the immediate vicinity of the site would be relocated to more advantageous locations near the site drive aisle.

3.1.4 <u>Tree Resources</u>

The project would remove trees and landscaping in the existing parking lot and within the footprint of the proposed building and underground parking garage. The project would retain 43 City of Palo Alto protected trees and transplant four protected trees. Of the trees not protected under the Palo Alto Municipal Code, the project would remove 71 trees and would retain 188.

3.2 USES OF THE INITIAL STUDY

This Initial Study (IS) provides decision-makers in the City of Palo Alto (the CEQA Lead Agency), responsible agencies, and the general public with relevant environmental information to use in considering the project. This IS may also be relied upon for other agency approvals necessary to implement the project.

The project would require the following approvals from the City of Palo Alto:

- Architectural Review
- Building, Demolition, and Grading Permit(s)
- Tree Removal Permit









SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. Mitigation Measures are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guideline 15370).

4.1 **AESTHETICS**

4.1.1 <u>Aesthetics Environmental Checklist</u>

We	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Substantially degrade the existing visual character or quality of the site and its surroundings?			\square		1
b.	Significantly alter public viewshed or view corridors or scenic resources (such as trees, outcroppings, or historic buildings) within a state scenic highway?				\square	1,2,3,4
c.	Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?			\square		1
d.	Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?					1

4.1.2 Existing Setting

4.1.2.1 Visual Character of the Site and Views from Public Vantage Points

The two existing buildings on the site are single-story mid-century office/R&D buildings that were constructed for industrial purposes by Lockheed Martin Corporation, and which were completed in 1957. The site was originally part of a 22-acre, five building campus. The site includes industrial and mechanical equipment between the two buildings, and trash enclosures and other structures at the rear of the buildings. The southernmost buildings (Building 204) reaches a height of approximately

24 feet, and the northernmost building (Building 205) reaches a height of 33 feet at the highest projection. A small building was added in 1960 to connect Buildings 204 and 205.

Although generally constructed as unadorned industrial buildings of tilt-up construction, the buildings contain a number of projections and overhangs and appear from the street as one structure. The building fronts are long and low with linear elements and the use of aluminum and metal-framed glazing. The roofs contain a large amount of mechanical structures and equipment, slightly visible from Hanover Street.

The existing structures were constructed on a terraced pad, with the remaining buildings of the former Lockheed Martin campus above the project site on two additional terraces. Pedestrian stairs lead from the parking lot to the north building entrance, and a vehicle ramp leads upslope to the east (rear) entrance.

The site is visible from Hanover Street, although much of the site and facades are obscured by trees and shrubs. The existing buildings are visible to a lesser extent from the Bol Park Bike Path, adjacent to the northern border of the site, although the bike path is located across the parking lot and is lower in elevation than the building and the parking lot.

The site is not located on a scenic view corridor; nor is it visible from a designated or eligible State scenic highway.

4.1.2.2 Surrounding Visual Setting

The site is located within an existing research park with residential uses adjacent to the southeastern (rear) property. Page Mill Road, a major thoroughfare in the city, is just west of the project site. Nearby properties in the research park are mostly comprised of similar two-story contemporary office/R&D buildings surrounded by surface parking lots.

The residential neighborhood to the east (rear) is characterized by large lots with single-family residences, which are not visible from Hanover Street. The Bol Park bike path is located along the north parcel line and provides connection to the citywide bicycle network. There is currently no direct connection from the bike path to the property.

Due to the hill rising south of the project, the Santa Cruz Mountains are not visible from street level in the vicinity of the project site.

4.1.3 <u>Impacts Evaluation</u>

a. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The project would demolish the two one-story office/R&D buildings on the project site, and would replace them with a two-story building of contemporary design. The proposed building would be constructed with a variably sloping roof line, glass cladding, and overhangs.

As shown on Figure 6 (Conceptual Elevations, South and East), existing light brown facades generally blend in with the mature landscape trees between the street and industrial buildings when viewed from Hanover Street. The proposed building, due to its overall height, materials, and placement on the terrace lot, would be more visually prominent than the existing structures. Trees to be retained on the site and new plantings would modify views of the new building, though more of the built environment would be visible from public vantage points.

Mechanical equipment would be behind roof screens setback from the roof parapet (see Figures 5, 6, and 7). The proposed mechanical equipment screens would extend to 42 feet above the roof, which is consistent with the City's zoning standards for building height.

The project is subject to architectural review and approval by the City through the Architectural Review process, which ensures compliance with City standards to promote visual environments that are of high aesthetic quality and variety. Implementation of the project in conformance with the final determination of the City's architectural review process would avoid adverse effects on the visual quality of the site or the area. **[Less Than Significant Impact]**

b. Would the project significantly alter public viewshed or view corridors or scenic resources (such as trees, outcroppings, or historic buildings) within a state scenic highway?

The project site is not located along a state scenic highway or scenic gateway. Due to the sloping nature of the site and the presence of mature street trees, views of the project site are limited to the immediate area. Redevelopment of the office uses on the site would not modify identified scenic resources or views of scenic resources in Palo Alto.

The project would remove a number of smaller trees not protected under the Palo Alto tree ordinance and retain a number of the existing mature oaks and other protected trees on the site. Trees removed would be replaced as required to comply with the City of Palo Alto Tree Technical Manual requirements, as described in Section 4.4. This replacement would provide for the long-term retention and enhancement of the urban forest of Palo Alto and the Stanford Research Park area.

As noted above, implementation of the City's design review and approval process would limit and avoid adverse effects on the visual quality of the building environment on the site and in the area. For these reasons, the project would not result in a substantial adverse effect on a scenic vista, public view, or view corridor. There are no rock outcroppings on site, and the site is not visible from a state scenic highway. **[Less than Significant Impact]**

c. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The project site is located in an urban area, which has been developed since the 1950's with the existing sources of light and glare. New lighting would be installed on the proposed building and would be controlled to minimize spillover beyond the property lines. A preliminary photometric plan and lighting details provided in the project plans indicate that

site lighting would be minimal at the property lines. Additionally, existing and proposed vegetative screening and proposed earthen berms and retaining walls between the site and the adjacent residences along the rear would provide a light buffer which would prevent glare from the building and site.

The lighting on site would be required to meet the City's standards, which restrict light levels. **[Less Than Significant Impact]**

d. Would the project substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?

The proposed project site includes 50-foot landscape buffers on the east and west sides, and a native meadow on the north side nearest the Bol Park bike path. The proposed building would not shade the bike path or other public open space. For these reasons, the project would not result in a shade and shadow impact. **[Less Than Significant Impact]**

4.1.4 <u>Conclusion</u>

Implementation of the proposed project would not result in significant adverse visual or aesthetic impacts. **[Less than Significant Impact]**

4.2 AGRICULTURAL AND FORESTRY RESOURCES

W	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\square	1,2,5
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\square	1,3,5
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Public Resources Code section 51104(g)?					3,5
d.	Result in a loss of forest land or conversion of forest land to non-forest use?				\square	1
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					1

4.2.1 Agricultural and Forestry Resources Environmental Checklist

4.2.2 Existing Setting

The project site is not designated as farmland or forest land. According to the *Santa Clara County Important Farmland 2012* map, the project site is designated as Urban and Built-Up Land, meaning that the land contains a building density of at least six units per 10-acre parcel or is used for industrial or commercial purposes, golf courses, landfills, airports, or other utilities.

4.2.3 <u>Impacts Evaluation</u>

a. - b. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use? Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

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The project site is not designated, used, or zoned for agricultural or forestry purposes. The project site is not part of a Williamson Act contract. For these reasons, the proposed project would not result in impacts to agricultural or forest resources. **[No Impact]**

c. - d. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Public Resources Code section 51104(g)? Would the project result in a loss of forest land or conversion of forest land to non-forest use?

The project site is not zoned for forestland or used for forestry. The surrounding area is not used or zoned for timberland or forest land. The project would not impact timberland or forest land. **[No Impact]**

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

According to the *Santa Clara County Important Farmland 2012* map, the project site and surrounding area is Urban and Built-Up Land. The development of the project site would not result in conversion of any forest or farmlands. **[No Impact]**

4.2.4 <u>Conclusion</u>

Implementation of the proposed project would not result in an impact to agricultural or forestry resources in the area. **[No Impact]**

4.3 AIR QUALITY

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Conflict with or obstruct implementation of the applicable air quality plan (such as the 2010 Clean Air Plan or the 2001 Ozone Attainment Plan)?					1,2,3,6,7
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation indicated by the following:			\square		1,2,3,6,7
i.	Direct and/or indirect operational emissions that exceed the Bay Area Quality Management District (BAAQMD) criteria air pollutants of 54 pounds per day and/or 10 tons per year for nitrogen oxides (NO), reactive organic gases (ROG), and fine particulate matter of less than 10 microns in diameter (PM ₁₀);					1,2,3,6,7
ii.	Contribute to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of nine parts per million (ppm) averaged over eight hours or 20 ppm for one hour (as demonstrated by CALINE4 modeling, which would be performed when a) project CO emissions exceed 550 pounds per day or 100 tons per year; or b) project traffic would impact intersections or roadway links operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E, or F; or c) project would increase traffic volumes on nearby roadways by 10% or more)?					1,2,3,6.7
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?					1,3,6.7
d.	Expose sensitive receptors to substantial pollutant concentrations?			\square		1,3,6.7

4.3.1 <u>Air Quality Environmental Checklist</u>

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
i.	Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million?			\square		1,3,6.7
ii.	Ground-level concentrations of non- carcinogenic TACs would result in a hazard index greater than one (1) for the MEI;			\square		1,3,6,7
e.	Create objectionable odors affecting a substantial number of people?				\square	1,3,6,7

The discussion in this section is based in part on an air quality analysis completed by *Ramboll Environ* on July 25, 2016. This memorandum is attached to this Initial Study as Appendix A.

4.3.2 Existing Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as "criteria pollutants," because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter (PM).

4.3.2.1 Regional Air Quality

The project site is located within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin.

The Federal Clean Air Act and the California Clean Air Act require that the CARB, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standard are not met as "nonattainment areas." Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

The Bay Area is considered a non-attainment area for ground-level ozone and $PM_{2.5}$ under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10} , the BAAQMD has established thresholds

of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM_{10} , and $PM_{2.5}$ and apply to both construction period and operational period impacts.

Clean Air Plan

Regional air quality management districts such as BAAQMD must prepare air quality plans specifying how state standards will be met. BAAQMD has adopted the *2010 Clean Air Plan* (2010 CAP), which provides a comprehensive plan to improve Bay Area air quality and protect public health, taking into account future growth projections to 2035.

4.3.2.2 Toxic Air Contaminants

Toxic Air Contaminants (TACs) are defined as air pollutants that may cause or contribute to increases in serious illness or death, or that may pose a present or potential hazard to human health. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a highway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state and federal level. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Diesel Particulate Matter

Diesel exhaust, in the form of diesel particulate matter (DPM), is the predominant TAC in urban air with the potential to cause cancer. It is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). The U.S. EPA and the CARB have adopted low-sulfur diesel fuel standards in 2006 that reduce diesel particulate matter substantially. The CARB recently adopted new regulations requiring the retrofit and/or replacement of construction equipment, on-highway diesel trucks and diesel buses in order to lower fine particulate matter (PM_{2.5}) emissions and reduce statewide cancer risk from diesel exhaust.

4.3.2.3 Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. The closest sensitive receptors are residential neighborhoods adjacent to the project site to the east that are assumed to include infants and small children.

4.3.3 <u>Impacts Evaluation</u>

a. Would the project conflict with or obstruct implementation of the applicable air quality plan (such as the 2010 Clean Air Plan or the 2001 Ozone Attainment Plan)?

The proposed project would not substantially increase the development on the site or in the City. The proposed project would not conflict with or obstruct implementation of any air

quality plan since the size of the developed space would not substantially change, and the proposed project would not support substantial additional jobs or cause an increase in the population within the City. **[Less Than Significant Impact]**

- b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation, indicated by the following:
 - i. Direct and/or indirect operational emissions that exceed the Bay Area Quality Management District (BAAQMD) criteria air pollutants of 54 pounds per day and/or 10 tons per year for nitrogen oxides (NO), reactive organic gases (ROG), and fine particulate matter of less than 10 microns in diameter (PM₁₀); or,
 - ii. Contribute to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of nine parts per million (ppm) averaged over eight hours or 20 ppm for one hour (as demonstrated by CALINE4 modeling, which would be performed when a) project CO emissions exceed 550 pounds per day or 100 tons per year; or b) project traffic would impact intersections or roadway links operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E, or F; or c) project would increase traffic volumes on nearby roadways by 10% or more)?

Criteria Air Pollutants and Precursors

<u>Construction</u>: The total criteria pollutant emissions from construction activities were estimated using the CalEEMod model defaults for the proposed project, and emissionreduction strategies were used to refine the default model equipment assumptions. Total estimated construction-related criteria pollutant emissions were divided by the estimated construction days in one year to estimate the average daily construction emissions (in pounds per day).

Based on the air quality analysis completed for the project (Appendix A), the project's construction exhaust-related emissions of reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed the BAAQMD significance thresholds, as shown in Table 4.3-1.

Table 4.3-1: Operational and Construction Emissions from the Project								
DescriptionROGNOxPM10PM2.5								
Operational Emissions (tons per year)	1.8	1.2	0.9	0.2				
BAAQMD Thresholds (tons per year)	10	10	15	10				
Operational Emissions (pounds per day)	9.9	6.6	4.8	1.4				
Construction Emissions (pounds per day)	5	45	0.7	0.7				
BAAQMD Thresholds (pounds per day)	54	54	82	54				
Exceedance:	No	No	No	No				
Refer to Appendix A, Table 2.								

BAAQMD's CEQA threshold of significance for construction fugitive dust is the implementation of best management practices (BMPs). The project will be required to implement these BMPs as City of Palo Alto conditions of approval, as follows:

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

<u>Operations</u>: Operational-related criteria air pollutant emissions are due to area sources (e.g., fuel combustion, use of consumer products, etc.) and mobile sources (e.g., employee, visitor, vendor and delivery trips). As shown in Table 4.3-1, operational- related emissions of ROG, NO_x , PM_{10} and $PM_{2.5}$ from area and mobile sources were computed using CalEEMod and do not exceed the BAAQMD significance thresholds.³

A net increase in developed space typically results in an increase in traffic and an associated increase in local and regional pollutant emissions. BAAQMD provides a screening methodology based on peak hourly traffic volumes to evaluate potential impacts of carbon monoxide (CO) emissions from mobile sources. The screening methodology focuses on intersections with vehicle traffic exceeding 44,000 vehicles per hour after project buildout (or 24,000 vehicles per hour in locations with limited vertical or horizontal air mixing) that could violate or contribute to a violation of ambient air quality standards for CO. Based on the size of the project, estimated project-related traffic, and existing traffic in the area, it is not expected that any of the intersections near the project would experience more than 24,000

³ Note that the existing R&D and office land uses could create a baseline level of emissions that could be included in the analysis to offset the project. The baseline was not evaluated as operational emissions from the project alone do not exceed BAAQMD CEQA thresholds.

vehicles per hour at buildout, and the project would not be expected to contribute to a violation of CO air quality standards.

The proposed project would not violate any air quality standard or contribute substantially to any existing or projected air quality violations. **[Less Than Significant Impact]**

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?

BAAQMD CEQA Guidelines also require an evaluation of cumulative risks (e.g., existing stationary sources, nearby roadways) if a new source will impact offsite receptors. No roadways within 1,000 feet of the project are believed to exceed the BAAQMD's minimum threshold of 10,000 daily vehicles. There are several nearby permitted stationary sources that may impact residential receptors.

As shown in Table 4.3-2, the sum of estimated excess lifetime cancer risks is less than the CEQA threshold of 100 in a million for cumulative impacts. Similarly, the estimated chronic Hazard Index and the annual average $PM_{2.5}$ concentrations fall below the corresponding significance thresholds for cumulative impacts.

Table 4.3-2: Cumulative Impacts During Construction							
Risks or Hazards	Cancer Risk (in a million)	Chronic Hazard Index	$PM_{2.5}(\mu g/m^3)$				
Stationary Sources (Screening Estimates)	28	0.03	0.05				
Nearby Roadways	0	0	0				
Project Construction	7	0.01	0.09				
Total Cumulative Impact	35	0.04	0.14				
Cumulative Impact Threshold	100	10	0.8				
Exceed Threshold?	No	No	No				

The long-term operation of the proposed project would not substantially increase the number of vehicle trips in the area or increase regional emissions, and therefore would not result in a cumulatively considerable increase of any pollutant. **[Less Than Significant Impact]**

- *d.* Would the project expose sensitive receptors to substantial pollutant concentrations? Where:
 - *i.* The probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million, or
 - *ii. Ground-level concentrations of non-carcinogenic TACs would result in a hazard index (HI) greater than one (1) for the MEI?*
The project air quality report analyzed the construction-related risks of the project by estimating ambient air concentrations of diesel particulate matter (DPM), diesel total organic gases (TOGs), and PM_{2.5}. The calculation of concentrations for use in a health risk assessment (HRA) requires the selection of appropriate concentration averaging times. In the HRA, all emissions associated with construction activities were conservatively assumed to occur in one year. In this analysis, residential receptors were conservatively treated as a resident child of age up to two years old who is assumed to be exposed to emissions 24 hours a day and seven days per week for one entire year, using default exposure assumptions recommended by Office of Environmental Health Hazard Assessment (OEHHA) and BAAQMD. This resident child scenario assumes a much higher daily breathing rate and age-sensitivity factor than other residential receptor population, and, therefore, is the most conservative scenario to evaluate residential exposures.

Construction emissions only impact receptors in the vicinity of the project during the nine hours when construction equipment operates; however, the emissions modeled during the nine hours each day were annualized assuming 24 hours per day in the air modeling outputs. These concentrations represent the theoretical maximum average concentrations over the construction period to which sensitive receptors might be exposed. The results of the modeling are shown in Table 4.3-3.

Table 4.3-3: Project Construction Impacts						
Risks or Hazards	Cancer Risk (in a million)	Chronic Hazard Index	ChronicAcuteHazardHazardIndexIndex			
Project Construction	7.1	0.009	0.10	0.09		
Project Impact Threshold	10	1	1	0.3		
Exceed Threshold?	No	No	No	No		

The estimated excess lifetime cancer risk, chronic HI, acute HI, and annual $PM_{2.5}$ concentrations were calculated to be below the BAAQMD significance thresholds. The location of the maximally exposed individual for cancer risk, chronic HI, acute HI, and $PM_{2.5}$ concentrations are shown on Figure 2 of Appendix A.

Based on the construction air quality analysis, the project would result in a less than significant impact to sensitive receptors from substantial pollutant concentrations. **[Less Than Significant Impact]**

e. Create objectionable odors affecting a substantial number of people?

The project does not include any odor-causing operations, and any odors emitted during construction would be temporary and localized. **[No Impact]**

4.3.4 <u>Conclusion</u>

The project would result in less than significant air quality impacts. **[Less Than Significant Impact]**

4.4 **BIOLOGICAL RESOURCES**

The discussion in this section is based in part on an arborist report prepared by *Arbor Resources* in November 2015, and a biological resources evaluation prepared by *MIG/TRA Environmental Services* in April 2016. These reports are included in this Initial Study as Appendices B and C.

4.4.1 <u>Biological Resources Environmental Checklist</u>

We	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					1,2,10
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					1,2,10
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					1,10
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?					1,10
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?					1,2,3,8,9, 10
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					1,2,10

4.4.2 <u>Regulatory Background</u>

4.4.2.1 Federal and California Endangered Species Acts

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (FESA) prohibits the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval. "Take" is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species.

