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ENVIRONMENTAL CHECKLIST

Fortinet HQ 901 Kifer Road Building Project

PREPARED FOR:

City of Sunnyvale Community Development Department, Planning Division 456 W. Olive Avenue Sunnyvale, California 94086

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Fortinet HQ 901 Kifer Road Building Project

Environmental Checklist

PREPARED FOR:

City of Sunnyvale Community Development Department, Planning Division 456 W. Olive Avenue Sunnyvale, California 94086

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LIST OF ABBREVIATIONS

AB 32	California Global Warming Solutions Act of 2006
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BMPs	best management practices
CAA	federal Clean Air Act
CAAQS	California Ambient Air Quality Standard
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH4	methane
CHRIS	California Historic Resources Information System
CLUP	comprehensive land use plan
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ -equivalent
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FTA	Federal Transit Administration
GHG	greenhouse gas
LOS	level of service
LUTE	Land Use and Transportation Element
MM	mitigation measure
MMT	million metric tons
N ₂ O	nitrous oxide
NA	not applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NO _X	oxides of nitrogen
NWIC	Northwest Information Center
PM ₁₀ PM _{2.5}	particulate matter with an aerodynamic diameter of 10 micrometers or less particulate matter with an aerodynamic diameter of 2.5 micrometers or less
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SQ. FT.BAAB	San Francisco Bay Area Air Basin
SO ₂	sulfur dioxide

TAC	toxic air contaminant
TDM	transportation demand management
TMA	Transportation Management Association
VMT	vehicle miles traveled
VOCs	volatile organic compounds
VTA	Santa Clara Valley Transit Authority
UWMP	Urban water management plan

1 INTRODUCTION AND PROJECT HISTORY

The Sunnyvale City Council adopted the updated Land Use and Transportation Element (LUTE) of the General Plan in April 2017. The LUTE establishes the fundamental framework of how streets and buildings in the City of Sunnyvale will be laid out and how various land uses, developments, and transportation facilities will function together. The LUTE and accompanying policies were developed to help guide decision making regarding land use and transportation for an approximate 20-year horizon—a time frame that is referred to as *Horizon 2035*. The LUTE land use policies provide direction for the amount, location, and direction of future change.

The LUTE includes additional mixed-use residential/commercial uses in key transit-oriented areas and in transformed Village Centers as well as areas for additional business (or industrial) growth. The transportation policies create incentives for non-vehicular modes of transportation (transit, pedestrian, and bicycle networks), recognize that driving will remain a significant transportation mode in Sunnyvale, and offer options for the car-free or car-light living. The transportation policies integrate with the land use policies, in part by reducing travel distances through promoting compact, mixed-use development.

The City prepared and certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015062013) for the LUTE that evaluated the environmental impacts associated with development of the land uses and implementation of transportation planning efforts in Sunnyvale as regulated and guided by the LUTE.

The 901 Kifer Road Project (project) includes redevelopment of an existing industrial/office area within the City of Sunnyvale (see Exhibits 1-1 and 1-2). The project proposes a new office and research and development (R&D) building (approximately 172,740 square feet [sq. ft.]) to replace nine existing warehousing and office and research and development buildings containing approximately 117,812 sq. ft. The existing 161,800 sq. ft. office and R&D building at 899 Kifer Road would remain. The project would also include a total of 293 parking spaces, in addition to the 479 parking spaces on the adjacent 899 Kifer Road site. Other improvements would include bicycle lockers and racks, rooftop solar panels, landscaping, publicly visible artwork, streetscape improvements, and stormwater drainage improvements.

The project site is designated by the LUTE as Industrial, which provides for research and development, manufacturing, office, and heavy industrial uses. Retail uses that serve the industrial area or the entire community (e.g., restaurants, warehouse shopping, home improvement) may be considered appropriate. Places of assembly, residential development, and other uses with sensitive receptors and uses that may restrict the industrial purpose of the area are limited or prohibited in these areas. Industrial areas generally allow 35 percent floor area ratio (FAR) with particular areas designated for more intensive development. In addition, the City maintains a limited pool of available square footage that may be applied to projects in Industrial areas that request higher floor area ratios and provide desired community benefits, including participation in the City of Sunnyvale Green Building Program.