Special status species in California include plants or animals that are listed as threatened or endangered under the California Endangered Species Act (CESA), species identified by the California Department of Fish and Wildlife (CDFW) as California Species of Special Concern, as well as plants identified by the California Native Plant Society (CNPS)⁴ as rare, threatened, or endangered. The CDFW has jurisdiction over state-listed species and regulate activities that may result in take of individuals.

4.4.2.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA: 16 USC Section 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA.

4.4.2.3 California Fish and Game Code

The California Fish and Game Code includes regulations governing the use of, or impacts on, many of the state's fish, wildlife, and sensitive habitats. Certain sections of the Fish and Game Code describe regulations that pertain to certain wildlife species. Fish and Game Code Section 3503, 2513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

4.4.2.4 Stanford University Habitat Conservation Plan

The property is within the area covered by the Stanford University Habitat Conservation Plan (SUHCP). Stanford University prepared a habitat conservation plan (HCP) to address protection and management of four federally listed, and one special-status, species that occur/potentially occur on Stanford lands. These species are the California tiger salamander, California red-legged frog, San Francisco garter snake, steelhead, and western pond turtle, which are also known as Covered Species.

⁴ The California Native Plant Society (CNPS) is a non-profit organization that maintains lists and a database of rare and endangered plant species in California. Plants in the CNPS "Inventory of Rare and Endangered Plants of California" are considered "Special Plants" by the CDFW Natural Diversity Database Program.

The SUHCP includes measures to minimize the impacts of University activities on federally protected species and protect and enhance habitat on Stanford lands. The HCP was a required element for the University's application to the USFWS and NOAA Fisheries for Incidental Take Permits (ITPs) under the FESA. The ITPs authorize take of federally listed species caused by otherwise lawful activities, such as those associated with normal operation of the University. These are also known as the Covered Activities, and they are specifically described in the HCP.

The Plan Area identified in the SUHCP includes some lands that fall within the City of Palo Alto limits (e.g., Page Mill Road west of El Camino Real, lands along San Francisquito Creek), and lands that fall within the City of Palo Alto's Sphere of Influence (e.g., lands west of Junipero Serra Boulevard). The project site is within Zone 4 of the Stanford Habitat Conservation Plan.

4.4.2.5 *City of Palo Alto Comprehensive Plan*

The Natural Environment Element of the City of Palo Comprehensive Plan (2007), combined with other Comprehensive Plan Update Elements, defines certain goals and policies for the conservation of sensitive natural resources. The Comprehensive Plan is in the process of being amended to ensure that it is effective through the year 2020. The amended plan has not yet been adopted, so the goals and policies of the 2007 Plan that are relevant to the proposed project are described below.

Goals

- **N-1:** A citywide open space system that protects and conserves Palo Alto's natural resources and provides a source of beauty and enjoyment for Palo Alto residents.
- N-2: Conservation of creeks and riparian areas as open space amenities, natural habitat areas, and elements of community design.
- N-3: A thriving "urban forest" that provides ecological, economic, and aesthetic benefits for Palo Alto. The City of Palo Alto has adopted an Urban Forest Master Plan. The City has adopted a range of plans and policies aimed at maintaining, protecting, and enhancing the urban forest. The management plans and programs for trees in the City consist of the new Urban Forest Master Plan (UFMP), the Street Tree Management Plan, and the Line Clearing and Right Tree, Right Place Programs. The UFMP establishes long-term management goals and strategies to foster a sustainable urban forest in the City, and addresses topics such as the state of the City's tree canopy, best management practices, interdepartmental coordination, and tree-related City regulations.
- N-4: Water resources that are prudently managed to sustain plant and animal life, support urban activities, and protect public health and safety.

Policies

- N-3: Protect sensitive plant species resources from the impacts of development.
- N-7: Preserve and protect the Bay, marshlands, salt ponds, sloughs, creeks, and other natural water or wetland areas as open space.
- **N-11:** Preserve the integrity of riparian corridors.
- **N-12:** Preserve the habitat value of creek corridors through the preservation of native plants and the replacement of invasive, non-native plants with native plants.

- **N-13:** Discourage creek bank instability, erosion, downstream sedimentation, and flooding by minimizing site disturbance and vegetation removal on or near creeks and carefully reviewing grading and drainage plans for development near creeks and elsewhere in the watersheds of creeks.
- **N-17:** Preserve and protect heritage trees, including native oaks and other significant trees, on public and private property.

4.4.2.6 City of Palo Alto Municipal Code

The City of Palo Alto Municipal Code regulates specific types of trees on public and private property for the purpose of avoiding their removal or disfigurement without first being reviewed and permitted by the City's Planning and Community Environment or Public Works Departments. Three categories within the status of regulated trees include protected trees (PAMC 8.10), public trees (PAMC 8.04.020), and designated trees (PAMC 18.76, when so provisioned to be saved and protected by a discretionary approval).

Section 8.10 of the Palo Alto Municipal Code, "Tree Preservation and Management Regulations," (Tree Preservation Ordinance), protects categories of trees on public or private property from removal or disfigurement. These categories of regulated trees include:

- **Protected Trees**. Includes all coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) trees 11.5 inches or greater in diameter, coast redwood (*Sequoia sempervirens*) trees 18 inches or greater in diameter, and heritage trees designated by the City Council according to any of the following provisions: it is an outstanding specimen of a desirable species; it is one of the largest or oldest trees in Palo Alto; or it possesses distinctive form, size, age, location, and/or historical significance.
- **Street Trees**. Also protected under Section 8.04 of the Palo Alto Municipal Code "Street Trees, Shrubs and Plants) are City-owned street trees (all trees growing within the street right-of-way, outside of private property). A permit is required for work that would in any way damage, destroy, injure, or mutilate a street tree. The excavation of any ditch or tunnel or placement of concrete or other pavement within ten feet from the center of any street tree trunk also requires a permit. Street trees require special protection by a fenced enclosure, according to the Standard Tree Protection Instructions, before demolition, grading or construction.
- **Designated Trees**. Designated trees are established by the City when a project is subject to discretionary design review process by the Architecture Review Board that under Municipal Code Chapter 18.76.020(d)(11) includes as part of the findings of review, "whether natural features are appropriately preserved and integrated with the project." Outstanding tree specimens or groups of trees function as a screening buffer or other value may contribute to an existing site, neighborhood or community, and may have a rating of "High" suitability for preservation.

Palo Alto Tree Preservation Guidelines

For all development projects within the City of Palo Alto, discretionary or ministerial, a *Tree Disclosure Statement* (TDS) is part of the submittal checklist to establish and verify trees that exist on the site, trees that overhang the site originating on an adjacent property, and trees that are growing in a City easement, parkway, or publicly-owned land. The TDS stipulates that a Tree Survey is required (for multiple trees), when a Tree Preservation Report is required (development within the dripline of a Regulated Tree), and who may prepare these documents. The City of Palo Alto Tree Technical Manual (Tree Technical Manual) describes acceptable procedures and standards to preserve Regulated Trees, including:

- The protection of trees during construction;
- If allowed to be removed, the acceptable replacement strategy;
- Maintenance of protected trees (such as pruning guidelines);
- Format and procedures for tree reports; and
- Criteria for determining whether a tree is a hazard.

4.4.3: <u>Existing Setting</u>

4.4.3.1 Wildlife and Special-Status Species

A reconnaissance-level biological survey of the property was completed on the morning of April 8, 2016 by *MIG/TRA Environmental Services*. During the visit, signs (e.g., tracks, scat, and feathers) of wildlife and habitats present within the property were documented. The biologist also inspected the interior and exterior of the buildings as well as the parking and landscaped areas.

The property currently has limited value for biological resources because it is located in an office park environment which has been highly altered by building development and non-native landscaping. The property is developed with office buildings and parking lots, and contains mature landscaping. The landscaped areas consist of a dense shrubs and trees along the perimeter of the property. Equally dense shrubs and trees border the northeast side of Building 204. An open grassy area separates the northwest side of both buildings from Hanover Street.

Landscaping trees and shrubs do provide some foraging and nesting habitat for birds and small mammals in urban areas. Birds that were observed the field survey were dark-eyed junco, western scrub jay, Northern mockingbird, and Bewick's wren. Mammals observed during the field survey were Eastern grey squirrel and cottontail rabbit. The buildings and the trees on the property do not provide suitable roosting habitat for cavity-roosting bats. No burrows or dens were observed. Several squirrel nests were observed in the trees.

Based on the site survey and a review of wildlife databases, the property does not contain suitable habitat for state or federally listed wildlife species, including the species covered by the Stanford Habitat Plan. It does not contain a wildlife nursery site, sensitive habitats, or waters/wetlands, nor is it suitable as a wildlife corridor.

Due to the large number of mature trees, the site does contain suitable habitat for nesting birds. Nesting birds likely inhabit the dense shrub and tree cover observed in the landscaped areas. Numerous passerines (perching birds/songbirds) were noted during the field survey, and ample nesting materials and nesting sites occur on the property.

4.4.3.2 *Tree Resources*

Tree Resources on Site

The arborist report completed for the proposed project by *Arbor Resources* in November 2015 (Appendix B) identified a total of 316 total trees on the project site. The dominant tree species include coast live oak (*Quercus agrifolia*), crape myrtle (*Lagerstroemia indica*), and Blackwood acacia (*Acacia melanoxylon*). Species on site native to the Palo Alto area include coast live oak, interior live oak, and valley oak.

Forty-three (43) trees are defined as **protected trees** under the City's Municipal Code due to being a either a coast live oak or valley oak with measured trunk diameters greater than 11.5 inches, and ten trees are situated within the public right-of-way and are defined as **street trees**.

As listed in Appendix B, each tree has been assigned either a "high," "moderate" or "low" suitability for preservation rating as a means to cumulatively measure its existing health, structural integrity, anticipated life span, location, size, particular species, tolerance to construction impacts, growing space, and safety to property and persons within striking distance. Twenty-nine trees are included in the "high" suitability for preservation category, 180 are listed in the "moderate" category, and 107 are in the "low" category.

The summary of trees on site is shown in Table 4.4-1, and their location is shown on Figure 8.

Table 4.4-1						
Tree Species and Impact Summary						
Тгее Туре	Number of Trees per Species	Number to be Removed	Native to the Palo Alto Area?			
Aleppo pine	4		No			
Almond	1		No			
American sweetgum	12	4	No			
Blackwood acacia	31		No			
Blue Atlas cedar	3		No			
Canary Island pine	2		No			
Carob	6		No			
Catalina ironwood	1	1	No			
Chinese flame tree	2		No			
Chinese pistache	5		No			
Coast live oak	92		Yes			
Crape myrtle	45	45	No			
Deodar cedar	19	2	No			
European olive tree	20	4	No			
Evergreen pear	2		No			
Firethorn	1		No			
Flowering pear	1		No			
Glossy privet	11		No			
Holly oak	15		No			
Holly juniper	2	2	No			
Interior live oak	2		Yes			
Italian oak	4		No			
Italian stone pine	4		No			
Japanese loquat	1	1	No			
Japanese maple	3		No			
Lemonwood	3		No			
London plane tree	9	9	No			
Monterey pine	1		No			
Peruvian pepper tree	2		No			
Red gum	3		No			
Spotted gum	2		No			
Strawberry tree	3		No			
Valley oak	4		Yes			
Total	316	67				







FIGURE 8





TREE SUMMARY

4.4.4 <u>Impacts Evaluation</u>

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish (CDFW) and Wildlife or US Fish and Wildlife Service?

The project site is currently developed and consists of urban habitat. Given the site's urban setting, isolation from larger areas of natural lands, and high level of human disturbance, the value to wildlife is limited. Therefore, redevelopment of the site would not result in a significant impact to wildlife habitat. The proposed project would not affect federally protected wetlands, riparian habitat, or other sensitive natural community. No special status species are expected to occur on the project site, given the lack of suitable habitat and developed nature of the site. **[Less Than Significant Impact]**

Nesting Birds

The numerous trees on the project site may provide suitable nesting habitat for migratory and nesting birds. Construction-related disturbances have the potential to "take" nests, eggs, or individuals, and otherwise lead to the abandonment of nests, which would be considered a violation of the MBTA and the California Fish and Game Code.

Impact BIO-1:If construction related activities (including demolition of structures,
vegetation and tree removal, and any construction related activities in
close proximity to such vegetation and trees) begins during the bird
nesting season (generally February 1- August 31), such activities
could impact birds protected under MBTA and California Fish and
Game Code. [Potentially Significant Impact Unless Mitigation
Measures Incorporated]

<u>Mitigation Measures</u>: The proposed project will implement the following measures to reduce construction-related impacts to nesting birds to a less than significant level:

MM BIO-1.1: To avoid or minimize impacts to nesting birds within the project footprint, all construction related activities should be scheduled to take place outside of the breeding season (generally February 1 to August 15). However, if construction-related activities are unavoidable during the breeding season, it is recommended that a qualified biologist conduct a survey for potentially nesting raptors and other tree and ground-nesting birds within five days prior to the proposed start of construction related activities. If active nests are not present, construction can take place as scheduled. If an active nest is observed, an appropriate exclusion buffer will be established around the nest in coordination with the CDFW and/or USFWS.

An active nest is defined as a nest having eggs or chicks present. Typically, a buffer will be established around the active nest. CDFW usually accepts a 250-foot radius buffer around passerine and small raptor nests, and up to a 1,000-foot radius for large raptors.

A qualified biologist will monitor the behavior of the birds (i.e., adults and young, when present) at the nest site to ensure that they are not disturbed by project-related activities. Nest monitoring will continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents and have left the nest site, as determined by a qualified biologist. The nest buffer may be removed and work commence once the chicks have fully fledged.

If more than five days lapse between the initial nest search and the start of construction related activities, it is possible for new birds to move into the construction area and begin building a nest; therefore, if there is such a delay, another nest survey will be conducted.

<u>Timing</u>: Vegetation removal and/or building demolition will start between September 1 and January 31, if feasible. If a preconstruction survey for nesting birds is required because construction related activities will start during the nesting bird season (generally February 1 and August 31), the survey will be conducted within five days prior to activities.

[Less Than Significant Impact with Mitigation Measures Incorporated in the Project]

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

The proposed project site is developed and does not support riparian habitat or other sensitive natural communities. **[No Impact]**

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

The proposed project site does not support any federally protected wetlands. [No Impact]

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?

The property is primarily urban is not located within an established wildlife movement corridor and it does contain a wildlife nursery site. However, wildlife may use the property as they move between habitats in the project vicinity.

The project also includes features to reduce bird strikes, such as breaking up glazing to avoid large glazed facades where possible. Fritted glass sun shade elements have also been added to reduce bird strike potential. **[Less Than Significant Impact]**

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?

The project would remove trees and landscaping in the existing parking lot and within the footprint of the proposed building and underground parking garage. The project would retain 43 protected trees and transplant four protected trees. Of the trees not protected under the Palo Alto Municipal Code, the project would remove 81 trees and would retain 185. All street tree removals would follow the public tree removal process, including adequate neighborhood notification.

Impact BIO-2:Construction of the proposed project could affect protected trees
proposed to be retained on and adjacent to the project site.
Construction activities, such as the compaction of soil or placing of
fill, could damage existing trees and their root systems. Four
protected trees proposed to be transplanted elsewhere on the site
could be damaged during transplant. [Potentially Significant
Impact Unless Mitigation Measures Incorporated]

<u>Mitigation Measures</u>: The proposed project will implement the following measures to reduce construction-related impacts to protected trees to a less than significant level:

MM BIO-2: <u>Tree Protection Measures</u>

- An Updated Tree Preservation Report (TPR) shall be prepared for trees to be preserved and protected, consistent with Policy N-7 of the Palo Alto Comprehensive Plan. An updated tree survey and tree preservation report (TPR) prepared by a certified arborist shall be submitted for review and acceptance by the City Urban Forester. The TPR shall incorporate the following measures, safeguards and information:
 - The TPR shall be based on latest plans and amended as needed to address activity or improvements within a Tree Protection Zone (ministerial dripline area). TPR shall stipulate areas designated for 'no-cut' design over root of each tree number; and including but not limited to any work (utilities trenching (not incidental), street work, lighting, irrigation, patio material, leveling, staging, travel, etc.) that may affect the health of the trees. The project

shall be modified to address TPR concerns and recommendations identified to minimize below ground or above ground impacts.

- The TPR shall be consistent with the criteria set forth in the tree preservation ordinance, PAMC 8.10.030 and the City's Tree Technical Manual, Section 3.00, 4.00 and 6.30
 http://www.cityofpaloalto.org/environment/urban_canopy.asp.
- To avoid improvements that may be detrimental to the health of the trees the TPR shall review the applicant's landscape plan to ensure that patio flat work, irrigation, planting or potted plants is consistent with the Tree Technical Manual. The approved TPR shall be implemented in full, including mandatory inspections and monthly reporting to City Urban Forester.

The TPR shall include a Tree Appraisal Section. Existing trees to be retained in place, including those in the right-of-way and any relocated tree (transplanted) shall be assessed. For the purposes of a security deposit agreement, the monetary market or replacement value shall be determined using the most recent version of the "Guide for Plan Appraisal", in conjunction with the Species and Classification Guide for Northern California.

- Provide a Tree Relocation and Maintenance Plan (TRMP) for all trees to be transplanted on the site. The TRMP shall outline all steps using the ISA BMP's for the successful relocation of any tree to be transplanted on the site, including biological treatments, details to provide regular automatic irrigation system for many years. Annual reporting to the City shall document tree conditions and soil moisture at all critical elevations with data and photos.
- Prior to building (grading phasing or any other jump-start) permit issuance, provide a *Tree Preservation Bond/Security Guarantee*. The natural tree resources on the site include significant protected trees and neighborhood screening, including trees proposed for relocation. Prior to building permit submittal, the Tree Security Deposit for the total value of replaced or relocated regulated trees, as referenced in the Tree Technical Manual, Section 3.26, Security Deposits, shall be posted to the City Revenue Collections in a form acceptable by the City Attorney. As a security measure, the project shall be subject to a Memorandum of Understanding between the City of Palo Alto and the Applicant describing a tree retention amount, list of trees, criteria and timeline for return of security, and conditions as cited in the Conditions of Approval for the project.

The applicant and project arborist shall coordinate with the City Urban Forester to determine the amount of bonding required to guarantee the protection and/or replacement of the regulated trees on the site during construction and within five years after occupancy. The applicant shall bond for 150 percent of the value for the relocated and 50 percent of the appraised value of the remaining regulated trees to be protected during construction (as identified in the revised and final approved Tree Protection Report). The applicant shall provide the proposed level of bonding as listed in the Tree Value Table, with the description of each tree by number, value, and total combined value of all the trees to be retained. A return of the guarantee shall be subject to an annual followed by a final tree assessment report on all the relocated and retained trees from the project arborist as approved by the City Urban Forester, five years following final inspection for occupancy, to the satisfaction of the director. A copy of the MoU draft is available from the Urban Forestry section.

- MM BIO-2.2Public Street TreesProvide optimum public tree replacement for
loss of public street trees. Provide no-net loss of canopy
mitigation in the event of a public tree removal. The new
frontage should be provided maximum streetscape design and
materials to include the following elements:
 - Consistency with the City of Palo Alto Urban Forest Master Plan. Provide adequate room for tree canopy growth and root growing volume resources.
 - Create conflict-free planting sites by locating tree sites and underground utility services at least 10-feet apart (electric, gas, sewer, water, fiber optic, telecom, etc.).
 - Utilize city-approved best management practices for sustainability products, such as permeable ADA sidewalk, Silva Cell planters, engineered soil mix base, and generous planter soil volume (800 to 1,200 cubic feet) to sustain a medium to large tree.