The project would be consistent with the LUTE because the project would redevelop a site containing existing industrial and office uses with office and R&D uses. Fortinet (project applicant) is seeking approval of 45 percent FAR based on the project's compliance with the City's Green Building Incentive Program.

The LUTE EIR was a program EIR that considered the environmental effects from the 2035 buildout scenario of the LUTE. Consistent with Public Resources Code (PRC) Section 21083.3(b) and State CEQA Guidelines (CEQA Guidelines) Section 15168 and 15183 the LUTE EIR can be used as the CEQA document for subsequent projects (public and private) consistent with the LUTE. As development projects are proposed, such as the project, they are evaluated to determine whether the entitlements/actions proposed fall within the scope of the LUTE and the impacts were addressed in the certified LUTE EIR and the project incorporates all applicable performance standards and mitigation measures identified therein. Should subsequent development projects not be consistent with the approved LUTE, or if there are specific significant effects

which are peculiar to the project or its site and cannot be addressed by uniformly applied development policies or standards, additional environmental review through the subsequent review provisions of CEQA for changes to previously-reviewed and approved projects may be warranted.

Consistent with the process described, the City is evaluating the project application to determine if additional environmental review would be required. This environmental checklist has been prepared to determine whether the environmental impacts of the 901 Kifer Road Project meet any of the following four conditions:

(1) Are peculiar to the project or the parcel on which the project would be located,

(2) Were not analyzed as significant effects in the LUTE EIR,

(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the LUTE EIR, or

(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the LUTE EIR was certified, determined to have a more severe adverse impact than discussed in the LUTE EIR.

If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the LUTE EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, then an additional EIR need not be prepared for the project solely on the basis of that impact.



Exhibit 1-1

Regional Location



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2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The project would redevelop an existing warehouse, office, and research and development area within the City of Sunnyvale. It would demolish nine existing buildings totaling approximately 117,812 square feet (sq. ft.) and would construct one new office building totaling approximately 172,740 sq. ft., as well as a total of 293 parking spaces. The project also includes bicycle lockers and racks, rooftop solar panels, landscaping, publicly visible artwork, streetscape improvements, and stormwater drainage improvements. The project would be designed to allow it to meet Leadership in Energy and Environmental Design (LEED) Gold certification standards. The project also would result in the merging of 10 parcels that comprise the project site. The 161,800 sq. ft. office and R&D building and other features (e.g., parking) located at 899 Kifer Road on the westernmost parcel in the project site would remain and would be outside of the area of work. All existing ten parcels on the site would be merged into one.

2.2 PROJECT LOCATION

The project site is located at 899 and 901 Kifer Road within the City of Sunnyvale (Exhibit 2-1). The building and other improvements at 899 Kifer would be outside the area of work, with the exception of sidewalk improvements along its street frontages. The site consists of ten parcels officially addressed as 893-909 Kifer Road (APN 205-42-011), 917 Kifer Road (APN 205-42-008), 133-135 Commercial Street and 919-921 Kifer Road (APN 205-42-007), 155 Commercial Street (APN 205-42-006), 165 Commercial Street (APN 205-42-010), 167-171 Commercial Street (APN 205-42-012), 181 Commercial Street (APN 205-42-003), 183 Commercial Street (APN 205-42-004), 193 Commercial Street (APN 205-42-002), and no address (APN 205-42-001). 901 Kifer is used to reference the multiple parcels in the area of work. The project site is bounded by Central Expressway to the north, Commercial Street to the east, Kifer Road to the south, and industrial and commercial development to the west along San Lazaro Avenue (Exhibit 2-1).

2.3 EXISTING SETTING

The project site consists of 10 contiguous parcels. The proposed development area consists of contiguous parcels that are developed with 9 warehouse, office, and research and development buildings totaling approximately 117,812 sq. ft., as well as parking, and landscaping (Exhibit 2-2). The proposed development area is approximately 6.88 gross acres in size excluding the 899 Kifer Road parcels (10.19 gross acres). No natural habitat or water features exist on the site. Surrounding land uses consists of office, industrial uses, and commercial uses. The subject parcels are all designated as Industrial and are zoned as Industrial and Service (M-S).

2.4 PROJECT OBJECTIVES

The project objectives are the following:

- Accommodate Fortinet's need for additional space with a state-of-the-art office and research development facility.
- ▲ Improve the visual characteristics of the project site through architectural, landscaping, and streetscape improvements.
- ▲ Build sustainably by meeting the requirements for LEED Gold certification.

2.5 PROJECT ELEMENTS

The project includes redevelopment of an existing warehouse, office, and research and development area within the City of Sunnyvale. It would construct a new, state-of-the-art office and research and development (R&D) building at 901 Kifer Road on the corner of Kifer Road and Commercial Street, a roof terrace, landscaping, and surface parking (Exhibit 2-1). The project would result in the merging of10 parcels in the project site, including the parcels containing 899 Kifer Road, creating one approximately 17.07-acre parcel. No modifications would be made to the former 899 Kifer Road parcel with the exception of sidewalk improvements along its street frontages.

The new office building would total approximately 172,740 sq. ft. gross floor area with four stories. The building height would be up to 75 feet in height excluding a portion of the roof screen. When added to the existing 161,800 sq. ft. building at 899 Kifer Road, the project would result in a total project floor to area ratio (FAR) of 0.45. The land use designation and zoning for the project site allows a maximum FAR of 0.35, but the LUTE and the zoning district permit an additional 0.10 FAR if the project complies with the City's Green Building Program. The project would seek an FAR incentive of 0.10 based on its compliance with the Green Building Incentive Program.

To construct the project, Fortinet would demolish approximately 117,812 sq. ft.. of existing buildings (Exhibit 2-2). The existing Moose Lodge at 905 Kifer Road is outside of the project site and would remain. The project also includes sidewalk improvements along the frontages of the former 899 parcel and the area of work and the construction of a bike lane along a portion of Kifer Road.

The architectural renderings of the proposed building as viewed from Commercial Street and the intersection of Kifer Road and Commercial Street are provided in Exhibits 2-3 and 2-4.

2.5.1 Energy-Saving Features

The project includes the replacement of numerous energy-inefficient buildings with a single distinguished, energy-efficient building. The project's energy-saving features would allow it to be certified LEED Gold (and the project applicant will seek LEED Gold certification) and include an advanced passive cooling system, a wall system designed to provide copious natural light while minimizing solar heat gain, rooftop solar, motion-sensing lights, electric vehicle charging stations for 29 parking spaces, bicycle parking spaces, and showers for employees. Preliminary LEED modeling indicates that even excluding the rooftop solar, the project would use approximately 27 percent less energy per year than a standard building.

2.5.2 Trip Reduction Features

The project includes a TDM program that would be available to all Fortinet employees at the project site. The TDM program would be designed to reduce peak-hour vehicle trips from the project site (Kimley-Horn and Associates 2018a) so that such trips would be no more than the number of trips associated with development at 0.35 FAR.

The following summarizes the preliminary TDM program for the project. A final TDM program will be reviewed by the City prior to building permit issuance. It is assumed that, if necessary, the TDM program would be refined over time to adapt to changing transportation trends and to maximize the efficiency of the program. The TDM program would be specifically designed to focus on incentives and rewards for employees to participate in the program rather than penalties for not participating. Fortinet would offer a combination of program elements to encourage employees to utilize alternative modes of transportation to driving alone. Potential program elements could include:

- ▲ vanpool program;
- preferential carpool parking spaces;
- ▲ preferential vanpool parking spaces;
- ▲ designated parking spaces for car share vehicles;
- ▲ on-site bike share program;
- ▲ subsidized Caltrain tickets for employees;
- ▲ Subsidized Santa Clara Valley Transportation Authority (VTA) transit tickets for employees;
- ▲ subsidy for carpool, vanpool, shuttle, or bus service;
- ▲ compressed workweek program;
- alternate hours workweek program;
- telecommuting;
- passenger loading zones for carpools, vanpools, and shuttles;
- ▲ safe, well-lit, and accessible routes to nearby transit or shuttle stops;
- ▲ bike lockers/racks;
- ▲ showers/changing rooms; and
- ▲ shuttle service.