The project will implement tree protection measures as described in the tree inventory and report in Appendix B of this Initial Study to protect the trees to be retained on the project site. All measures would be required to be printed on project plans, in accordance with City standards. **[Less than Significant Impact with Mitigation Measures Incorporated in the Project]**

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

The project is located within Management Zone 4 of the Stanford University Habitat Conservation Plan. Zone 4 of the HCP, which is approximately 3,187 acres, consists of urbanized areas that do not provide any habitat value for any of the HCP Covered Species. The Covered Species in the HCP are the California red-legged frog, steelhead, Western pond turtle, California tiger salamander, and San Francisco garter snake.

Incidental Take Permits authorize the take of Covered Species in Zone 4, primarily by authorizing Stanford to relocate any species that wander into the urbanized areas to an appropriate habitat area. However, there is no habitat in Zone 4, so development and ongoing urban activities in Zone 4 are not Covered Activities. Therefore, the project does not conflict with the provisions of the Stanford University Habitat Conservation Plan. **[No Impact]**

4.4.5 <u>Conclusion</u>

With implementation of the identified mitigation measures and conditions of approval, the project would have a less than significant impact on biological resources. **[Less Than Significant Impact with Mitigation Measures Incorporated in the Project]**

4.5 CULTURAL RESOURCES

The discussion in this section is based in part on the "Historic Resource Evaluation, Buildings 204 & 2015, 3223 Hanover Street, Palo Alto," prepared by *Preservation Architecture* on November 17, 2016. This document is attached as Appendix D of this Initial Study. A peer-review of the Historic Resource Evaluation prepared by *Archives & Architecture* on January 9, 2017 is attached as Appendix E.

4.5.1 <u>Cultural Resources Environmental Checklist</u>

W	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?					1,2,3,11
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?		\square			1,2,3,11
c.	Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?				\square	1,2
d.	Disturb any human remains, including those interred outside of formal cemeteries?		\square			1,2,3,11
e.	Eliminate important examples of major periods of California history or prehistory?			\bowtie		1,2,3,11
f.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
	 Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or 					1,2,3,11

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
 ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered. 					1,2,3,11

4.5.2 <u>Eligibility Criteria for Historic Resources</u>

4.5.2.1 National Register of Historic Places

The National Register of Historic Places (National Register) is a comprehensive inventory of known historic resources throughout the United States. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects and districts that possess historic, architectural, engineering, archaeological or cultural significance at the national, state or local level. A historic resource listed in, or formally determined to be eligible for listing in, the National Register is, by definition, included in the California Register (Public Resources Code Section 5024.1(d)(1)).⁵

National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context." The National Register identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these are:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.

Second, for a property to qualify under the National Register's Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance." While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance." To determine if a property retains the

⁵Refer to Public Resources Code Section 5024.1(d)(1)

physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity: 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

4.5.2.2 California Register of Historical Resources and CEQA

The guidelines for identifying historic resources during the project review process under CEQA are set forth in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a). These provisions of CEQA create three categories of historical resources: mandatory historical resources; presumptive historical resources; and resources that may be found historical at the discretion of the lead agency. These categories are described below.

- <u>Mandatory Historical Resources</u>. A resource the State Historical Resources Commission lists on the California Register of Historical Resources, or the State Historical Resources Commission determines to be eligible for listing in the California Register is defined by CEQA to be "an historical resource." Resources are formally listed or determined eligible for listing by the State Historical Resources Commission in accordance with the procedures set forth in the provisions of State Law relating to listing of historical resources.⁶ If a resource has been listed on the State Register, or formally determined to be eligible for listing by the State Historical Resources Commission under these procedures, it is conclusively presumed to be an "historical resource" under CEQA.
- <u>Presumptive Historical Resources</u>. A resource included in a local register of historic resources as defined by State law⁷ or identified as significant in an historical resource survey meeting the requirements of State law,⁸ shall be presumed to be historically or culturally significant. The lead agency must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- <u>Discretionary Historical Resources</u>. A resource that is not determined to be a significant historical resource under the criteria described above, may, in the discretion of the lead agency, be found to be a significant historical resource for purposes of CEQA, provided its determination is supported by substantial evidence in light of the whole record. The CEQA Guidelines further provide that generally, a lead agency should consider a resource historically significant if the resource is found to meet the criteria for listing on the California Register of Historical Resources, including the following:

⁶ These procedures are set forth in Public Resources Code § 5024.1 and 14 Cal. Code Regulations §§ 4850, et. seq. ⁷ These State law standards defining a local register of historical resources are set forth in Public Resources Code section 5020.1(k). Under section 5020.1(k), a local register of historical resources is a "list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution."

⁸ These State law standards defining the requirements for an historical resource survey are set forth in Public Resources Code section 5024.1(g). Under section 5024.1(g), a resource can be identified as "significant" in an "historical resources survey" and found to be significant by the State Office of Historic Preservation ("SOHP") (i.e., listed in the California Register). Three criteria must be met: (1) the survey has or will be included in the State Historic Preservation procedures and requirements; and (3) the State Office has determined the resource has a significance rating of Category 1 to 5 on Form 523.

- <u>Criterion 1 (Events)</u>: The resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States; or
- <u>Criterion 2 (Persons</u>): The resource is associated with the lives of persons important to local, California, or national history; or
- <u>Criterion 3 (Architecture</u>): The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values, or
- <u>Criterion 4 (Information Potential</u>): The resource has the potential to yield information important to the prehistory or history of the local area, California or the nation.⁹

Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above *and* retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and hence; in evaluating adverse changes to them. Integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The process of determining integrity is similar for both the California and National Registers, and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

4.5.2.3 Palo Alto Historic Inventory

The City of Palo Alto Historic Inventory lists noteworthy examples of individual designers and architectural eras as well as buildings associated with local, state or national historic events. The inventory identifies buildings on the California and/or National Registers, whether a building is in a recognized historic district, and lists categories related to architectural style and stylistic development. Development incentives, such as reduced parking requirements and bonus floor area, are allowed for in the Palo Alto Municipal Code in exchange for historic rehabilitation of Category 1 and 2 buildings.¹⁰

The specific categories in the Historic Inventory include:

⁹ See CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation *Technical Assistance Series #6*. March 14, 2006.

¹⁰ The City's incentive program for preservation and rehabilitation of historic buildings is provided for in the PAMC (Title 16 and Title 18), and in Palo Alto Comprehensive Plan policy and programs.

- <u>Category 1</u>: An "Exceptional" Building" of pre-eminent national or state importance. These buildings are meritorious works of the best architects, outstanding examples of a specific architectural style, or illustrate stylistic development of architecture in the United States. These buildings have had either no exterior modifications or such minor ones that the overall appearance of the building is in its original character.
- <u>Category 2</u>: A "Major Building" of regional importance. These buildings are meritorious works of the best architects, outstanding examples of an architectural style, or illustrate stylistic development of architecture in the state or region. A major building may have some exterior modifications, but the original character is retained.
- <u>Category 3 or 4</u>: A "Contributing Building" which is a good local example of an architectural style and relates to the character of a neighborhood grouping in scale, materials, proportion or other factors. A contributing building may have had extensive or permanent changes made to the original design, such as inappropriate additions, extensive removal of architectural details, or wooden façades resurfaced in asbestos or stucco.

In accordance with the City's Historic Preservation Ordinance (Chapter 16.49 of the Palo Alto Municipal Code), the Historic Resources Board (HRB) is responsible for making recommendations to the City Council on proposed additions to the Historic Inventory and on reclassifications of existing Historic Inventory buildings.¹¹

For properties that are considered eligible for listing in the City of Palo Alto's Historic Inventory and to be designated as either a "Historic District," or "Historic Structure/Site," the property must meet the following criteria:

- 1. The structure or site is identified with the lives of historic people or with important events in the city, state, or nation;
- 2. The structure or site is particularly representative of an architectural style or way of life important to the city, state, or nation;
- 3. The structure or site is an example of a type of building which was once common, but is now rare;
- 4. The structure or site is connected with a business or use which was once common, but is now rare;
- 5. The architect or building is important;
- 6. The structure or site contains elements demonstrating outstanding attention to architectural design, detail, materials or craftsmanship.

The City's Historic Resources Board (HRB) reviews proposed modifications to historic properties listed in the City's Historic Inventory as Category 1-2 and Category 3-4 if in the Downtown Area. Discretionary actions (such as architectural review, design enhancement exception [DEE]) that effect Category 3-4 historic properties outside of the Downtown may also be reviewed by the HRB if review by the City's Historic Resources Planner indicates that a potential impact to a historic resource may occur pursuant to CEQA.

⁵City of Palo Alto. Historic Preservation. <u>http://www.cityofpaloalto.org/gov/depts/pln/preservation.asp</u>. Accessed January 31, 2016.

A property that has not yet been designated on the City's Historic Inventory may qualify as a historic resource for the purposes of CEQA review (e.g., a structure may be California Register eligible). The HRB also reviews discretionary projects that involve demolition, new construction, new addition, or other substantial exterior alterations for properties identified as California Register-eligible based upon evidence presented in a Historic Resource Evaluation report.

4.5.3 <u>Existing Setting</u>

4.5.3.1 Prehistoric Resources

The site is located in western Palo Alto, and is fully developed and previously disturbed. The site is located in an area of "moderate sensitivity" for archaeological resources, based on the *Palo Alto Comprehensive Plan Update, Existing Conditions Report* (2014).¹²

4.5.3.2 Paleontological Resources

The proposed office development site is underlain by clayey sand that is part of the Santa Clara Formation, as discussed in *Section 4.6, Geology and Soils* of this Initial Study. Regionally, this unit is known to include freshwater vertebrate, invertebrate, and plant fossils. Based on the presence of vertebrate fossils in the formation, the Santa Clara Formation is considered to have high paleontological sensitivity.¹³

 ¹² Palo Alto, City of. Comprehensive Plan Update, Cultural Resources. *Draft Existing Conditions Report*. August 29, 2014. Available at: <u>http://www.paloaltocompplan.org/wp-content/uploads/2014/09/4</u> <u>CulturalResources.pdf</u>.
 ¹³ Hanson, C. Bruce. *Paleontological Evaluation Report for the Envision San José 2040 General Plan, Santa Clara County, California*. September 2010.



4.5.3.3 Historic Resources

The industrial buildings on the site were constructed in 1956-1957. Prior to this development, the site was uncultivated and undeveloped grassland.¹⁴

History of Lockheed Buildings 204 and 205

<u>Building Location</u>: The approximately 10.17-acre project site is located in the Stanford Research Park in western Palo Alto on Assessor's Parcel Number (APN) 142-17-039. The proposed project site is just northeast of the intersection of Hillview Drive and Porter Drive in the Stanford Research Park in Palo Alto. The project site is adjacent to the rear of four single-family houses on Matadero Avenue.

The project site was formerly part of the property designated as 3251 Hanover Street. This address included several buildings occupied by Lockheed Martin Corporation, including the buildings on the project site (Lockheed Buildings 204 and 205). In 2016, a new lease line was established to separate the 10.17-acre project site from the southern 12.5-acre portion of the former parcel 142-17-017. The adjacent building to the south on the parcel will retain the 3251 Hanover Street address (Lockheed Building 203) on APN 142-17-038. The new site address is 3223 Hanover Street.

<u>Site Development</u>: Buildings 204 and 205 stand side-by-side on a terraced site that was originally part of a 22-acre campus with a building complex constructed in 1956-1957 for the Lockheed Aircraft Corporation Missile Systems Division. The campus buildings were designed by architect Kenneth T. Thompson and built by McNeil Construction. Kenneth T. Thompson studied at the University of Southern California under Dean A. Quincy Jones, an important and innovative Southern California architectural modernist and urban planner. His firm was only active for about 16 years and his firm worked on projects for NASA in Pasadena as well as commercial/industrial projects in Los Angeles County. His work does not appear to be part of known academic study (*Archives & Architecture*, Appendix E) and he later worked for Kaiser as an in-house architect designing hospitals internationally.

The campus originally consisted of five buildings: the two project buildings (Buildings 204 and 205); Buildings 201 and 202, formerly located at the upper terrace; and a smaller, linear building, Building 203, across the rear of the intervening terrace and parking lot (Figure 9). Over the immediately subsequent decades, the complex incrementally yet continuously grew and changed, with smaller structures infilling and attaching to the primary buildings, and with substantial amounts of equipment added and attached. Building 201, which was the first to be constructed and which provided central executive and administrative use, was removed and replaced in approximately 2010 by a new Lockheed building.

An underground tunnel below the central parking lot originally connected Buildings 202 and 204. That connecting tunnel remains, but has been closed off. Two additional buildings were early additions to the site: a cafeteria building connecting 201 and 202; and another small building connecting 204 and 205, both of which were added in approximately 1960.

¹⁴ Historical information in WSP Services, Inc. *Phase I Environmental Site Assessment*, March 20, 2016 (Appendix G of this Initial Study).

Lockheed Aircraft Corporation: The site buildings were research laboratories for Lockheed Missiles Division, which was headquartered in nearby Sunnyvale. Lockheed was formed in 1926 in Hollywood, California and became one of the major producers of military aircraft for the United States and its allies in World War II. In 1954, Lockheed Aircraft Corporation expanded its mission and services to confront the challenges of the Cold War, and established the Lockheed Missiles and Space Division."

Lockheed selected the Sunnyvale location for their Missiles Division headquarters because of Sunnyvale's climate, proximity to the airfield at Moffett Field and to Stanford University. Lockheed moved the missile headquarters and manufacturing center into their Sunnyvale campus beginning in 1956. Simultaneous to their relocating their missile division headquarters and manufacturing center to Sunnyvale, Lockheed developed the Palo Alto facility as a research branch.

Records indicate that this building group was originally referred to as the Research Branch of the Lockheed Aircraft Corporation Missile Systems Division. Archival plans identify several of the original building uses, including Building 204, a chemistry and materials laboratory building; and 205, a facilities receiving, shops and laboratory building. Immediately subsequent to the completion of Lockheed's mid-1950's complex on Hanover Street, the division was reformulated as the Lockheed Missiles and Space Division. The Palo Alto facilities were one of the Division's two research facilities, with the other located at Van Nuys, California. The Palo Alto research unit of Lockheed then occupied some 235,000 square feet, including buildings 204 and 205, each of which were 55,000 square feet.

Archives & Architecture (Appendix E) note that the Palo Alto Lockheed facility on Hanover Street in the mid- to late-1950s is primarily associated with nationally-recognized physicist Dr. Louis Nicot Ridenour, Director of Research at the Lockheed Missile Systems Division in Burbank at the time research and development facilities were planned for the site. In the late 1950s, 1,200 scientists, technicians and other staff were employed at the greater Lockheed facility in Palo Alto. In addition to Dr. Louis N. Ridenour, missile program director John H. Carter and distinguished scientists at the facility included Willis M. Hawkins, Ronald Smelt, Frank C. Hoyte, Dr. Samuel B. Batdorf and Stanley W. Burriss. The historic development patterns at the site are associated with the rise in the national defense industry (in this case, research for land and submarine missile programs) in mid-20th century Santa Clara County, the region and the county.

In 1991, with the end of the Cold War, the U.S. defense industry reached its 20th century zenith. At that juncture, Lockheed Palo Alto consisted of some 21 buildings within the Stanford Research Park, including the original five buildings.

In 1995, Lockheed merged with the Martin-Marietta Corp., creating Lockheed-Martin. Under Lockheed-Martin, the Palo Alto research unit became the Advanced Technology Center (ATC). Currently, both Buildings 204 and 205 are vacant and no longer a part of the Lockheed-Martin leasehold.

<u>Stanford Research Park</u>: Another historical context of the project site is the development of Palo Alto in the post-WWII period. Development of the Stanford Research Park, which the project site is located in, is one element of that context. The Stanford Research Park occupies some 700 acres of

Stanford University land and is an industrial, scientific and commercial park that is allied with the University. The Stanford Research Park was founded in 1951 as the Stanford Industrial Park and its first building opened in 1953.

Architecture

As noted previously, Buildings 204 and 205 were completed in 1957. The two buildings mirror one another – 204 to the west and 205 to the east – across a narrow, linear space infilled with interconnecting structures that are later constructions. The two are large, rectangular-plan, single-story, industrial buildings. Their fronts face northwest towards and are aligned with Hanover Street. Their two facades consist of glazed entry lobbies at the adjoining, inside corners and a bank of front-office space along the faces of the buildings, forming strips of architectural form that essentially decorate the relatively massive building volume behind.

The fronts of the building are a period architectural design of the mid-1950's: long and low with linear elements and the use of aluminum and metal-framed glazing, yet the singular element of each is a vertical wall that stands in front of each entry lobby – an entry wall – that is otherwise a unadorned rectangle. The two walls themselves are plain, the west building's (205) is stucco-faced while the east building's (204) is ceramic mosaic tile clad.

Both buildings are large volume (each 160 feet wide by 320 feet deep) constructed of tilt-up concrete frames, their vertical structural elements slightly visible at the wall surface, and with a pattern of infill panels that appear to be cement faced, along with identical sets of steel-sash windows in each structural bay. The exterior walls are flat-topped and the roofs are low-sloped as well as covered with a large amount of mechanical structures and equipment. That equipment has been partly screened from the street and entry of Building 204, but the buildings sit on a flat-terrace, one of several large pads of land formed for this complex – the lowest a large and flat parking lot to the east, the next lowest supporting the subject buildings, the next highest another large parking lot, and the uppermost another building group at the western end of the site.

From the parking lot terrace above, and from the street level directly west, the mechanical character of these buildings is strongly evident. Based on photographic evidence, however, the roofs were originally practically empty. In summary, the architecture of these two large buildings are generically light-industrial and modern, and characteristics of a given architectural style exist only at their fronts, where the architectural character is Midcentury Modern.

Historic Evaluation

<u>California Register of Historic Places</u>: The industrial buildings on the site are not currently listed on any historic inventory at the local or state level. The Historic Resource Evaluation prepared for 3223 Hanover Street found that the buildings are not eligible for the California Register of Historic Places under Criterion 1, 2, 3, or 4, and also lack integrity, as described below.

• <u>Criterion 1 (Events)</u>: Although the defense industry in Palo Alto and the Stanford Research Park was important to the development of the area, the buildings on site were a small part of the overall effort, and therefore the buildings on the site are not uniquely associated with events of historic importance.

- <u>Criterion 2 (Persons)</u>: Although a number of distinguished people were employed by Lockheed Corporation, no persons of historical significance are uniquely associated with the project buildings.
- <u>Criterion 3 (Architecture)</u>: As Buildings 204 and 205 do not embody distinction in terms of type, period, region or methods, nor are they the work of a master, nor do they possess any artistic value, Buildings 204 and 205 are therefore not potentially eligible under California Register Criterion 3. Research into the architect, Kenneth T. Thompson, does not indicate that Thompson was or is of any historical or architectural importance in his time or in the present, so the subject buildings do not represent the work of a master architect.
- <u>Criterion 4 (Information Potential)</u>: The property and structures at 3223 Hanover Street have not yielded and do not appear to have the potential to yield any important historic information, and it is unlikely that they could provide any information about history or prehistory.
- <u>Integrity:</u> The property retains some, but not all, of its historical integrity over time as per the National Register's seven aspects of integrity and as outlined within the California Register eligibility criteria. The former Palo Alto Lockheed five-building campus on Hanover Street has integrity of location and surrounding park-like setting in the Stanford Industrial/Research Park. The setting includes curving streets, large open spaces with expansive landscaping and generous areas of parking. The neighboring complexes are also research facilities of one or two stories, set back similarly from the streets.

Of the five buildings, one (Building 201) has been demolished and replaced; the loss of this building compromises the paired relationship of it with its adjacent building (202). The project buildings are also built as a pair, separated from the other main structures, and maintain some integrity with their autonomous immediate setting.