2.5.3 Outdoor Space and Landscaping

The project includes approximately 2.30 acres of landscaped area. One of the primary new landscaped areas (west plaza) would be a courtyard between 899 and 901 Kifer Road that would serve to tie the two buildings together. This courtyard would feature an outdoor dining area, a lawn area, and pedestrian connections between 899 and 901 Kifer, and the Moose Lodge at 905 Kifer. The project's frontage at the intersection of Kifer Road and Commercial Street would be landscaped with drought-tolerant and native plants mixed with ornamental plants and trees, with a palette consisting mainly of Mediterranean plants, This frontage would include artwork (to be reviewed later by the City's Arts Commission) and enhanced sidewalk facilities.

The project includes removal of 17 trees (five that have health issues) that are protected under the Municipal Code Section 19.94.030. The project would comply with the City's tree replacement requirements, which require a minimum of 20 trees ranging in size from 24-inch box to 48-inch box (Exhibit 2-5).

2.5.4 Other Project Features

The project includes a number of other improvements, including bio-filtration features that would improve the quality of the stormwater from the property from existing conditions. The project also would address existing site constraints by using construction techniques that prevent cross-contamination of aquifers affected by historical off-site sources and include features that prevent vapor intrusion as required by the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Prior to project construction, the applicant intends to request modification of the RWQCB's groundwater monitoring program for the property and permission to decommission (destroy) groundwater wells and soil vapor monitoring. The RWQCB would approve the modification of the well monitoring program and the disposition of the wells (including specification of the existing wells to be replaced following completion of project construction), and the Santa Clara Valley Water District would oversee well destruction and disposal of hazardous materials. Regulation by these two agencies would ensure compliance with the Porter-Cologne Water Quality Control Act, the California Department of Water Resources' California Well Standards, set forth in Bulletin Nos. 74-81 and 74-90, which establish statewide standards for safe well construction and destruction, and applicable Santa Clara Valley Water District ordinances that include detailed well destruction and construction procedures.

Pursuant to the project's Transportation Operational Analysis (TOA), General Plan Policy LT-3.24, and Sunnyvale City Council Policy 1.2.2 (Transportation Impact Mitigation), the City will require the installation of a traffic signal at the intersection of Commercial Street and Kifer Road to ensure proper operation of the intersection consistent with City standards. The signalization of this intersection would not require the establishment of new dedicated traffic lanes on either roadway.

2.5.5 Construction Schedule

The demolition and construction activities for the project are proposed to occur over an approximately 1.5year period. Construction activities could occur during weekdays between 7:00 a.m. and 6:00 p.m. and on Saturdays between 8:00 a.m. and 5:00 p.m. No construction activity would occur on Sunday or federal holidays when City of Sunnyvale offices are closed.

2.6 REQUIRED ACTIONS

The project would require the following actions by the City.

- ▲ approval of a vesting tentative parcel map consistent with the requirements of Chapter 18.22 of the Municipal Code,
- ▲ approval of design review as required under Chapter 19.80 of the Municipal Code,
- ▲ issuance of demolition permits for the removal of existing buildings,
- ▲ issuance of building permits, and
- ▲ approval and recordation of a final parcel map.

The project would also require approval to modify the RWQCB's groundwater monitoring program for the property, resulting in the decommissioning (destruction) of groundwater wells. This would also require approval by the Santa Clara Valley Water District.

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Buildings to be Demolished



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ASCENT



Source: Image provided by Hellar Manus in 2018

X17010148 02 007

Exhibit 2-3

Architectural Rendering of Building as Viewed from Commercial Street





Source: Image provided by Hellar Manus in 2018

X17010148 02 008

Exhibit 2-4

Architectural Rendering of Building as Viewed from Corner of Intersection



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3 ENVIRONMENTAL CHECKLIST FOR SUPPLEMENTAL ENVIRONMENTAL REVIEW

3.1 EXPLANATION OF CHECKLIST EVALUATION CATEGORIES

The LUTE EIR was prepared as a program EIR consistent with the requirements of California Environmental Quality Act (CEQA). The analysis considered the environmental impacts of development buildout that could occur under the LUTE (assumed to be year 2035).