The replacement building remains low and in the original footprint, so its alteration is not a direct physical impact on the subject buildings. With their Mid-Century Modern one-story front façades and their tilt-up rear workspace form and materials, the two project buildings have integrity to their Post-war light-industrial design composition and structure. Although the buildings have been altered over time by the addition of many functional appendages and equipment, they have integrity of the underlying original materials and workmanship, including the horizontal ribbon of windows beneath a shade canopy faced with metal, the recessed entries, the detached entry walls, the stone veneer surfaces, and the serviceable rear concrete structures with their repetitive window pattern.

The buildings in the complex, with their Modernist front lobbies and vast rear laboratory/light-industrial workspaces, convey visual associations of research-building design in the 1950's, but do not convey any specific associations with their use as a Lockheed facility. Four of the original buildings remain, but Building 203 is fully utilitarian in design, without a lobby feature. The complex as a whole has lost much of its integrity with the replacement of one of its four main components; however, the design of the lobbies and materials used for the rest of the buildings allow Buildings 204 and 205 to be identifiable as Mid-Century designs within the greater Stanford Research Park.

The peer review of the Historic Resource Evaluation by *Archives & Architecture* (Appendix E) did not concur that because the facility was a smaller part of Lockheed facilities in northern and southern California that they would not meet Criterion 1 or Criterion 2. They did concur that the buildings would not meet Criterion 3 and currently lack integrity and therefore would not be considered a historic resource under CEQA.

<u>City of Palo Alto Historic Inventory</u>: The buildings are not listed in the City of Palo Alto Historic Inventory as historic resources and do not appear eligible for listing. To be found eligible for designation on the City's Historic Inventory, one or more of six criteria in PAMC Chapter 16.49 must be met. Based on the analysis in the Historic Resource Evaluation (Appendix D):

- The structures and site at 3223 Hanover Street are not uniquely associated with historic persons or important events and therefore do not meet the City's criterion 1;
- Buildings 204 and 205 are not representative of an important architectural style or way of life important to the city, state or nation and therefore do not meet the City's criterion 2;
- Buildings 204 and 205 are not an example of a rare use or type and therefore do not meet the City's criterion 3;
- The structures and site are not representative of a business that once was common but now is rare and therefore does not meet the City's criterion 4;
- The original architect (Kenneth T. Thompson) and builder (McNeil Construction) were not considered exceptionally or uniquely important in their fields and therefore the site does not meet the City's criterion 5;
- Buildings 204 and 205 on the project site (tilt up construction with mosaic tile) demonstrate no outstanding architectural or construction characteristics and do not meet the City's criterion 6.

<u>Conclusions of Discussion</u>: Buildings 204 and 205 are not listed on local, state or national historic registers or inventories and do not appear eligible for listing. Therefore, they are not considered historic resources.

4.5.4 <u>Impacts Evaluation</u>

a., e. Would the project adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory? Would the project eliminate important examples of major periods of California history or prehistory?

The project proposes to remove all the structures on the property prior to building a new office building. Based on the historic evaluation and peer review, the buildings on the project site are not eligible as a historic resource under the criteria of the California Register of Historical Resources, due to the lack of integrity or relation of the site to its larger historic form and layout. Demolition of the buildings, therefore, would not result in a significant impact to historic resources. **[Less Than Significant Impact]**

Although not a significant impact, to record the buildings on site as part of the overall base of knowledge of historic resources in the city and the important historic associations, the following measure will be required of the applicant as a condition of approval, prior to building demolition.

Condition of Approval:

- The buildings on the project site shall be documented prior to demolition, including archival photography, written narrative description and history, and funding provided for the acquisition, preservation and archiving of other historical information, images, and oral histories via a local repository such as the Palo Alto Historical Association or other archive. This documentation shall be submitted to and approved by the City of Palo Alto Department of Community and the Environment prior to building demolition.
- b., d. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? Would the project disturb any human remains, including those interred outside of formal cemeteries?

Although existing and past development has altered the project site, there is always the potential to discover unknown cultural resources during site excavation. In the event any archaeological or human remains are discovered on the site, impacts would be potentially significant. Implementation of the following mitigation measures as conditions of approval would reduce this impact to a less than significant level.

- **MM CR-1.1:**In the event any significant cultural materials are encountered during
construction grading or excavation, all construction within a radius of
50 feet of the find would be halted, the Director of Planning and
Community Environment shall be notified, and the archaeologist shall
examine the find and make appropriate recommendations regarding
the significance of the find and the appropriate mitigation.
Recommendations could include collection, recordation and analysis
of any significant cultural materials. A report of findings
documenting any data recovered during monitoring shall be submitted
to the Director of Planning and Community Environment.
- MM CR-1.2: In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian Affairs. No further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs in accordance with the provisions of state law and the Health and Safety Code. The Director of Planning and Community Environment shall also be notified

immediately if human skeletal remains are found on the site during development.

Implementation of **MM CR-1.1 and CR-1.2** would reduce and/or avoid impacts to unknown paleontological resources to a less than significant level. [Less Than Significant Impact with Mitigation Measures Incorporated in the Project]

c. Would the project directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?

Although no paleontological resources have been identified in the vicinity of the project site, the site is underlain by sediment with a high paleontological sensitivity. Disturbance of these resources, if they are discovered during excavation and construction, could result in an impact. The project will be required to comply with the following measures to avoid or reduce impacts to unknown paleontological resources to a less than significant level.

MM CR-1.3: Discovery of Paleontological Resources: In the event that a fossil is discovered during construction of the project, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. The City shall be notified if any fossils are discovered. Treatment may include preparation and recovery of fossil material so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project proponent shall be responsible for implementing the recommendations of the paleontologist.

Implementation of **MM CR-1.3** would reduce and/or avoid impacts to unknown paleontological resources to a less than significant level. [Less Than Significant Impact with Mitigation Measures Incorporated in the Project]

f. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered?

The project is located in a fully developed area within the Stanford Research Park and no tribal cultural resources have been listed or determined eligible for listing in the California Register or a local register of historical resources. To date, no California Native American tribes that are or have been traditionally culturally affiliated with the project vicinity have

requested notification from the City of Palo Alto regarding projects in the area and their effects on a tribal cultural resource. The project, therefore, is not anticipated to result in a substantial adverse effect on a tribal cultural resource. **[No Impact]**

4.5.5 <u>Conclusion</u>

With implementation of the mitigation measures included in the project, the proposed project would result in a less than significant impact on cultural and historic resources. **[Less Than Significant Impact with Mitigation Measures Incorporated in the Project]**

4.6 GEOLOGY

The discussion in this section is based in part on the "Feasibility Geotechnical Engineering Study," prepared by *Geosphere Consultants, Inc.* on August 17, 2016. This report is attached to this Initial Study as Appendix F.

4.6.1 <u>Geology and Soils Environmental Checklist</u>

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
 a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial 					1,2,3,12
evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)					
ii. Strong seismic ground shaking?iii. Seismic-related ground failure, including liquefaction?			\boxtimes		1,2,3,12 1,2,3,12
iv. Landslides?b. Result in substantial soil erosion or the loss				\square	1,2,3,12 1,2,3,12
of topsoil? c. Cause substantial soil erosion or siltation?					
d. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					1,2,3,12
e. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?			\boxtimes		1,2,3,12
f. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					1,2,3,12
g. Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?					1,2,3,12

4.6.2 <u>Existing Setting</u>

4.6.2.1 Background and Topography

The project site is located in the Santa Clara Valley, an alluvial basin, bound by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by continued tectonic uplift and regression of the inland sea that had previously inundated this area. Bedrock in this area is made up of the Franciscan Complex, a diverse group of igneous, sedimentary, and metamorphic rocks of Upper Jurassic to cretaceous age (70 to 140 million years old). Overlaying the bedrock in the vicinity are alluvial fan and fluvial sediments of Quaternary age.

The western portion of the site is underlain by Pliocene to Pleistocene-age alluvial deposits of the Santa Clara Formation. The Santa Clara Formation is described as interbedded layers of partly consolidated clays, sands, silts, and gravels, to partially indurated sandstone, siltstone, claystone and conglomerate. The eastern portion of the site is underlain by younger, Pleistocene-age alluvial sediments generally consisting of interbedded fine-grained sand, silt, and gravel.

The elevation at the project site is approximately 50 feet above sea level nearest Hanover Street, in the northern part of the site, and rises to approximately 80 feet at the southern border of the site. The existing building was constructed on a terraced pad, with the remaining buildings of the former Lockheed Martin campus above the project site on two additional terraces. Pedestrian stairs lead up from the parking lot to the north building entrance, and a vehicle ramp leading up to the east (back) entrance is sloped up the terrace as well.

4.6.2.2 Faults and Seismicity

Major Fault Zones

The San Francisco Bay Area is an active seismic region. There are no mapped faults across or adjacent to the site, and the site is not located in a State of California Earthquake Fault Zone, or an area where the potential for fault rupture is considered probable. The closest active fault is the San Andreas Fault, located approximately 4.8 miles southwest of the project site. Based on this distance, the likelihood of surface rupture occurring from active faulting at the site is low.

The other faults considered most likely to produce large earthquakes in the area include the San Gregorio, Hayward, and Calaveras faults, which are more than 10 miles from the project site. With the relatively proximity of these faults, the site is likely to be subject to ground shaking during moderate to large earthquakes produced along these active fault zones.

Smaller Faults

Extensive studies performed for Stanford University and nearby areas have identified other smaller Quaternary-age reverse thrust faults subparallel to the San Andreas Fault system. These faults include the Stanford Fault, the Frenchman's Road Fault and San Juan Hill Fault. Where these faults have been identified within the Stanford University campus, they have been designated (in
conjunction with Santa Clara County) as fault rupture hazard zones susceptible to potential future seismic deformation, although no compelling evidence of Holocene-age (i.e., recent) displacement of these structures have been conclusively found. The project site is about 4,000 and 5,000 feet east of the zoned portion of the Frenchman's Road Fault and San Juan Hill Fault within the Stanford University campus, respectively.

In addition to the aforementioned local faults, a fold in the underlying bedrock known as the Stock Farm Monocline has been identified as the surface expression of a late Pleistocene, pre-Holocene blind thrust fault. No evidence of recent deformation along this structure has been conclusively identified, but Stanford University and Santa Clara County have considered a zone on 50 feet to each side of the estimated lower (monocline) hinge of this structure within Stanford University property to be a fault rupture hazard zone and a potential source of future co-seismic deformation that could occur in conjunction with a nearby major seismic event.

Based on extensive work in the Stanford University campus area, *Cornerstone Earth Group* (2014) had estimated co-seismic movement to potentially be on the order of 0.5 inches tilt (settlement) over a lateral distance of 100 feet. Mapping by Cornerstone has shown the lower hinge of the Stock Farm Monocline to be approximately within a zone extending from the adjoining office building on the northeast side of the site, to the slope of the existing building pad within the project site, thus including the existing northeast parking lot of the 3223 Hanover Street property.

Based on the preliminary geotechnical evaluation, the potential for fault ground rupture and surface creep at the site is very low to nil. As no Holocene-age (recent) displacement has been documented on the Stock Farm Monocline to date, the potential for development of the estimated co-seismic settlement occurring as a result of a major seismic event is judged to be very low, and can be accounted for in the structural design of the buildings.

4.6.2.3 Soils and Groundwater

A feasibility geotechnical report by *Geosphere Consultants, Inc.* was completed August 17, 2016 and included subsurface exploration and laboratory analysis.

Soils Types and Expansive Soils

During the borings for this investigation, on-site near-surface soils observed and/or sampled from the upper four feet of the site were found to generally consist of clay of low- to medium-plasticity and low to moderate expansion potential. A layer of fat clay thought to be representative of the original native surficial soils in the lower, eastern portion of the site was encountered in the easternmost boring at depths between 4.5 and seven feet and was found to be of high plasticity and very high expansion potential. The site has been extensively graded and it is probable that most original fat clay surface soils have been either removed or mixed with other soils during previous site grading.

The geotechnical report recommended that the project should be designed to accommodate the potential presence of moderately expansive soils at or near subgrade elevations. Any local highly expansive soils encountered during future grading may either be removed from the site, or placed at greater depths or in non-structural areas.

Landslide Hazards and Slope Instability

The generalized Santa Clara County Geologic Hazard Zones Map (2012) shows the western edge of the site to be within a mapped landslide hazard zone. Based on a review of the site topography and results of the subsurface investigation, the preliminary geotechnical report stated that the potential for slope instability at the site is very low.

Groundwater

Groundwater was encountered during the subsurface exploration at a depth of about 30 feet below ground surface. With the exception of possible perched groundwater zones existing within granular subsurface layers, groundwater is not expected to be problematic during construction of footing foundations, site utility excavations, and below-grade excavation for future parking structures.

Liquefaction and Lateral Spreading

Based on maps of liquefaction susceptibility and liquefaction potential, the western portion of the site is mapped within an area of very low to low liquefaction susceptibility, while the eastern portion is mapped as straddling the boundary of low to moderate liquefaction susceptibility. Based on the generally stiff to hard clays encountered during the field investigation over the western portion of the site, the potential for liquefaction occurring in this area of the site is considered to be negligible.

Below the eastern portion of the site, subsurface soils consist generally of stiff to very stiff clays and medium dense to dense clayey and gravelly sands. Combined with a relatively deep groundwater table (30 feet), the potential for liquefaction within this portion of the site is considered to be very low.

Due to the very low to nil potential for liquefaction at the site, the potential for lateral spreading to occur and affect the site is also considered to be very low to negligible.

Planning Considerations

The project is located on a site potentially subject to seismic ground shaking, containing expansive soils, and subject to liquefaction hazards. The California Building Standards Code and PAMC, however, contain regulations that have been adopted for the purpose of avoiding or mitigating the environmental effects of these geologic hazards on development projects within the City. Construction would occur in accordance with these adopted state and City codes and standards to reduce the potential for damage from seismic activity.

Additionally, the PAMC requires that a site-specific geotechnical investigation be prepared for projects, including construction recommendations to mitigate structural geotechnical risk and damage. These geotechnical investigation recommendations would be incorporated into the project as a development permit Condition of Approval and verified during the Building Permit process in order to address the effects of the existing geology and soil hazards at the project site.

4.6.3 <u>Impacts Evaluation</u>

a., d., g. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, ii) strong seismic ground shaking, iii) seismic-related ground failure, or iv) landslides? Would the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Would the project expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?

The Association of Bay Area Governments (ABAG) has reported that the Working Group on California Earthquake Probabilities (2007) has estimated that there is a 63 percent probability that one or more major earthquakes would occur in the San Francisco Bay Area before 2038. An earthquake occurring on any of the fault lines in the region may induce seismic ground shaking at the project site.

The project site is located within the seismically-active San Francisco Bay region, but is not located within a mapped fault zone. There are no known major earthquake faults crossing the site, therefore the likelihood of primary ground rupture is low. The proposed office building will be designed and constructed in accordance with state and City of Palo Alto building codes and standards to reduce damage from seismic activity. **[Less Than Significant Impact]**

The proposed project site is located within an area subject to liquefaction. The proposed buildings would be constructed to meet the current California Building Codes and the City of Palo Alto Municipal Code and building standards. **[Less Than Significant Impact]**

According to the California Seismic Hazards Zone Map, the project site is not located within an earthquake induced landslide area. **[No Impact]**

Geologic hazards at the project site can be mitigated through the use of standard engineering design and seismic safety techniques. **[Less Than Significant Impact]**

b., c., e. Would the project result in substantial soil erosion or the loss of topsoil, or substantial siltation? Would the project be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?

The site has been previously graded by cutting and filling to construct terraced pads for the lower parking lot and for the buildings. The upslope portion of the pads are likely bottomed on cut materials, whereas the lower, downslope portion of the pads are underlain by fill that increases in thickness toward the downslope edge of the pad. The upper pad contains existing buildings that straddle the transition between cut and fill. In general, buildings placed partly on native materials and partly on engineered fills may be susceptible to differential settlements. Past mitigation, if any, for construction of the existing buildings on a cut-fill transition are unknown. Differential settlement may be an issue affecting the new office building, and should be reevaluated during the design-level geotechnical study to assess to what extent cut/fill transitions would impact building performance.

<u>Undocumented Fills</u>: Previously placed fill where records of placement and compaction do not exist or cannot be found are considered to be undocumented. Undocumented fills are generally considered to be variable in quality and compaction, and generally should not be relied upon for foundation support. The proposed new construction in the western portion of the existing upper building pad will generally be located in cut areas, but eastern portions of the existing upper pad are underlain by fill currently considered to be undocumented. If not removed during site grading, such fills may need to be reworked under structure foundations, or the foundations deepened to bear on competent native supporting material. The thickness of fill below the upper pad should be further evaluated after demolition of the existing buildings. At the existing northern pad (i.e., lower parking lot), relatively weak fill soils were encountered that should not be relied upon for foundation support. Where these soils are not removed by grading for construction of any future structures, such materials should be removed and reworked, and foundations either supported on reworked soils or extended to deeper, competent native soils.

<u>Expansive Soils</u>: Some of the surficial soils, primarily in the lower, northern portion of the site, were found to be moderately to highly expansive. Where such soils are not removed by site grading, measures to accommodate potentially moderately expansive soils should be implemented, such as keeping subgrade surfaces moist before placement of concrete or pavement sections; slightly deepened foundations, and use of a non-expansive fill layer below interior floor slabs.

<u>Groundwate</u>r: Groundwater was encountered during field exploration at about 30 feet below the existing lower parking lot grade. With the exception of possible perched groundwater zones existing within granular subsurface layers, groundwater is not expected to be problematic during construction of footing foundations, site utility excavations, and below-grade excavation for the future parking structure. Cohesionless sand and gravel layers were not encountered in the explorations at depths less than 15 feet. However, due to the variability of alluvial deposits, isolated zones of cohesionless soils could be encountered in site excavations, particularly deeper excavations. Local caving of could occur in excavations that encounter loose cohesionless soils, but are not expected to pose a significant effect on grading or foundation or utility construction.

The project will be required to prepare a design-level geotechnical report for approval by the City of Palo Alto. Construction of the new office building in conformance with the California Building Code and City of Palo Alto requirements would avoid risks associated with soil conditions. **[Less Than Significant Impact]**

Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

f.

The project does not propose the use of septic tanks or alternative wastewater disposal systems, as it is located in an urban area of Palo Alto. **[No Impact]**

4.6.4 <u>Conclusion</u>

With the preparation and implementation of a design-level geotechnical report and conformance with City of Palo Alto and state requirements, the project would not result in significant geology and soil impacts. **[Less Than Significant Impact]**

4.7 GREENHOUSE GAS EMISSIONS

The discussion in this section is based in part on a greenhouse gas analysis completed by *Ramboll Environ* on July 25, 2016. This report is attached to this Initial Study as Appendix A.

4.7.1	Greenhouse	Gas Emissions	Environmental	Checklist

Wo	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\square		1,2,3,7
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					1,2,3,7

4.7.2 Existing Setting

4.7.2.1 Background Information

Unlike emissions of criteria and toxic air pollutants, which are discussed in *Section 4.3*, and have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere over time. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California could be adversely affected by the global warming trend. Increased precipitation and sea level rise could increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur.

The potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.7.2.2 Regulatory Information

California Assembly Bill 32

The Global Warming Solutions Act (Assembly Bill [AB] 32) was passed in California in September 2006 to address the state's contribution to global climate change. Assembly Bill 32 requires that GHG emissions in California be reduced to 1990 levels by 2020. The California Air Resources Board (CARB) approved the state's first Climate Change Scoping Plan (Scoping Plan) in 2008. It proposed a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the Scoping Plan must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal.

In May 2014, CARB adopted an updated Scoping Plan document (2014 update). The 2014 Update defines CARB's climate change priorities for the next five years and lays the groundwork to start the transition to the post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012 (see below). The 2014 Update highlights California's progress toward meeting the "near-term" 2020 greenhouse gas emission reduction goals defined in the 2008 Scoping Plan and evaluates how to align the state's longer-term GHG reduction strategies with other state policy priorities, such as for water, waste, natural resources, agriculture, clean energy, and transportation and land use.

Executive Orders

In addition to AB 32, Executive Order S-3-05 (EO S-3-05) established a reduction target of 80 percent below 1990 levels by 2050 and Executive Order B-16-2012 established benchmarks for increased use of zero emission vehicles and zero emission vehicle infrastructure by 2020 and 2025.

On April 29, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-30-15, setting a new interim statewide greenhouse gas emission reduction target. The purpose of establishing the interim target is to ensure California meets its previously established target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050, as set forth in Executive Order S-3-05 in 2005. Under Executive Order B-30-15, the interim target is to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030.

California Senate Bill 375

Senate Bill 375 (SB 375), known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 in comparison to 2005 emissions. The per capita reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area in July 2013 as part of SB 375 implementation. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs,

schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions.

Bay Area 2010 Clean Air Plan

The Bay Area 2010 Clean Air Plan (CAP) addresses air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The 2010 CAP includes emission control measures and performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

BAAQMD Guidelines

As discussed in the CEQA Guidelines, the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Palo Alto and other jurisdictions in the San Francisco Bay Area Air Basin often utilize the thresholds and methodology for greenhouse gas emissions developed by the BAAQMD.

City of Palo Alto Plans and Programs

At the local level, the City's Comprehensive Plan includes a number of goals and policies to reduce its impact on global climate change through promoting energy efficiency and/or conservation, alternative modes of transportation, water efficiency, and specific building standards. In addition, the City adopted a *Climate Protection Plan* in December 2007 and a Green Building Ordinance updated on June 11, 2015. The Green Building Program applies to residential and non-residential private development projects (PAMC 16.14).

4.7.3 <u>Impacts Evaluation</u>

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

The proposed project would generate greenhouse gas emissions during construction and operation of the office uses. The *Ramboll Environ* report attached as Appendix A primarily used the California Emission Estimator Model (CalEEMod) to assist in quantifying the GHG emissions in the inventories for the project. The analysis assumed that the on-site uses were vacant.

<u>Operational</u>: The project's operational-related GHG emissions were evaluated using CalEEMod. Consistent with guidance to use local values when available, a carbon intensity factor of 128.75 pound (lb) carbon dioxide equivalent per megawatt hour (CO₂e/MWh) was used for the calculation of the GHG emissions associated with electricity consumption. This carbon intensity factor is based on the City of Palo Alto's forecasted GHG emissions and electricity generation in 2015 without further offsets, and is cited in the City of Palo Alto's Comprehensive Plan Update of Greenhouse Gas Emissions. This represents a conservative estimate of GHG emissions from electricity use, as the City Council has approved a Carbon Neutral Plan to use carbon neutral electric resources starting in 2013. The Plan commits the City to buying Renewable Energy Certificates (RECs) in the short-term (2013-2016) to offset GHG emissions. By 2017, the City's energy supply is expected to rely entirely on renewable energy resources. In addition, it is assumed the project will meet 2013 Building Energy Efficiency Standards (Title 24), and with the City's green building requirements.

CalEEMod default parameters were used to quantify emissions from other operational activities, as no on-site stationary diesel engines are proposed for the project. Net operational GHG emissions are expected to be 672 metric tonnes of CO₂e per year. Divided by the estimated number of employees (380), the estimated GHG emissions for the proposed project are 1.8 MT CO₂e per service population (SP). Both of these results are below BAAQMD's respective significance thresholds of 1,100 MT CO₂e per year and 4.6 MT CO₂e per SP per year. **[Less Than Significant Impact]**

<u>Construction</u>: Construction-related carbon dioxide (CO_2) emissions were quantified using CalEEMod defaults for the intended land uses (115,000 square feet of office space, 360 enclosed parking spaces, and approximately 26 above-ground parking spaces). The applicant confirmed the equipment list, soil exported, and phasing schedule. CalEEMod estimates construction emissions of 824 metric tonnes (MT) of CO_2 using default parameters.

The BAAQMD guidelines have not provided a threshold of significance for short-term construction-related GHG emissions, but require that projects quantify and disclose such emissions. Based on the implementation of Basic Construction Measures discussed in *Section 4.3 Air Quality*, the project would not make a cumulatively considerable contribution of greenhouse gas emissions to cumulative greenhouse gas emissions, and, therefore, would result in a less than significant impact to greenhouse gas emissions. **[Less Than Significant Impact]**

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As discussed in *Section 4.7.2.2, Regulatory Information*, the State of California has adopted a Climate Change Scoping Plan. Greenhouse gas emissions are also addressed in the adopted 2010 CAP and Plan Bay Area. The CARB-approved Climate Change Scoping Plan outlines a comprehensive set of actions intended to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. The Scoping Plan includes recommended actions for reducing greenhouse gas emissions. While the Scoping Plan focuses on measures and regulations at a statewide level, local governments play a key role in implementing many of the strategies contained in the Scoping Plan, such as energy efficient building codes, local renewable energy generation, and recycling programs.

Similarly, the 2010 CAP includes performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of greenhouse gases to 1990 levels by 2020 and 40 percent below 1990 levels by 2035. The 2010 CAP identifies a range of Transportation Control Measures, Land Use and Local Impacts Measures, and

Energy and Climate Measures that make up the CAP's control strategy for emissions, including greenhouse gas emissions.

The project includes green building measures as required by the City of Palo Alto's green building program. These measures include, but are not limited to:

Non-residential Development:

- Must comply with the California Green Building Standards Code Mandatory + Tier 2 requirements, as applicable to the scope of work,
- Must meet the commissioning requirements outlined in the California Building Code (CBC),
- Must acquire an Energy STAR Portfolio Manager Rating and submit the rating to the City of Palo Alto once the project has been occupied after 12 months.
- Must comply with potable water reduction Tier 2,
- Must be designed and installed to reduce irrigation water,
- Must install recycled water infrastructure and meters,
- Must meet Enhanced Construction Waste Reduction Tier 2,
- Must comply with the City's Electric Vehicle Charging Ordinance,

For these reasons, the project would be consistent with recommended actions in the Scoping Plan and control measures in the 2010 CAP related to energy efficient lighting and would not conflict with implementation of recommended actions in these plans intended to reduce greenhouse gas emissions by the year 2020 (and ultimately 2050).

Given that demolition and construction materials would be salvaged or recycled in conformance with City of Palo Alto requirements, and the project would meet Title 24 standards to reduce energy usage, construction and operation of the project would not conflict with the plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions. **[Less than Significant Impact]**

4.7.4 <u>Conclusion</u>

The proposed project would not generate substantial new greenhouse gas emissions considered to have a significant impact on global climate change. Compliance with green building requirements would further reduce impacts to greenhouse gas emissions to a less than significant level. **[Less Than Significant Impact]**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The discussion in this section is based in part upon the *WSP Services, Inc.*, "Phase I Environmental Site Assessment," prepared on March 20, 2016. This report is attached to this Initial Study as Appendix G. A Phase II Environmental Site Assessment prepared by *URS* in September 2013 is included as Appendix H.

	4.8.1	Hazards and	Hazardous	Materials	Environmental	Checklist
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Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes		1,2,3,13, 14
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					1,2,3,13, 14
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					1,2,13,14
d.	Construct a school on a property that is subject to hazards from hazardous materials contamination, emissions, or existing release?					1
e.	Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site, or by being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5?					1,3,13,14
f.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?					1,2,15

W	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
g.	For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?				\square	1,2,15
h.	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?				\square	1,2,3
i.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?					1,16

4.8.2 <u>Background</u>

Hazardous materials encompass a wide range of substances, some of which are naturally occurring and some of which are man-made. Examples include motor oil and fuel, metals (e.g., lead, mercury, arsenic), asbestos, pesticides, herbicides, and chemical compounds used in manufacturing and other activities. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Hazardous waste generators and hazardous materials users in the City are required to comply with regulations enforced by several federal, state, and county agencies. The regulations are designed to reduce the risk associated with the human exposure to hazardous materials and minimize adverse environmental effects. State and federal construction worker health and safety regulations require protective measures during construction activities where workers may be exposed to asbestos, lead, and/or other hazardous materials.

4.8.3 Existing Setting

The two existing buildings on the site are single-story office/R&D buildings that were constructed for industrial purposes by Lockheed Martin Corporation. The buildings were completed in 1957, as part of a 22-acre, five-building campus. The site includes industrial and mechanical equipment between the two buildings, and trash enclosures and other structures at the rear of the buildings. Within the Lockheed campus, the buildings were listed as Building 204 (south) and Building 205 (north). The remaining buildings of the former campus are located at 3251 Hanover Street, to the south of the project site. Building 203 is located adjacent to the project site to the south, Building 202 is south of Building 203, and Building 201 was demolished and replaced in 2010 with a new

facility in approximately 2010. Prior to its current use, the subject property was undeveloped agricultural land since at least 1939 until sometime during or shortly after 1956.

The two buildings on site are vacant. The buildings contain laboratories, machine shops, research and development areas, offices and administrative space, conference rooms, break rooms, common space, maintenance rooms, supply rooms, and restrooms. Several smaller buildings and outdoor fenced areas attached to the main buildings were used for storing emergency tools, supplies, maintenance equipment, chemicals, and other materials. The site also contains enclosures for mechanical and heating/cooling units.

The buildings and outside areas of the site are vacant and have undergone closure and decontamination activities in coordination with the Santa Clara County Department of Environmental Health (SCCDEH) and the City of Palo Alto, with additional oversight by Stanford University, the property owner. The closure activities were conducted in accordance with the Hazardous Materials Management Plan and associated closure plan. The Palo Alto Fire Department issued Fire Department Permit Issuance Confirmations on February 4, 2016.¹⁵

As part of the closure being overseen by the City of Palo Alto, all salvageable equipment and materials would have been removed from the buildings, along with all chemicals and other wastes. All wall, floor, and remaining equipment surfaces would have undergone decontamination to reach health and safety standards for residential use. Additionally, portions of underground piping would be flushed and cleaned, with the flush water contained for proper disposal.

The SCCDEH was the oversight agency in 2015 for the removal of two former wastewater retention sumps along the eastern side of Building 204 that discharged to the sanitary sewer. Sump removal and backfill activities were conducted between November 2014 and May 2015. The removal also included removal and remediation of surrounding soils that may have been affected during the operation of the sumps. Analytical samples (with one exception) were taken from the sidewalls and directly beneath the sump.

The following known recognized environmental condition was identified in connection with the project site.

• According to historical records, one former underground storage tank (UST) was reported to be present on the subject property. During a January 8, 1990 excavation initiated to remove a diesel-fuel UST suspected to be located on the southeastern side of the property behind Building 204 and 205, it was revealed that the tank was not present and that it may have been removed some time in 1972. A concrete vault that formerly housed the UST's pumping equipment and the former UST's above and underground piping leading to both Building 204 and 205 was found and was removed.

¹⁵ Palo Alto Fire Department. Memoranda. "Re: Hazardous Materials Closure – Fire Department Permit Issuance Confirmation." Palo Alto Fire Department Facility ID# 001786 (Building 205) and 001792 (Building 221); and "Re: Hazardous Materials Closure – Fire Department Permit Issuance Confirmation." Palo Alto Fire Department Facility ID# 001785 (Building 204), 001789 (Building 208), 001790 (Building 209), 006376 (Building 212), 006279 (Building 213) and 001791 (Building 220). February 4, 2016.

• Three groundwater monitoring wells were installed and groundwater was monitored from November 1997 to December 2003. Groundwater monitoring for the subject property was determined to no longer be required and the wells were properly abandoned on November 19, 2004. On December 22, 2004, the County of Santa Clara granted the UST case closure. The closure letter states that contamination in soil remains at the site that could pose an unacceptable risk under certain site development activities. Based on the above information, the former diesel UST release is a recognized environmental condition for the subject property. Lockheed Martin will be responsible for any future additional sampling, health risk assessment and future mitigation measures for this condition.

A Phase II Environmental Site Assessment was completed in September 2013 (Appendix H). This report was reviewed in October 2016 by the Santa Clara County Department of Environmental Health, and the site conditions were summarized as follows:

• <u>Soil:</u> Soil samples were analyzed for metals, petroleum hydrocarbons and volatile organic compounds (VOCs) and semi-VOCs. Soil samples contained metal concentrations below the residential and industrial screening criteria with the exception of arsenic and vanadium. Arsenic was detected at a maximum concentration 5.5 parts per million (ppm) and vanadium at concentrations of up to 93 ppm. Both metals are considered to be below background concentrations.

Petroleum hydrocarbons were detected above the reporting limits for two samples collected at 25 feet below ground surface (bgs). These two samples contained up to 2.0 parts per million diesel range hydrocarbons. Low concentrations, up to 0.039 ppm trichloroethene (TCE), were detected in samples collected along the sanitary sewer main and wastewater sumps. In addition, one sample collected from soil boring S-4 at 25 feet bgs contained low levels of 1,1-dichloroethene (i.e., 0.0068 ppm). All VOC sample results were below applicable screening criteria.

- <u>Groundwater</u>: First encountered groundwater was found at depths ranging from 35 to 60 feet bgs. Low concentrations of chemical compounds were detected in groundwater samples, none of which exceeded the drinking water screening criteria. The chemical compounds that were most commonly detected were the volatile petroleum constituents benzene, toluene, ethylbenzene and xylene (BTEX).
- <u>Soil Gas</u>: Benzene, TCE and tetrachloroethylene (PCE) were detected in several samples above the residential, screening criteria; however, PCE was the only compound which exceeded the commercial/industrial screening criteria. Benzene, PCE and TCE were detected in several different locations beneath the buildings suggesting that multiple releases have occurred. Further assessment is required to define the nature and extent of the impact.

The Phase II evaluated six objectives for different areas of the site cleanup. The two objectives that require further assessment are listed below:

- <u>Objective 1 (sanitary waste lines)</u>: The Phase II site assessment data indicates multiple releases of benzene, PCE and TCE have occurred. Further soil gas assessment is required to define the nature and extent of the vapor plume.
- <u>Objective 2 (waste water sump)</u>: Low concentrations of TCE were detected in soil samples. TCE at this location appears to be related to operations in the building and not related to a release from the sumps. This impact would be addressed as part of the overall building site assessment listed in Objective 1. Polyaromatic Hydrocarbons (PAHs) were detected at 10 feet bgs beneath Sump 1. This impact would be addressed during facility and sump closure activities.

Additional inquiry with Lockheed Martin, SCCDEH, and City of Palo Alto as to the sampling results and status of the ongoing closure and remediation activities associated with the sumps and other areas of concern should continue until closure is certified by the regulatory agencies. If not covered under the ongoing regulated closure activities (before, during, or following any demolition or earth moving activities on the site), further subsurface characterization surrounding portions of Building 204 and the southeast portion of Building 205, as well as any other suspect areas, is warranted to understand the magnitude and extent of possible impacts upon subsurface conditions in these areas.

Asbestos-Containing Materials and Lead-Based Paint

Several locations within Building 204 and 205 were observed to contain vinyl-tiled floors, including laboratories, offices, and hallways. Given the age of the building, there is a potential for the tile adhesive used for tile installation to contain asbestos. Additionally, insulation observed in several areas of the buildings may also contain asbestos materials. Before demolition activities begin, all potential asbestos-containing materials (ACMs) need to be identified so that they may be handled and disposed of in accordance with health and safety and regulatory requirements.

Based on the age of the facility (constructed in approximately 1956), lead-based paint is also potentially present. Accessible painted surfaces were generally observed to be in good condition (not peeling) at the time of the site visit for the Phase I Environmental Site Assessment in 2015. According to Lockheed, all painted surfaces are assumed to contain lead-based paint. Before demolition activities begin, all painted surfaces should be handled accordingly and wastes disposed of in accordance with health and safety, and regulatory requirements regarding lead based paint.

4.8.4 <u>Impacts Evaluation</u>

a., b. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project proposes to demolish two existing, one-story office/R&D buildings containing approximately 110,384 square feet of developed space. The project would also remove existing surface parking lots, driveways, and a portion of the landscaping and trees on site. The project would construct a new two-story, 115,500 square foot office building on the site. The new building would have approximately the same square footage as the existing

building. The project includes a two-level underground parking garage and surface parking above a portion of the garage.

There is a potential for the redevelopment on the site to include the minor use, storage, transport, or disposal of hazardous materials such as janitorial, landscaping, and maintenance chemicals. Future occupants and users of the site will be required to comply with federal, state, and local requirements for managing hazardous materials. Depending on the type and quantity of hazardous materials, these requirements could include the preparation, implementation, and training in the plans, programs, and permits prepared for the site. Compliance would be monitored and enforced during the permitting process for these activities.

Project construction would require the temporary use of heavy equipment, including excavation equipment. Construction would also require the use of hazardous materials including petroleum products, lubricants, cleaners, paints, and solvents. These materials would be used in accordance with all federal, state, and local laws, as required by the City of Palo Alto. If used as directed, these materials would not pose a hazard to the environment or workers or persons in the vicinity. **[Less Than Significant Impact]**

Asbestos-Containing Materials and Lead-Based Paint

Hazardous materials contamination from ACMs and lead-based paint remaining on the site could pose a risk to construction workers and adjacent uses during building demolition and/or renovation of the buildings on site. To reduce the potential for construction workers and adjacent uses to encounter hazardous materials contamination from ACMs and lead-based paint, the following measures are included in the project as conditions of approval to reduce hazardous materials impacts related to ACMs and lead-based paint.

CONDITION HAZ-1.1:

- In conformance with local, state, and federal laws, an asbestos building survey and a lead-based paint survey shall be completed by a qualified professional to determine the presence of ACMs and/or lead-based paint on the structures proposed for demolition. The surveys shall be completed prior to demolition work beginning on these structures.
- A registered asbestos abatement contractor shall be retained to remove and dispose of all potentially friable asbestos-containing materials, in accordance with the National Emissions Standards for Hazardous Air Pollutants guidelines, prior to building demolition that may disturb the materials. All construction activities shall be undertaken in accordance with California Division of Occupational Safety and Health (Cal/OSHA) standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than one percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.
- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, CCR

1532.1, including employee training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the waste being disposed.

[Less Than Significant Impact]

c., d. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Would the project construct a school on a property that is subject to hazards from hazardous materials contamination, emissions, or existing release?

The proposed project site is located within one-quarter mile of an existing public school. Barron Park Elementary School is located approximately 1,000 feet northeast of the project site (0.19 mile). There is a potential for the project to include the minor use, storage, transport, or disposal of hazardous materials such as janitorial, landscaping, and maintenance chemicals. Additionally, construction would require the use of hazardous materials including petroleum products, lubricants, cleaners, paints, and solvents. These materials would, however, be used in accordance with federal, state, and local laws, as required by the City of Palo Alto; therefore, the project would not result in hazardous emissions causing a significant impact. **[Less Than Significant Impact]**

e. Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site, or by being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5?

The Lockheed Martin Campus area with the address of 3251 Hanover Street is listed on a hazardous materials database pursuant to Government Code Section 65962.5.¹⁶ Although the current location of Lockheed Buildings 204 and 205 now have the address of 3223 Hanover Street, documents related to the proposed project site are included in the case file for the previously applicable address.