As discussed in Chapter 2, the project is consistent with the LUTE policies and applicable density standards. CEQA Guidelines Section 15183 dictates that, in circumstances such as these, a lead agency "shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." Section 15183 further indicates that an initial study or other analyses should be prepared by a lead agency to determine the scope of environmental review in light of this prohibition. The purpose of this process is to streamline the review of covered projects and reduce the need for the preparation of repetitive environmental studies.

Under Section 15183, the lead agency's initial study checklist is used to determine whether the following types of impacts may merit additional environmental analysis:

- 1. Significant impacts that are peculiar to the project or the parcel on which the project would be located,
- 2. Significant impacts that were not analyzed in a prior EIR on the zoning action, general plan or community plan with which the project is consistent,
- 3. Potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
- 4. Previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Unless an environmental effect satisfies one of these criteria, the lead agency can rely upon its previously certified EIR and not duplicate that analysis.

The purpose of this checklist is to evaluate the categories listed in CEQA Guidelines 15183 to determine whether, in light of the LUTE EIR, there are any significant environmental effects requiring additional environmental analysis. The row titles of the checklist include the full range of environmental topics, as presented in Appendix G of the State CEQA Guidelines. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to PRC Section 21083.3(b) and State CEQA Guidelines Section 15183. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact because it was analyzed and addressed with mitigation measures in the LUTE EIR. For instance, the environmental categories might be answered with a "no" in the checklist because the impacts associated with the project were adequately addressed in the LUTE EIR, and the environmental impact significance conclusions of the LUTE EIR remain applicable. The purpose of each column of the checklist is described below.

Where Impact was Analyzed?

This column provides a cross-reference to the pages of the LUTE EIR where information and analysis may be found relative to the environmental issue listed under each topic.

Any Peculiar Impact?

Pursuant to CEQA Guidelines Sections 15183(b)(1) and 15183(f), this column indicates whether the project could result in a peculiar impact, including a physical change that belongs exclusively or especially to the project or that is a distinctive characteristic of the project or the project site and that peculiar impact is not substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Impact Not Analyzed as Significant Effect in LUTE EIR?

Pursuant to CEQA Guidelines Section 15183(b)(2), this column indicates whether the project would result in a significant effect that was not analyzed as significant in the LUTE EIR. A new EIR is not required if such a project impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Off-Site or Cumulative Impact Not Analyzed as Significant Effect in LUTE EIR?

Pursuant to CEQA Guidelines Section 15183(b)(3), this column indicates whether the project would result in a significant off-site or cumulative impact that was not discussed in the LUTE EIR. A new EIR is not required if such an off-site or cumulative impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Adverse Impact More Severe Based on Substantial New Information?

Pursuant to CEQA Guidelines Section 15183(b)(4), this column indicates whether there is substantial new information that was not known at the time the LUTE EIR was certified, indicating that there would be a more severe adverse impact than discussed in the LUTE EIR. A new EIR is not required if such an impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?

This column indicates whether the LUTE EIR and adopted CEQA Findings provide mitigation measures to address effects in the related impact category. In some cases, the mitigation measures have already been implemented. This column also indicates whether uniformly applied development standards or policies address identified impacts. A "yes" response will be provided if the impact is addressed by a LUTE mitigation measure or uniformly applied development standards or policies. If "NA" is indicated, this Environmental Checklist Review concludes that there was no impact, the adopted mitigation measures are not applicable to this project, or the impact was less-than-significant and, therefore, no mitigation measures are needed.

3.2 DISCUSSION AND MITIGATION SECTIONS

Discussion

A discussion of the elements of the checklist is provided under each environmental category to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue, and the status of any mitigation that may be required or that has already been implemented.

Mitigation Measures

Applicable mitigation measures from the prior environmental review that would apply to the project are listed under each environmental category. New mitigation measures are included, if needed.

Conclusions

A discussion of the conclusion relating to the need for additional environmental documentation is contained in each section.