Lockheed Martin and the applicants for the proposed project have been coordinating with Santa Clara County Department of Environmental Health and the Regional Water Board regarding the cleanup and development of the site. The site will remain under agency oversight until a "No Further Action" letter can be issued. The City of Palo Alto will continue to coordinate with the applicant and the agencies, as necessary.

<u>Mitigation Measures</u>: In coordination with the responsible parties and oversight agencies, the following mitigation measures would apply to the proposed project:

¹⁶ State Water Resources Control Board. Geotracker. Lockheed Hanover, 3251 Hanover Street, Palo Alto, CA 94304. <u>http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000007095</u>. Accessed February 15, 2017.

MM HAZ-1.1: SOIL REMEDIATION AND MANAGEMENT PLAN (SRMP): A Soil Remediation and Management Plan (SRMP) should be prepared for all site development activities. This must include grading and excavation practices, and any plan to mitigate contamination-related risks. A soil gas assessment work plan shall be included in the SRMP. The goal of the work plan is to fully delineate the nature and extent of soil gas underlying the site. The soil gas assessment may be initiated after demolition activities are complete. Any vapor mitigations required by the SCCDEH or any other regulatory agency must be incorporated into plans. These plans shall be provided to the SCCDEH for approval prior to the issuance of building permits. The plan shall include conclusions and recommendations for the next phases of work required to protect water resources, human health and safety, and the environment at the site. Soil in any area of elevated soil contamination exceeding the RWQCB's environmental screening level (ESL) for groundwater protection shall be removed and disposed of at an appropriate waste facility. Documentation of completion of surveys and any required remediation shall be provided to the City of Palo Alto and the SCCDEH prior to issuance of building permits.

DISCOVERY OF CONTAMINATED SOILS: If contaminated soils are **MM HAZ-1.2:** discovered, the applicant will ensure the contractor employs engineering controls and Best Management Practices (BMPs) to minimize human exposure to potential contaminants. Engineering controls and construction BMPs will include, but not be limited to, the following: (a) contractor employees working on-site will be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training; (b) contractor will stockpile soil during redevelopment activities to allow for proper characterization and evaluation of disposal options; (c) contractor will monitor area around construction site for fugitive vapor emissions with appropriate field screening instrumentation; (d) contractor will water/mist soil as it is being excavated and loaded onto transportation trucks; (e) contractor will place any stockpiled soil in areas shielded from prevailing winds; and (f) contractor will cover the bottom of excavated areas with sheeting when work is not being performed.

MM HAZ-1.3: SOIL AND GROUNDWATER MANAGEMENT PLAN: Prior to building permit submittal, a Soil and Groundwater Management Plan (SMP) will be completed to establish management practices for handling contaminated soil, soil vapor, ground water or other materials. The SMP will also contain contingency plans to be implemented during excavation activities if unanticipated hazardous materials or unknown structures/contaminants are encountered. The SMP will also specify basic health and safety concerns to be addressed by the contractor or subcontractor responsible for worker health and safety and documented in a detailed Health and Safety Plan prepared for the contractor. SMP measures will be required to be incorporated into the project design documents. The SMP shall be reviewed and approved by the Santa Clara County Department of Environmental Health, the San Francisco Bay Regional Water Quality Control Board (RWQCB), or other appropriate agency addressing oversight to establish management practices for handling contaminated soil or other materials (including groundwater) if encountered during demolition, earth-moving activities (such as grading) and construction activities. Proof of approval or actions for site work required by the oversight agency must be provided to the Palo Alto Building Department prior to the issuance of any demolition or building permits.

MM HAZ-1.4: HEALTH AND SAFETY PLAN: A Health and Safety Plan (HSP) will also be prepared to provide the protocols for site-specific training, personal protective equipment, monitoring, decontamination measures, etc. The general contractor will be required to incorporate the provisions of the HSP into their site health and safety program. The HSP will outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction. Each contractor working at the site shall prepare a health and safety plan that addresses the safety and health hazards of each phase of site operations that includes the requirements and procedures for employee protection. Employees conducting earthwork activities at the site must complete a 40hour training course, including respirator and personal protective equipment training. Upon construction completion, an environmental regulatory closure report should be prepared demonstrating that the soil and groundwater were handled according to requirements of the SMP.

The site will remain under agency oversight until a "No Further Action" letter can be issued. The City of Palo Alto will continue to coordinate with the applicant and the agencies, as necessary.

With the implementation of these mitigation measures, the proposed project would not create a significant hazard to the public or the environment from contamination in excess of soil and groundwater cleanup goals. [Less Than Significant Impact with Mitigation Measures Incorporated in the Project]

f., g. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The closest airport to the project site, Palo Alto Airport, is located approximately 3.5 miles northeast of the project site. The project site is not located within an area subject to the airport land use plan. The project would not affect any airport or result in a safety hazard for people working or residing in the project area. **[No Impact]**

h., i. Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The development of the proposed project would not impair or interfere with implementation of the City's emergency response plans or any statewide emergency response or evacuation plans. The project is located in a fully developed area within the Stanford Research Park, and is therefore not subject to hazards from wildland fires.¹⁷ [No Impact]

4.8.5 <u>Conclusion</u>

Implementation of the required mitigation measures and City of Palo Alto conditions of approval would reduce any potential impacts to a less than significant hazards and hazardous materials impact. **[Less Than Significant Impact with Mitigation Measures Incorporated in the Project]**

¹⁷ California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones – Santa Clara County*. October 8, 2008. <u>http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php</u>. Accessed August 13, 2016.

4.9 HYDROLOGY AND WATER QUALITY

Wo	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Violate any water quality standards or waste discharge requirements?			\boxtimes		1,2,3
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?					1,3,12
с.	Substantially increase the rate, volume, or flow duration of storm water runoff or alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?					1,2,3,17
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?					1,3,17
e.	Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					1,3,19
f.	Otherwise substantially degrade water quality?			\square		1,3,12
g.	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?					1,2,17
h.	Place within a 100-year flood hazard area structures which will impede or redirect flood flows?					1,17

4.9.1 Hydrology and Water Quality Environmental Checklist

Wo	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				\boxtimes	1,2,3,17, 18,20
j.	Inundation by seiche, tsunami, or mudflow?				\square	1,17,18, 20
k.	Result in stream bank instability?				\square	1,2,12

4.9.2 <u>Existing Setting</u>

Flood Zones

The site is within the Matadero Creek watershed. Matadero Creek originates in the foothills of the Santa Cruz Mountains and flows in a northeasterly direction for approximately eight miles until it discharges into the Palo Alto Flood Basin, and then drains into the Lower South San Francisco Bay. The project site is approximately 1,000 feet west of Matadero Creek. The Matadero Creek Bypass, an engineered channel, is also located east of the project site, and provides overflow capacity for flood events.

According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), the project area is not located in a special flood hazard area subject to inundation by the one percent chance flood. The one percent annual flood (100-year flood), also known as the base flood, is the flood that has a one percent change of being equaled or exceeded in any given year.¹⁸

Stormwater and Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Stormwater runoff water quality is regulated by the federal National Pollutant Discharge Elimination System (NPDES) program to control and reduce pollutants to water bodies from surface water discharge. Locally, the NPDES program is administered by the Bay Area Regional Water Quality Control Board (RWQCB). The RWQCB worked with cities and counties throughout the region to

¹⁸ Federal Emergency Management Agency. *Flood Insurance Rate Map, Community Panel No. 060850017H.* Map. Effective Date: May 18, 2009.

prepare and adopt a Regional Municipal Stormwater Permit (Regional Permit). This Regional Permit identifies minimum standards and provisions that the City of Palo Alto, as a permittee, must require of new development and redevelopment projects within the City limits. Compliance with the NPDES Regional Permit is mandated by state and federal statutes.

The project site is developed with approximately 61 percent of impervious surfaces in the form of buildings, parking lots and driveways. Approximately 39 percent of the site contains pervious surfaces in landscaping, mostly in the buffers at the east and west borders of the site. The site does not rely on groundwater for water supplies, and no wells are located on site.

4.9.3 Impacts Evaluation

a., f. Would the project violate any water quality standards or waste discharge requirements? Would the project otherwise substantial degrade water quality?

The City's standard conditions of approval include a requirement that a project develop and implement best management practices (BMPs) to control erosion during construction and permanent features to treat stormwater runoff, such as swales. Compliance with the City's standard conditions of approval would ensure that adverse effects on water quality associated with stormwater runoff during construction and operation of the project are avoided.

The proposed project would be required to comply with all city, state, and federal standards and requirements pertaining to stormwater runoff and water quality. For these reasons, the project would result in a less than significant impact to water quality. **[Less Than Significant Impact]**

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

The project site is largely developed, and the proposed project would increase the amount of pervious surfaces on the site after implementation from approximately 39 percent to approximately 61 percent. Since the amount of pervious surfaces on the site would increase, the project would not deplete groundwater supplies or interfere with groundwater recharge.

The geotechnical investigation for the site identified groundwater at 30 feet below the existing lower parking lot grade, and the excavation for the parking garage would extend to a depth of (at least) 21 feet. With the exception of possible perched groundwater zones existing within granular subsurface layers, groundwater is not expected to be problematic during construction of footing foundations, site utility excavations, and below-grade excavation for the future parking structure.

Standard conditions of the City's architectural review process require special procedures for dewatering, if encountered. Specifically, a "Construction Dewatering Plan" must be submitted to Public Works for excavation activities that encounter groundwater or other

water that needs to be removed from the excavation and disposed of into the City storm drain system. The plan must detail a system that will remove silt and other pollutants from this water in order to place clean water into the City storm drain system.¹⁹ With the implementation of these standard conditions, impacts to groundwater flow would be less than significant. **[Less Than Significant Impact]**

c., k. Would the project substantially increase the rate, volume, or flow duration of storm water runoff or alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site? Would the project result in stream bank instability?

Matadero Creek is located approximately 1,000 feet east of the project site. The project is not in the floodplain of the creek and does not propose any alterations or impacts to the creek. The project would not cause stream bank instability in or near Matadero Creek. **[No Impact]**

d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?

The proposed project would not significantly alter the existing drainage pattern of the site or area and does not include any alterations to a waterway. Implementation of Construction BMPs and erosion control measures would reduce surface runoff impacts during construction and project operation to a less than significant level. **[Less Than Significant Impact]**

e. Would the project create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed project would reduce the amount of impervious surface and thereby decrease stormwater runoff. The project would not create runoff that has the potential to exceed the capacity of existing stormwater drainage systems.

New storm drains would be installed such that stormwater flows from the project would flow to stormwater treatment areas throughout the site. Stormwater would flow downhill (to the north) to existing City stormwater lines. These improvements would not result in a significant impact due to their construction, and no other stormwater facilities would be required for project implementation. **[Less Than Significant Impact]**

g., i. Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Would the project place within a 100-year flood hazard area structures which will impede or redirect flood flows? Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

¹⁹ City of Palo Alto, Public Works Engineering. Construction Dewatering System Policy and Plan Preparation Guidelines. <u>http://www.cityofpaloalto.org/civicax/filebank/documents/2727</u>. Accessed July 28, 2015.

According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), the project area is not located in a special flood hazard area subject to inundation by the one percent chance flood. The one percent annual flood (100-year flood), also known as the base flood, is the flood that has a one percent change of being equaled or exceeded in any given year.²⁰ [No Impact]

Reservoirs whose failure would affect the City of Palo Alto include Felt Lake, Searsville Lake, Lagunita Reservoir, and Foothills Park. Based on the Palo Alto Comprehensive Plan Draft EIR (2016) and the Palo Alto Office of Emergency Services, the site is not within a dam failure inundation area. **[Less Than Significant Impact]**

j. Would the project expose people or structures to inundation by seiche, tsunami, or mudflow?

The project site is not subject to seiche, tsunami, or mudslide hazards. The California Department of Conservation provides tsunami inundation maps for the Bay Area. Based on the review of the maps for Santa Clara County, the project site is not located in an affected area. **[No Impact]**

4.9.4 <u>Conclusion</u>

With implementation of the best management practices, erosion control measures, and conformance with the City of Palo Alto Municipal Code, the project would result in a less than significant impact to hydrology and stormwater quality. **[Less Than Significant Impact]**

²⁰ Federal Emergency Management Agency. *Flood Insurance Rate Map, Community Panel No. 060850017H.* Map. Effective Date: May 18, 2009.

4.10 LAND USE

Wor	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Physically divide an established community?				\boxtimes	1,2,3
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the Comprehensive Plan, CAP, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					1,2,3,10
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\square	10
d.	Substantially adversely change the type or intensity of existing or planned land use in the area?			\boxtimes		1,2,3
e.	Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height?			\square		1,2,3
f.	Conflict with established residential, recreational, educational, religious, or scientific uses of an area?				\square	1,2,3

4.10.1 Land Use Environmental Checklist

4.10.2 Existing Setting

The site is located on a 10.17-acre parcel which includes two single-story mid-century office/research and development (R&D) buildings containing approximately 110,384 square feet of space. Until recently, the buildings were occupied by Lockheed Martin Corporation, and represent a portion of the company's campus in Palo Alto.

The site is located within an existing research park with residential uses adjacent to the southeastern (rear) property line. Nearby lease areas in the research park are mostly comprised of similar twostory contemporary office/R&D buildings surrounded by surface parking lots. The residential neighborhood to the east (rear) is characterized by large lots with single-family residences.

4.10.2.1 *Comprehensive Plan*

The project site is currently designated *Research/Office Park* in the City's Comprehensive Plan. This land use is defined as follows:

Research/Office Park: Office, research, and manufacturing establishments whose operations are buffered from adjacent residential uses. Stanford Research Park is an example. Other uses that may be included are educational institutions and child care facilities. Compatible commercial service uses such as banks and restaurants, and residential or mixed uses that would benefit from the proximity to employment centers, will also be allowed. Additional uses, including retail services, restaurants, commercial recreation, churches, and private clubs may also be located in Research/Office Park areas, but only if they are found to be compatible with the surrounding area through the conditional use permit process. Maximum allowable floor area ratio ranges from 0.3 to 0.5, depending on site conditions.

The project site is located in the Stanford Research Park, which contains a number of research and development (R&D) and office uses in a campus setting. The park has about 150 companies and is the location of corporate headquarters or R&D facilities for several prominent national and international companies. The Palo Alto Comprehensive Plan includes the following policy:

Policy L-44: Develop the Stanford Research Park as a compact employment center served by a variety of transportation modes.

4.10.2.2 Zoning

The project site is located within the *Research Park* and *Research Park with Landscape Combining District* (RP; RP(L)) zoning district. This zoning district is defined as follows:

18.20.010(d). Research Park (RP): The Research Park district provides for a limited group of research and manufacturing uses that may have unusual requirements for space, light, and air, and desire sites in a research park environment. Premium research and development facilities should be encouraged in the RP district. Support office uses should be limited and should exist primarily to serve the primary research and manufacturing uses. The RP district is intended for application to land designated for research and office park use in the Palo Alto Comprehensive Plan on sites that are west of El Camino Real and held in large parcels, which may or may not also be subject to ground leases. The maximum Floor Area Ratio (FAR) for the site is 0.4:1.

18.30(E).010. Landscape Combining District. The landscape combining district is intended to provide regulations to ensure the provision of landscaped open space as a physical and visual separation between residential districts and intensive commercial or industrial uses, and in selected locations where landscaped buffers are desirable.

The (*L*) combining district functions as an overlay zone, and is located at the rear of the property for a distance of 50 feet parallel from the rear property line. Properties to the west (across Hanover Street), south, and north have the same zoning designation as the subject site. To the east of the site, properties are zoned *Residential Estate District (RE)*.

4.10.2.3 Habitat Conservation Plan/Natural Community Conservation Plan

The property is within the Stanford University Habitat Conservation Plan (SUHCP). Stanford University prepared a habitat conservation plan (HCP) to address protection and management of four federally listed, and one special-status, species that occur/potentially occur on Stanford lands. These species are the California tiger salamander, California red-legged frog, San Francisco garter snake, steelhead, and western pond turtle, which are also known as Covered Species. The project site is within Zone 4 of the Stanford Habitat Conservation Plan.

4.10.3 Impacts Evaluation

a. Would the project physically divide an established community?

Development of the project would not substantially change the existing uses or circulation patterns of western Palo Alto or the Stanford Research Park. The proposed project, therefore, would not physically divide an established community. **[No Impact]**

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the Comprehensive Plan, CAP, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed uses and intensity of the project is consistent with the City of Palo Alto's Comprehensive Plan and zoning designation for the site, and it would replace similar existing uses with similar uses. Mitigation measures are included in the project to reduce hazardous materials, noise, and air quality impacts. **[Less Than Significant Impact]**

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project is located within Management Zone 4 of the Stanford University HCP. Zone 4 of the HCP, which is approximately 3,187 acres, consists of urbanized areas that do not provide any habitat value for any of the HCP Covered Species. There is no habitat for covered species in Zone 4, so development and ongoing urban activities in Zone 4 are not Covered Activities. Therefore, the project does not conflict with the provisions of the Stanford University Habitat Conservation Plan. **[No Impact]**

d. Would the project substantially adversely change the type or intensity of existing or planned land use in the area?

The proposed project would replace R&D and office uses with similar office uses of approximately the same size. Although this may represent an increase in development and employees on the site, in the context of growth City-wide anticipated in the Comprehensive Plan and other regional planning, the change is minor. For these reasons, the proposed project would not substantially adversely change the type or intensity of existing or planned land use in the area. **[Less Than Significant Impact]**

e., f. Would the project be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height? Would the project conflict with established residential, recreational, educational, religious, or scientific uses of an area?

The project is adjacent to several single family residences along the rear property line to the east of the site. The area between the project site and the residences is composed of a tree line which provides significant screening. The project plans include the selective use of earthen berms, retaining walls, and shrubs adjacent to this forested area to further screen and buffer the site from the residences. Given this existing and proposed screening, as well as other project elements such as the proposed 90 foot rear building setback, the project would not conflict with the existing residences in the area.

The project does not propose any elements that may result in any greater shade or shadow effects on the Bol Park Bike Path or adjacent residential uses.

The proposed project would not be adding new uses to the area, and represents a small increase of commercial office space in an area where corporate office and R&D uses have been in place for decades. The project would be consistent with Comprehensive Plan policies and comply with the zoning requirements for the site. The project would not conflict with existing uses. **[Less Than Significant Impact]**

4.10.4 <u>Conclusion</u>

The proposed project would not result in a significant land use impact. **[Less Than Significant Impact]**

4.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a. Result in the loss of availability of a kno mineral resource that will be of value to region and the residents of the state?	wn			\square	1,2,3
b. Result in the loss of availability of a loca important mineral resource recovery site delineated on a local general plan, specif plan or other land use plan?	lly-				1,2,3

4.11.1 <u>Mineral Resources Environmental Checklist</u>

4.11.2 Existing Setting

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, limestone, and mercury. The project site is located in western Palo Alto, and is not located within a Mineral Resource Zone area containing known mineral resources, nor is the project site within an area where they are likely to occur.

4.11.3 <u>Impacts Evaluation</u>

a. – b. Would the project result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state or in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project site is in western Palo Alto, and is not located in an area containing known mineral resources. There are no known mineral recovery sites in the vicinity of the project site. **[No Impact]**

4.11.4 <u>Conclusion</u>

The project would not result in the loss of availability of known mineral resources. [No Impact]

4.12 NOISE

The following discussion is based in part on an Environmental Noise Assessment prepared by *Charles M. Salter Associates, Inc.* on July 22, 2016. This report is attached as Appendix I.

Less Than Potentially Less Than Significant With Checklist Significant Significant No Impact Mitigation Source(s) Impact Impact Would the project result in: Incorporated Exposure of persons to or generation of 1,2,3,21 a. noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Exposure of persons to, or generation of, 1,2,3,21 b. $|\times|$ excessive groundborne vibration or groundborne noise levels? A substantial permanent increase in ambient 1,2,3,21 c. \times noise levels in the project vicinity above levels existing without the project? d. A substantial temporary or periodic increase 1,2,3,21 \times in ambient noise levels in the project vicinity above levels existing without the project? For a project located within an airport land \times 1.2.15 e. use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels? f. For a project within the vicinity of a private 1,2,15 \times airstrip, will the project expose people residing or working in the project area to excessive noise levels? Cause the average 24-hour noise level (L_{dn}) \times 1,2,3.21 g. to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB? h. Cause the L_{dn} to increase by 3.0 dB or more 1,2,3,21 \times in an existing residential area, thereby causing the L_{dn} in the area to exceed 60 dB? i. Cause an increase of 3.0 dB or more in an 1,2,3,21 \ge existing residential area where the Ldn currently exceeds 60 dB?

4.12.1 <u>Noise Environmental Checklist</u>

Potentially SignificantLess Than Significant WithLess Than SignificantWould the project result in:ImpactImpact					No Impact	Checklist Source(s)
j.	Result in indoor noise levels for residential development to exceed an L_{dn} of 45 dB?				\boxtimes	1,2,3,21
k)	Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior L_{dn} of 60 dB or greater?			\boxtimes		1,2,3,21
1)	Generate construction noise exceeding the daytime background L_{eq} at sensitive receptors by 10 dBA or more?					1,2,3,21

4.12.2 <u>Background</u>

Noise may be defined as unwanted sound. Acceptable levels of noise vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or **dBA**.²¹ This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, different types of noise descriptors are used to account for this variability. Typical noise descriptors include maximum noise level (L_{max}), the energy-equivalent noise level (L_{eq}), and the day-night average noise level (L_{dn}). The L_{dn} noise descriptor is commonly used in establishing noise exposure guidelines for specific land uses. For the energy-equivalent sound/noise descriptor called L_{eq} the most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable.

Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Day/Night Average Sound Level, L_{dn} (sometimes also referred to as DNL), is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the nighttime between 10:00 p.m. and 7:00 a.m. The Community Noise Equivalent Level (CNEL) is a

²¹ The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted, unless otherwise stated.

24-hour A-weighted noise level from midnight to midnight after the addition of five dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

4.12.3 Existing Setting

The City's Comprehensive Plan has established outdoor noise environment land use compatibility guidelines for different land use categories. Noise levels of up to 60 dBA L_{dn} are considered "Normally Acceptable" for residential land uses, and noise levels of up to 70 dBA L_{dn} are considered "Normally Acceptable" for office and commercial land uses. The project site is affected by noise from surrounding roadways, particularly traffic movements on Hanover Street.

To quantify the existing noise environment at the project site, two continuous long-term noise measurements were collected May 2016 by *Charles M. Salter Associates, Inc.*. The purpose of the measurements was to quantify the daily average (L_{dn}) and the loudest hourly average $(L_{eq} 1$ -hour) noise levels at the site. The results were used to calculate noise levels at the proposed building setback distances and elevations of the project facades. A summary of the acoustical measurements and locations is listed below in Table 4.12-1, and the measurement locations are shown in Figure 10.

	Table 4.12-1:							
	Noise Measurements							
		Measure N	loise Level					
Monitor	Location	(d)	B)					
		$\mathbf{L}_{\mathbf{dn}}$	Leq 1-hour					
LT1	Mounted to a tree, approximately 22 feet from the centerline of Hanover Street, approximately 260 feet north of the bike path entrance at the sound end of the site, 12 feet above grade.	70	71					
LT2 Mounted to a lamp post, approximately 630 feet from Hanover Street, approximately 50 feet from the bike path turn at the east edge of the project site, 12 feet above grade.		54	55					
Note: The L _{eq}	levels listed above are the maximum hourly average noise level	els.	•					


4.12.4 <u>Impacts Evaluation</u>

a.,j.,k. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Would the project result in indoor noise levels for residential development to exceed an L_{dn} of 45 dB? Would the project result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior L_{dn} of 60 dB or greater?

The project includes one, two-story office building and two levels of below-grade parking. An outdoor area with seating is proposed to the northeast of the building, and the project also proposes a roof deck facing Hanover Street. At the future location of the roof deck facing Hanover Street and the nearest outdoor seating area at grade, noise levels are calculated to be DNL 62 dB, which would be in the "normally acceptable" range for office uses (noise levels below DNL 70 dB).

The project site plan shows office exterior windows located as close as 130 feet from the centerline of Hanover Street. The CALGreen Code requires that interior noise levels not exceed an L_{eq} 1-hr level of 50 dBA. Calculations based on the project plans indicate that exterior windows with ratings of at least STC 28 would be needed to meet CALGreen requirements.

As a City condition of approval, a report shall be prepared by a qualified acoustical engineer verifying that the project design includes windows capable of reducing interior noise levels to 50 dBA or less. This report shall be prepared prior to issuance of building permits and to the satisfaction of the Building Official. **[Less Than Significant Impact]**

b. Would the project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

The proposed project would include demolition, construction, and earthwork activities, including excavation for the basement parking garage. The groundborne vibration and noise generated by these activities would be temporary and would only occur during the construction phase of the project. For structural damage, a vibration limit of 0.20 in/sec PPV would apply for neighboring properties to 3223 Hanover Street. At a distance of 50 feet, the distance to the nearest neighboring property, construction activities would be unlikely to generate vibration levels above the 0.20 in/sec PPV limit.

In areas where vibration would not be expected to cause structural damage, vibration levels might occasionally be perceptible to human occupants. Through the use of administrative controls such as notifying adjacent land uses of scheduled construction activities, and limiting construction activities with the highest potential to produce perceptible vibration to the least sensitive times of the day, perceptible vibration can be kept to a minimum and would result in a less than significant impact. **[Less Than Significant Impact]**

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

<u>Traffic Noise</u>: Implementation of the project would result in approximately 64 net new daily vehicle trips, which would not result in a noticeable increase in traffic noise. Once constructed, operational noise of the project site would be similar to existing conditions.

<u>Mechanical Noise</u>: The building will be fully conditioned, and heating, ventilating, and airconditioning units will be located on the roof of the building. The roof-top mechanical equipment will be located no closer than 200 feet from the nearest residential property line. At noise monitor location LT2, ambient noise levels were measured between 37 and 49 dBA.

Six decibels over the ambient level (Section 9.10.030 of City of Palo Alto Municipal Code) with "ambient" defined as no quieter than 40 dBA, would be between 46 and 55 dBA. Rooftop mechanical areas would be higher than the neighboring residential property, and would be screened to the height of the tallest item of equipment, reducing noise levels to the nearest residences by a minimum of five dB.

At the minimum expected distance of 200 feet, the proposed mechanical equipment (per the applicant's mechanical plans) would produce noise levels of no more than 44 dBA at the property line. The proposed project will be subject to City of Palo Alto conditions of approval to reduce noise from mechanical equipment, including:

• Mechanical equipment shall be designed to reduce impacts on surrounding uses to meet the City's Ordinance requirements. An acceptable acoustical consultant shall be retained to review mechanical noise as these systems are developed to determine specific noise reduction measures necessary to reduce noise to meet the City Noise Ordinance.

New mechanical equipment and exterior fans would be required to comply with the requirements of the Palo Alto Noise Ordinance requirements, and for this reason, mechanical equipment noise would be less than significant. **[Less Than Significant Impact]**

d., l. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Would the project generate construction noise exceeding the daytime background L_{eq} at sensitive receptors by 10 dBA or more?

Construction activities will result in temporary increases in local ambient noise levels and vibration from garage construction. Typical noise sources would include mechanical equipment associated with excavation, grading, and construction, which will be short term in duration.

Standard conditions of approval would require the project to comply with the City's Noise Ordinance (City of Palo Alto 2013d), which restricts the timing and overall noise levels associated with construction activity. These measures would include the following:

- No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made out-side the structure at a distance as close to twenty-five feet from the equipment as possible.
- The noise level at any point outside of the property plan of the project shall not exceed 110 dBA.
- Construction and delivery hours shall be limited to 8:00 a.m. to 6:00 p.m. Monday through Friday, and 9:00 a.m. to 6:00 p.m. on Saturday. Construction shall be prohibited on Sundays and holidays. Signs identifying these hours shall be posted at the site per the City Noise Ordinance.
- During construction, mufflers shall be provided for all heavy construction equipment and all stationary noise sources in accordance with the manufacturers' recommendations.
- Limit unnecessary idling of internal combustion engines.
- Stationary noise sources and staging areas shall be located as far as is feasible from existing noise-sensitive receivers. Locating stationary noise sources near existing roadways away from adjacent properties is preferred.
- Air compressors and pneumatic equipment should be equipped with mufflers, and impact tools should be equipped with shrouds or shields.
- A "construction liaison" shall be designated to ensure coordination between construction staff and neighbors to minimize disruptions due to construction noise. Neighboring property owners within 400 feet of construction activity shall be notified in writing of the construction schedule and the contact information for the construction liaison.
- A qualified acoustical engineer should be retained as needed to address neighbor complaints as they occur. If complaints occur, noise measurements could be conducted to determine if construction noise levels at adjacent property lines are within the standards. Short-term or long-term construction noise monitoring could also be utilized to diagnose complaints and determine if additional mitigation is required for certain phases of construction as needed.

Short-term construction that complies with the Noise Ordinance would result in less than significant impacts. **[Less Than Significant Impact]**.

e-f. For a project located within an airport land use plan or, where such a plan has not yet been adopted, within two miles of a public use airport, would the project expose people residing or working in the project area to excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The project site is located approximately 3.5 miles southwest of Palo Alto Airport and is not located within the noise contour for the airport. The project would not expose people to excessive noise levels from aircraft sources.²² [No Impact]

²² Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Palo Alto Airport.* November 19, 2008.

g.-i. Would the project cause the average 24-hour noise level (L_{dn}) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the L_{dn} would remain below 60 dB? Would the project cause the L_{dn} to increase by 3.0 dB or more in an existing residential area, thereby causing the L_{dn} in the area to exceed 60 dB? Would the project cause an increase of 3.0 dB or more in an existing residential area where the L_{dn} currently exceeds 60 dB?

The project site is located in a developed area of Palo Alto. An increase of three dB in exterior noise levels at the site would require a substantial increase in traffic on nearby roadways. The project would add approximately 64 net new vehicle trips to the roadway system, which would not create a perceptible change in ambient noise levels after project construction. **[Less than Significant Impact]**

4.12.5 <u>Conclusion</u>

With compliance with City of Palo Alto Municipal Code, noise impacts would be less than significant. **[Less than Significant Impact]**

4.13 POPULATION AND HOUSING

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					1,2
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?					1,2
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\square	1,2
d.	Create a substantial imbalance between employed residents and jobs?				\square	1,2
e.	Cumulatively exceed regional or local population projections?					1,2

4.13.1 <u>Population and Housing Environmental Checklist</u>

4.13.2 Existing Setting

The site is located on a 10.17-acre parcel which includes two single-story mid-century office/research and development (R&D) buildings containing approximately 110,384 square feet of space. The project site is within the Stanford Research Park, which contains a number of office and R&D uses.

4.13.3 <u>Impacts Evaluation</u>

a.,d.,e. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Create a substantial imbalance between employed residents and jobs? Cumulatively exceed regional or local population projections?

The project proposes a new two-story, 115,500 square foot office building on the site. The new building would have approximately the same square footage as the existing building. Implementation of the project would not result in substantial population or employment growth that is not already anticipated by the Palo Alto Comprehensive Plan. The proposed project would not contribute a worsening of the jobs/housing balance in the City. **[Less Than Significant Impact]**

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b., c. Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

The project would not result in displacement of residences and would not result the need to construct replacement housing. **[No Impact]**

4.13.4 <u>Conclusion</u>

The project would not induce unplanned growth or result in significant adverse impacts to the existing housing supply. **[Less Than Significant Impact]**

4.14 PUBLIC SERVICES

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: 1. Fire Protection? 2. Police Protection? 3. Schools? 4. Parks? 5. Libraries?				$\boxtimes \Box \boxtimes \boxtimes$	1,2,3,22 1,2,3,23 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3

4.14.1 <u>Public Services Environmental Checklist</u>

4.14.2 <u>Existing Setting</u>

Public facility services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Agencies serving the site are summarized below.

4.14.2.1 *Fire Services*

The City of Palo Alto Fire Department is located at City Hall at 250 Hamilton Avenue. The nearest fire station to the project site is the Mayfield Station, Fire Station #2, located in the Sanford Research Park at 2675 Hanover Street, west of the project site across Page Mill Road.

4.14.2.2 *Police Services*

The Palo Alto Police Department (PAPD) provides law enforcement services within the City limits. The offices for the PAPD are located adjacent to City Hall at 275 Forest Avenue.

4.14.2.3 *Public Schools*

All public schools in Palo Alto are operated by the Palo Alto Unified School District. Barron Park Elementary is located approximately 1,000 feet northeast of the project site.

4.14.2.4 Parks

The City of Palo Alto has 29 neighborhood and district parks that total approximately 190 acres.

Bol Park is the closest park to the project site, approximately 800 feet to the east. The Bol Park bike path runs on the north border of the project site.

4.14.2.5 *Libraries*

The City of Palo Alto maintains five public library branches across the City. The College Terrace branch at 2300 Wellesley Street is the nearest branch to the site, and is located approximately 3,700 feet to the northwest.

4.14.2.6 Impact Fees

The City established Impact Fees to be borne by new development to pay proportionately for Parks, Community Centers, Libraries, Public Safety Facilities, Schools, General Government Facilities, Housing, Traffic and Public Art. The project would be subject to payment of these fees prior to issuance of a building permit

4.14.3 <u>Impacts Evaluation</u>

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services?

The proposed project is located in an urban area that is currently served by the City Police and Fire Departments. The project would not cause a substantial increase in population or employment that would demand additional services.

Standard conditions of approval require fees to address any increased need for community facilities, schools, and housing. With payment of development impact fees for community facilities, schools, libraries, and parks, public services impacts would be less than significant. **[Less Than Significant Impact]**

4.14.4 <u>Conclusion</u>

The project would result in a less than significant impact to public services. **[Less Than Significant Impact]**

4.15 **RECREATION**

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?					1,2,3
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?					1

4.15.1 <u>Recreation Environmental Checklist</u>

4.15.2 Existing Setting

The City of Palo Alto has 29 neighborhood and district parks that total approximately 190 acres. These parks vary in size and features, but recreational facilities generally include playground and grass areas. The City also owns and manages several open space preserves, including Foothills Park, Baylands Preserve, and Pearson-Arastradero Preserve.

Bol Park is the closest park to the project site, approximately 800 feet to the east. The Bol Park bike path runs on the north border of the project site.

4.15.3 <u>Impacts Evaluation</u>

a., b. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The redevelopment of the site from R&D to office uses would not result in a substantial increase in development on the site, and is not expected to generate demand that would have a significant effect on existing recreational facilities. The project includes a bicycle and pedestrian connection to the Bol Park bicycle path that runs on the north border of the project site, and the cost of the connection would be borne by the applicant. The connection would increase the connectivity between the project site and Bol Park, but as a connection currently exists immediately to the north of the site the increase in use would be minor. Development impact fees for parks and community facilities would be required of the project per City ordinance. **[Less Than Significant Impact]**

4.15.4 <u>Conclusion</u>

The project would not adversely impact recreation facilities within the City of Palo Alto. **[Less Than Significant Impact]**

4.16 TRANSPORTATION/TRAFFIC

The discussion in this section is based in part on a transportation memorandum prepared by *Hexagon Transportation Consultants, Inc.*, in August 2016. This report is attached as Appendix J to this Initial Study.

4.16.1 <u>Transportation Environmental Checklist</u>

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?					1,2,3,24
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?					1,2,3,24
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?					1,3,15
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?					1,24
e.	Result in inadequate emergency access?				\square	1,18,24
f.	Result in inadequate parking capacity that impacts traffic circulation and air quality?				\boxtimes	1,3,24
g.	Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., pedestrian, transit & bicycle facilities)?				\square	1,2,3,24

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We	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
h.	Cause a local (City of Palo Alto) intersection to deteriorate below Level of Service (LOS) D and cause an increase in the average stopped delay for the critical movements by four second or more and the critical volume/capacity ratio (V/C) value to increase by 0.01 or more?					1,2,3,24
i.	Cause a local intersection already operating at LOD E or F to deteriorate in the average stopped delay for the critical movements by four second or more?					1,3,24
j.	Cause a regional intersection to deteriorate from an LOS E or better to LOS F or cause critical movement delay at such an intersection already operating at LOS F to increase by four seconds or more and the critical V/C value to increase by 0.01 or more?					1,3,24
k.	Cause a freeway segment to operate at LOS F or contribute traffic in excess of 1% of segment capacity to a freeway segment already operating at LOS F?				\square	1,3,24
1.	Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?				\square	1,3,24
m.	Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spill back queues on ramps.					1,3,24
n.	Impede the development or function of planned pedestrian or bicycle facilities?				\square	1,2,3,24
0.	Impede the operation of a transit system as a result of congestion?				\square	1,3,24
p.	Create an operational safety hazard?				\boxtimes	1,3,24

4.16.2 <u>Existing Setting</u>

The project site currently is developed with two single-story office/research and development (R&D) buildings containing approximately 110,384 square feet of space. The buildings were recently occupied by Lockheed Martin Corporation, and represent a portion of the company's campus in Palo Alto.

The existing buildings are accessed from one driveway from Hanover Street. The site contains 192 surface parking spaces.

Regional access is provided to the project site from Page Mill Road, Foothill Expressway, El Camino Real, and Interstate 280.

Bicycle and Pedestrian Facilities

There are numerous bike lanes in the vicinity of the project site, including on Hanover Street, Hillview Avenue, Porter Drive, and Page Mill Road. The Bol Park Bike Path runs along the northern boundary of the project site. The 1.25-mile, asphalt trail begins at Hanover Street and ends on Miranda Avenue and Arastradero Road. Currently, there is one stairway connecting the project site to this multi-use path at the path entrance on Hanover Street.

The City of Palo Alto has identified objectives for the expansion of bicycle and pedestrian facilities. The City of Palo Alto *Bicycle + Pedestrian Transportation Plan* (2012) lists several improvements for bicycle and pedestrian facilities in the study area, including extending the Bol Park Path to El Camino Real via Research Park/Hansen Way or via a Hanover Street/Page Mill Road side path.

Pedestrian facilities in the project area consist of sidewalks and crosswalks along the streets and intersections. Sidewalks are available on the south side of Hanover Street and are intermittent along north side of Hanover Street. There is one pedestrian crosswalk along Hanover Street in front of the project site with a yellow pedestrian crossing sign to increase safety. Sidewalks are available on the north side of Hillview Avenue in the nearby area. Page Mill Road includes sidewalks on both sides between El Camino Real and Foothill Expressway. The Matadero Creek Trail parallels Page Mill Road between Foothill Expressway and Deer Creek Road, where it transitions to the Matadero Creek Hiking Path. Crosswalks are located across all of the legs of the signalized intersections in the vicinity of the project site. There are crosswalks at the south and west approaches at the intersection of Hillview Avenue and Hanover Street.

Transit Facilities

Existing transit service to the study area is provided by the VTA, AC Transit, Stanford Marguerite Shuttle, and Caltrain. There is a bus stop for eastbound buses in front of the project site along Hanover Street, which serves local bus routes 89, 101, 102, 103, 104 and AC Transit bus line DB1 (Dumbarton Express). There is another bus stop for westbound buses across from the site, accessible via the crosswalk at Hanover Street.