4 ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
1.	Aesthetics. Would the project:						
a.	Have a substantial adverse effect on a scenic vista?	Draft EIR Setting pp. 3.12-1 to 3.12-5 Impact 3.12.1 and 3.12.5	No	No	No	No	NA, no impact would occur.
b.	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Draft EIR Setting pp. 3.12-1 to 3.12-5 Impact 3.12.2 and 3.12.5	No	No	No	No	NA, no impact would occur.
C.	Substantially degrade the existing visual character or quality of the site and its surroundings?	Draft EIR Setting pp. 3.12-1 to 3.12-5 Impact 3.12.3 and 3.12.5	No	No	No	No	NA, impact remains less than significant.
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Draft EIR Setting pp. 3.12-1 to 3.12-5 Impact 3.12.4 and 3.12.5	No	No	No	No	NA, impact remains less than significant.

4.1.1 Discussion

No substantial change in the environmental and regulatory settings related to aesthetics, described in the LUTE Draft EIR Section 3.12, Visual Resources and Aesthetics, has occurred since certification of the EIR in April 2017.

a) Have a substantial adverse effect on a scenic vista?

Impact 3.12.1 of the LUTE Draft EIR identifies that Sunnyvale does not have any designated scenic vistas, but there are several trees and historic resources, as well as the Libby Water Tower, the Murphy Avenue Commercial District, and the cherry orchards on Mathilda Avenue that comprise important local scenic attributes. The LUTE Draft EIR identified no significant project or cumulative impacts (Impact 3.12.5) on scenic vistas would occur.

The project and the intersection signal improvement are located within an existing developed industrial/commercial area that does not include these features or any scenic vistas. Therefore, no off-site new significant project impacts or substantially more severe impacts would occur, and the findings of the certified LUTE EIR remain valid. No further analysis is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact 3.12.2 of the LUTE Draft EIR identifies that there are no designated state scenic highways in the City. Therefore, no project impact would occur for build out of the City under the LUTE or for the project.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Impact 3.12.3 of the LUTE Draft EIR identifies that new development under the LUTE would mostly be concentrated around transit nodes and other areas that are visually appropriate for increased development intensities in regards to densities and structure height similar to existing developed conditions. The LUTE would result in new urban uses that would complement the city's existing urban character. The LUTE policies and associated actions require compliance with design guidelines for future development subsequent to the Draft LUTE and would maintain compatibility with existing surrounding neighborhoods. These guidelines would further support the direction provided in the Citywide Design Guidelines. The LUTE Draft EIR identified that no significant project or cumulative impacts (Impact 3.12.5) on visual character would occur.

The project is located within an existing developed industrial/commercial area. The proposed architectural design of the proposed building would be consistent with the developed conditions (industrial, office, and commercial buildings) along Kifer Road. Project landscaping would enhance the existing visual character of the street frontage along Kifer Road and Commercial Street (see Exhibit 2-5 and 2-6). The proposed intersection signal improvement would be consistent with other intersection signals and related roadway features. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact 3.12.4 of the LUTE Draft EIR identifies that future development under the LUTE would not result in substantial increases in existing daytime glare or nighttime lighting conditions in the City. Citywide Design Guideline 3.B9 provides guidance on reducing light impacts and associated glare. Guideline 2.E3 provides design considerations to address glare, such as avoiding large expanses of highly reflective surfaces and mirror glass exterior walls. Furthermore, compliance with Sunnyvale Municipal Code Chapter 19.42.050 regarding restrictions on lighting would ensure that all lights, spotlights, floodlights, reflectors, and other means of illumination are shielded or equipped with special lenses in such a manner as to prevent any glare or direct illumination on any public street or other property. The LUTE Draft EIR identified that no significant project or cumulative impacts (Impact 3.12.5) from glare and nighttime lighting would occur.