4.16.3 Impacts Evaluation

a. – b. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Proposed Project Activities

The project proposes to demolish the two existing one-story office/R&D buildings containing approximately 110,384 square feet of developed space, and would remove existing surface parking lots, driveways, and a portion of the landscaping and trees on site. The project would construct a new two-story office building on the site with approximately the same square footage (~115,500 square feet) as the existing building, including approximately 5,500 square feet of amenity space. The project includes a two-level underground parking garage and surface parking above a portion of the garage. New landscaping, trees, pedestrian paths, and pedestrian and bicycle access and courtyard would be installed with the project.

The existing driveway and curb cut on to the site from Hanover Street would be retained for vehicle use. The existing 192-space surface parking lot would be removed and replaced by a two-level underground parking garage, in addition to 26 spaces in a surface lot, for a total of 386 parking spaces.

Pedestrians and bicyclists would access the site at a new mid-block access point from the sidewalk to a courtyard, as well as from a new connection to the Bol Park bicycle path to the north of the project site. The project would provide 30 long-term and seven short-term bicycle parking spaces. The two nearest VTA bus stops along Hanover Street would be relocated near the drive aisle entrance to the site, and would be accessed by a new mid-block pedestrian crossing.

Trip Generation

The proposed new office building would be essentially the same size as the existing two office/R&D buildings that would be replaced, but with a slightly more intense use. For this reason, the proposed new building would generate slightly more traffic than the existing buildings.

Due to the small increase in employment intensity on the project site, the impacts of the proposed redevelopment on the surrounding roadway network are expected to be minimal, and a full traffic impact analysis was not required by the City of Palo Alto. The project trip generation was calculated and is described below.

Project trip generation was estimated by applying to the size and uses of the development the appropriate trip generation rates obtained from Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition. The trips generated by the proposed uses were estimated using the average trip generation rates for General Office Building (Land Use 710). According to ITE trip generation rates, the proposed project would generate 1,213 gross daily trips with 172 trips during the AM peak hour and 164 trips during the PM peak hour.

The trips associated with the existing buildings were subtracted from the project-generated traffic to derive the net site-generated trips. The potential vehicular trips generated by the existing R&D/Office buildings were estimated using the ITE average trip generation rates for Research and Development Center (Land Use 760) (20 percent) and General Office Buildings (Land Use 710) (80 percent). After applying the existing trip credits, the project would generate 64 net new daily trips, with eight net trips occurring during the AM peak hour and nine net trips occurring during the PM peak hour (refer to Table 4.16-1).

				Table	4.16-1							
		Project	Trip G	eneratio	on Rate	s and	Estim	ates				
	Daily	aily	AM Peak Hour				PM Peak Hour			•		
Land Use		Size	Trip Rates	Daily Trips H Ra	Peak Hour Rate ¹	In	Out	Total	Peak Hour Rate ¹	In	Out	Total
	Office Space ¹	88,000 square feet	11.03	971	1.56	121	16	137	1.49	22	109	131
Existing Uses	Research & Development Space ²	22,000 square feet	8.11	178	1.22	22	5	27	1.07	4	20	24
	Existing Total	110,000 square feet		1,149		143	21	164		26	129	155
Proposed Uses	Office Space ¹	110,000 square feet	11.03	1,213	1.56	151	21	172	1.49	28	136	164
Net New Pr	roject Trips (Proj	posed – Ext	isting):	64		8	0	8		2	7	9
Notes:	Notes:											

¹Rates based on ITE Land Use Code 710 for (General Office).

² Rates based on ITE Land Use Code 760 for (Research & Development Center), average rate.

Source: Institute of Transportation Engineers, Trip Generation, 9th Edition (ITE). 2012

The proposed project would not increase development area on the site, but would increase trips based on the use of the space. The project would not substantially increase traffic after project completion. The project would not exceed a level of service standard established by any congestion management agency. **[Less Than Significant Impact]**

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Palo Alto airport is located approximately 3.5 miles northeast of the project site. The project would not affect air traffic patterns. **[No Impact]**

d.,e.,p. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)? Would the project result in inadequate emergency access? Would the project create an operational safety hazard?

Vehicular access to the project site would be provided via the existing driveway on Hanover Street, with less than three vehicles per minute entering/exiting the driveway during either AM or PM peak hour. Based on this vehicle frequency, the single driveway would be sufficient to serve the project traffic.

There is no on-street parking allowed along the project frontage on Hanover Street, and therefore, there would be no restrictions to sight distance at the driveway. The existing surface parking lot would be replaced with new landscaping. The driveway would run along the northeastern side of the landscaped area and would provide access to a smaller surface parking lot and a new below-grade parking garage. The driveway would provide direct access to the surface spaces and the at-grade drop-off area. The driveway also would provide access to the parking garage from two separate entrances located along the driveway, one for each level. The lower level of the parking garage would provide a second drop-off area adjacent to the stair and elevator pavilion proposed in the building courtyard. Both entrances are measured around 28 feet wide, and would be adequate to serve the project. Based on this analysis, the project would not increase hazards due to a design feature.

Pedestrian access to the parking structure would be provided by two elevator shafts and staircases, one located in the middle of the garage and the other at the northeast corner of the garage.

On-Site Circulation

The onsite circulation was reviewed by *Hexagon* in accordance with generally accepted traffic engineering standards. The parking garage provides separate access points to each of the two levels. Generally, the proposed plan was found to provide adequate connectivity through the parking areas for vehicles.

Based on the City's zoning code (section 18.52.040), two loading spaces are required for an office development with size between 100,000 square feet and 199,999 square feet. The project proposes two loading spaces in the surface lot towards the rear of the site.

Based on the analysis of the proposed site plans, the project would not result in safety hazards, nor would it block emergency access. **[No Impact]**

f. Would the project result in inadequate parking capacity that impacts traffic circulation and air quality?

The parking for the proposed project was evaluated based on the City of Palo Alto parking code for office use. The code requires a minimum parking supply of one space per 300 square feet for office use located in the *Research Park* zoning districts. As previously described, the proposed new office building would provide 110,000 square feet of space, which translates to a minimum parking requirement of 367 spaces. The project would provide a total of 386 parking spaces, which would meet the minimum parking requirements specified by the City of Palo Alto.

The City's municipal code requires a minimum bicycle parking supply of one space per 3,000 square feet for office use, with 80 percent of the spaces for long-term parking and 20 percent for short-term parking. This yields a parking requirement of 37 bicycle parking spaces. The site plan indicates that 37 bicycle parking spaces (30 long-term spaces and seven short-term spaces) would be provided, which would comply with the City standards. **[No Impact]**

g., n. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? Would the project impede the development or function of planned pedestrian or bicycle facilities?

A new connection between the project site and the Bol Park Path at the northeast corner of the project site is included in the project plans, which would provide a more convenient access point for both bicyclists and pedestrians. With the existing bike facilities and the proposed improvements, the bike trips resulting from the project would be accommodated by the bicycle facilities in the area.

Generally, there is good connectivity for pedestrians to and from the site. Although most of the streets near the project site have adequate sidewalks, a few significant sidewalk gaps remain. These include portions of Hanover Street, Porter Drive, and Hansen Way in the Research Park. Future improvements are proposed in the City's *Bicycle + Pedestrian Transportation Plan*, including completion of the Research Park sidewalk network for transit access on Hillview Avenue, Hanover Street, and Porter Drive (in coordination with Stanford University). The project would not impede these planned improvements.

The estimated transit, bicycle, and pedestrian trips generated by the project could be accommodated by the existing facilities around the study area. The project would not be in conflict with any adopted polices, plans, or programs supporting alternative transportation. The proposed project would not impede the development or function of transit, bicycle, and pedestrian facilities. **[No Impact]**

h., i., j. Cause a local (City of Palo Alto) intersection to deteriorate below Level of Service (LOS) D and cause an increase in the average stopped delay for the critical movements by four second or more and the critical volume/capacity ratio (V/C) value to increase by 0.01 or more?

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Cause a local intersection already operating at LOD E or F to deteriorate in the average stopped delay for the critical movements by four second or more? Cause a regional intersection to deteriorate from an LOS E or better to LOS F or cause critical movement delay at such an intersection already operating at LOS F to increase by four seconds or more and the critical V/C value to increase by 0.01 or more?

Per the discussion above and the trip generation analysis (Table 4.16-1), the proposed project would result in less than 10 net new vehicle trips during each peak hour, and therefore would not result in impacts at local or regional intersections. **[No Impact]**

k. Cause a freeway segment to operate at LOS F or contribute traffic in excess of 1% of segment capacity to a freeway segment already operating at LOS F?

Per the discussion above and the trip generation analysis (Table 4.16-1), the proposed project would result in less than 10 net new vehicle trips during each peak hour, and therefore would not result in impacts to freeway segments. **[No Impact]**

l. Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?

The proposed project would not increase the TIRE index by 0.1 or more during the peak hour on any residential streets. **[No Impact]**

m. Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spill back queues on ramps.

Per the discussion above and the trip generation analysis (Table 4.16-1), the proposed project would result in less than 10 net new vehicle trips during each peak hour, and therefore the proposed project would not result in significant queuing impacts. **[No Impact]**

o. Impede the operation of a transit system as a result of congestion?

The proposed project would not increase congestion, and therefore would not impede the operation of a transit system. The two VTA bus stops nearest to the project site would be relocated to a central location adjacent to the drive aisle serving the site, which would provide enhanced access to transit for building occupants. **[No Impact]**

4.16.4 <u>Conclusion</u>

The proposed project would not result in a significant impact to transportation or traffic. [Less Than Significant Impact]

4.17 UTILITIES AND SERVICE SYSTEMS

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			\boxtimes		1,2,3,25
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					1,2,3,25
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					1,2,3,19
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					1,2,3
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					1,3,25
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\square		1,2,3,26
g.	Comply with federal, state and local statutes and regulations related to solid waste?			\square		1,2,3,26
h.	Result in a substantial physical deterioration of a public facility due to increased use as a result of the project?			\square		1,2,3

4.17.1 <u>Utilities and Service Systems Environmental Checklist</u>

4.17.2 Existing Setting

The City of Palo Alto Utilities Department (CPAU) is the only municipal utility in California that operates city-owned utility services that include electric, fiber optic, natural gas, water, and sewer services. The project site is currently developed and electricity, gas, water, sanitary sewer, and solid waste collection services are provided to the site.

4.17.2.1 Water Services

The City's drinking water is provided by the CPAU and is purchased from the San Francisco Public Utility Commission, which obtains most of its water from the Hetch Hetchy system. The City also owns five groundwater wells, three of which are currently operational. The wells are available in case the Hetch Hetchy system cannot meet the City's needs in times of drought or emergency. Water lines are available in the area to serve the project site.

The City's Water Efficient Landscape Ordinance incorporates a set of standards that are applied to any new or renovated landscape for commercial, industrial, multi-family common area, or City Facility projects with 1,000 square feet or more of landscaped area. The ordinance requires projects to meet the requirements of the City's water efficiency standards before a building or grading permit is issued.

4.17.2.2 Wastewater Services

The CPAU is responsible for the existing wastewater collection system. There are existing sanitary sewer lines in the area that serve the project site.

The City of Palo Alto operates the Regional Water Quality Control Plant (RWQCP), a wastewater treatment plant, for the East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, and Stanford University. The RWQCP is on the shore of San Francisco Bay in Palo Alto adjacent to the Palo Alto Baylands Preserve. The RWQCP discharges treated wastewater effluent to a man-made channel, which empties into the southern reach of San Francisco Bay. In 2013, the plant treated an average of 18 million gallons per day (MGD) of wastewater during the dry season, well below its permitted dry-weather capacity of 39 MGD.²³

4.17.2.3 Storm Drainage

The site is within the Matadero Creek watershed. Matadero Creek originates in the foothills of the Santa Cruz Mountains and flows in a northeasterly direction for approximately eight miles until it discharges into the Palo Alto Flood Basin, and then drains into the Lower South San Francisco Bay.

The City's Department of Public Works Storm Drain Management Program is responsible for the approval, construction, and maintenance of the storm drain system in Palo Alto. The system consists of approximately 107 miles of underground pipelines, 2,750 catch basins, 800 manholes, and six pump stations. Local storm drains are designed to convey the runoff from a 10-year storm.²⁴ Stormwater on the project site flows downhill (to the north) to existing City stormwater lines.

The project site is largely developed, and contains 61 percent impervious and 39 percent pervious surfaces.

 ²³ Palo Alto Regional Water Quality Control Plan. 2015 Pollution Prevention Plan. Available at: <u>http://www.cityofpaloalto.org/news/displaynews.asp?NewsID=1527&TargetID=65</u>. Accessed July 29, 2015.
²⁴ City of Palo Alto. Storm Drain System Facts and Figures. <u>http://www.cityofpaloalto.org/civicax/filebank/documents/2806</u>. Accessed July 30, 2015.

4.17.2.4 Solid Waste

Solid waste collection and disposal services are provided under exclusive franchises overseen by the City of Palo Alto Public Works Department. The majority of the City's solid waste is taken to the Sunnyvale Materials Recovery and Transfer Station (SMaRT[®] Station) where recyclables and yard trimmings are recovered, processed and marketed. The remaining solid waste is sent to the Kirby Canyon Landfill, or several secondary landfills. The City has an agreement with Waste Management, Inc. to dispose of waste at Kirby Canyon until 2031. In 2014, a total of 43,730 tons of solid waste were generated in Palo Alto, with a diversion rate of 80 percent.²⁵

Palo Alto residential and commercial recycling is processed at the GreenWaste Material Recovery Facility in the City of San Jose. This 96,000 square foot facility processes and recycles residential and commercial trash, yard trimmings, curbside recyclables, and food waste.²⁶

The City's Construction and Demolition Ordinance (Chapter 5.24 of the PAMC) requires the diversion of construction and demolition waste from landfills. Under this ordinance, project-related construction and demolition waste shall be diverted to an approved recycling/transformation facility or salvaged. The City passed the Construction and Demolition Debris Diversion Ordinance in 2004, and updated the ordinance in 2009. The ordinance requirements are currently enforced through the City's Green Building Program and require projects to salvage, and/or divert at least 75 percent of project debris from landfills. Mixed construction debris is processed at the Zanker Materials Processing Facility in San Jose. The facility has a total capacity of approximately 1.2 million cubic yards.²⁷

4.17.2.5 Electricity and Natural Gas

The CPAU is responsible for electricity and natural gas service in the City of Palo Alto. Electric lines and gas lines are present in the project area that currently serve the site.

4.17.3 <u>Impacts Evaluation</u>

The project proposes to demolish two existing one-story office/R&D buildings containing approximately 110,384 square feet of developed space. The project would construct a new two-story, 115,500 square foot office building on the site. The new building would have approximately the same square footage as the existing building.

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

²⁵ City of Palo Alto. Zero Waste Program, Progress Report. Accessed September 26, 2016. <u>http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/about/progress.asp</u>.

²⁶ City of Palo Alto. Comprehensive Plan Draft EIR. Accessed May 26, 2016. <u>http://www.paloaltocompplan.org/wp-content/uploads/2016/02/4-14_UtilitiesServiceSystems.pdf</u>.

²⁷ Greenwaste/Zanker. Sustainability Report. May 26, 2016.

http://www.zankerrecycling.com/sites/default/files/GreenWaste Zanker Sustainability Report 2012.pdf.

The proposed project would not substantially increase the generation of wastewater on the project site, and would not exceed existing wastewater treatment requirements. **[Less Than Significant Impact]**

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The increase in water use and wastewater generation related to the proposed project would be minimal, and would not require or result in the construction of new water or wastewater facilities. **[Less Than Significant Impact]**

c. Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project site is largely developed, and the proposed project would decrease the amount of impervious surfaces on the site after implementation from approximately 61 percent to approximately 39 percent. New storm drains would be installed such that stormwater flows from the project would flow to stormwater treatment areas throughout the site. These improvements would not result in a significant impact due to their construction, and no other stormwater facilities would be required for project implementation. **[Less Than Significant Impact]**

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The proposed project would have sufficient water supplies, since the increase in water use would be minimal. **[Less Than Significant Impact]**

e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The RWQCP would have sufficient capacity to serve the project, since the increase in wastewater generation would be minimal. **[Less Than Significant Impact]**

f. - g. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Would the project comply with federal, state and local statues and regulations related to solid waste?

Solid waste generated by the proposed project would be hauled to the City's designated recycling facility in Sunnyvale. Unrecoverable refuse is transported to Kirby Canyon Landfill in San José for disposal. Mixed construction debris is processed at the Zanker Materials Processing Facility in San Jose. The proposed project would not generate additional solid waste beyond the capacity of the existing disposal facilities. The project

would be required to comply with federal, state and local statutes and regulations related to solid waste. **[Less Than Significant Impact]**

h. Result in a substantial physical deterioration of a public facility due to increased use as a result of the project?

The project would not result in a substantial physical deterioration of a public facility due to increased use by the project. **[No Impact]**

4.17.4 <u>Conclusion</u>

The project would not result in any utility or service facility exceeding its current capacity or require the construction of new infrastructure or service facilities. **[Less Than Significant Impact]**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

Less Than Potentially Less Than Significant With Checklist Significant Significant No Impact Mitigation Source(s) Impact Impact Incorporated Does the project have the potential to degrade a. the quality of the environment, substantially Pages reduce the habitat of a fish or wildlife 13-99 species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? b. Does the project have impacts that are \boxtimes Pages individually limited, but cumulatively 13-99 considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? Does the project have environmental effects Pages C. Х which will cause substantial adverse effects 13-99 on human beings, either directly or indirectly?

4.18.1 <u>Mandatory Findings Environmental Checklist</u>

4.18.2 <u>Impacts Evaluation</u>

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

With implementation of City conditions of approval and compliance with existing laws, the project would not result in significant impacts to aesthetics, agricultural resources, air quality, geology and soils, greenhouse gas emissions, hydrology and water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation, and utilities and service systems.

With the implementation of the mitigation measures included in the proposed project and described in the biological resources, cultural resources, and hazards and hazardous materials sections of this Initial Study, the proposed project would not result in significant adverse

environmental impacts. [Less than Significant Impact with Mitigation Measures Incorporated in the Project]

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As identified elsewhere in this Initial Study, the potential environmental impacts from the proposed project are primarily limited to the construction period. It is possible that other proposed projects in the Stanford Research Park area have construction schedules that may be concurrent with the project's schedule, but the overlap is likely to be minimal, and the proposed project includes measures to minimize disturbance to adjacent land uses and reduce construction impacts to a less than significant level. **[Less than Significant Impact]**

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if it would cause substantial adverse effects to humans, either directly or indirectly. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals.

While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, noise, and hazardous materials. Due to the short construction schedule and limited extent of the project, impacts to human beings resulting from construction-related air and noise impacts would be less than significant. With the implementation of the mitigation measures described in the hazardous materials section of this Initial Study, hazardous materials impacts would be less than significant. No other direct or indirect adverse effects of the project on human beings have been identified. **[Less than Significant Impact]**

CHECKLIST SOURCES

- 1. CEQA Guidelines Environmental Thresholds (Professional judgment and expertise and review of project plans).
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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

LEAD AGENCY

City of Palo Alto

Department of Planning and Community Environment Jodie Gerhardt, Current Planning Manager Graham Owen, Associate Planner

CONSULTANTS

David J. Powers & Associates, Inc.

Environmental Consultants and Planners Nora Monette, Principal Project Manager Judy Fenerty, Project Manager Zach Dill, Graphic Artist

Archives & Architecture, LLC

Franklin Maggi Leslie A.G. Dill

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

<Note: Project Planner signs upon completion of analysis but Director shall sign when the Negative Declaration or Mitigated Negative Declaration is adopted - after circulation, comment period over>

Project Planner

2/17/17

Director of Planning and Community Environment

Date

X