The project and intersection signal improvement are located within an existing developed industrial/commercial area that contains existing sources of daytime glare from buildings as well as nighttime lighting from buildings, street lighting, and parking lot lighting. The project's building features include window glazing and architectural treatments designed to address glare. The project is also subject to compliance to the lighting requirements in Sunnyvale Municipal Code Chapter 19.42.050 regarding lighting shielding. The project has provided a lighting analysis (see Sheets LP.11 through LP.15 in the 901 Kifer Planning Application) showing that the project would meet the City's lighting requirements and policies designed to prevent glare and direct illumination beyond the project's property line. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2)

impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

Mitigation Measures

No significant aesthetic impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project or the parcel on which the project would be located. No new impacts have occurred nor has any new information been found requiring new analysis or verification. The project would not have any potentially significant off-site impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.2 AGRICULTURE AND FOREST RESOURCES

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
2.	Agriculture and Forestry Reso	urces. Would the pro	oject:				
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?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Scoped out at Notice of Preparation stage. No agricultural zoning or Williamson Act contracted lands exist in the City.	No	No	No	No	NA
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 Government Code section 51104(g))?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA
d.	Result in the loss of forest land or conversion of forest land to non- forest land?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA
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?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA

4.2.1 Discussion and Conclusion

Agricultural and forestry impacts were scoped out of the LUTE EIR at the Notice of Preparation stage as these resources do not exist in the City. The project site does not contain any of these resources and would also have no impact.

4.3 AIR QUALITY

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
3.	Air Quality. Would the project:						
a.	Conflict with or obstruct implementation of the applicable air quality plan?	Draft EIR Setting pp. 3.5-1 to 3.5-13 Impact 3.5.1	No.	No	No	No	NA, impact remains less than significant.
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Draft EIR Setting pp. 3.5-1 to 3.5-13 Impact 3.5.2, 3.5.3 and 3.5.8	No.	No	No	No	Yes, but impact remains significant and unavoidable.
с.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Draft EIR Setting pp. 3.5-1 to 3.5-13 Impact 3.5.2, 3.5.3 and 3.5.8	No.	No	No	No	Yes, but impact remains significant and unavoidable.
d.	Expose sensitive receptors to substantial pollutant concentrations?	Draft EIR Setting pp. 3.5-1 to 3.5-13 Impact 3.5.4, 3.5.5, 3.5.6, and 3.5.8	No.	No	No	No	NA, but impact remains significant and unavoidable.
e.	Create objectionable odors affecting a substantial number of people?	Draft EIR Setting pp. 3.5-1 to 3.5-13 Impact 3.5.7	No.	No	No	No	NA, impact remains less than significant.

4.3.1 Discussion

There have been changes in the regulatory setting related to Air Quality, described in LUTE Draft EIR Section 3.5, Air Quality, has occurred since certification of the EIR in April 2017, but these changes do not result in any new or more severe significant effects than were analyzed in the LUTE EIR.

On April 19, 2017, the Bay Area Air Quality Management District (BAAQMD) adopted an updated Clean Air Plan. Like the 2010 Clean Air Plan, the 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health & Safety Code. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NOx)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds on the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants. BAAQMD updated its CEQA Guidelines in May 2017. All CEQA impact thresholds applicable to land use development, such as the development contemplated by the LUTE, remain unchanged from the 2011 CEQA Guidelines.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Impact 3.5.1 of the LUTE Draft EIR evaluated whether the LUTE would conflict with or obstruct implementation of the applicable air quality plan. The Bay Area Air Quality Management District's (BAAQMD) 2010 Clean Air Plan includes various control strategies to reduce emissions of local and regional pollutants and promote health and energy conservation. As stated in Impact 3.5.1, the LUTE supports the goals, includes applicable pollutant control mechanisms, and is consistent with the 2010 Clean Air Plan. Therefore, this impact is considered less than significant.

No changes in the air quality conditions for the project site have occurred since approval of the LUTE. The project would be consistent with land use and zoning designations and would not include any development beyond that assumed and analyzed in the LUTE EIR. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR concerning consistency with air quality plans remain valid and no further analysis is required.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impacts 3.5.2, 3.5.3 and 3.5.8 of the LUTE Draft EIR identified that implementation of the LUTE would result in short-term construction and long-term operation emissions that would substantially contribute to air pollution or result in a projected air quality violation. The City adopted Mitigation Measure 3.5.3 that requires construction projects to implement BAAQMD's basic construction mitigation measures as well as use construction equipment that is California Air Resources Board (CARB) Tier 3 Certified or better to address construction emissions. The LUTE Draft EIR identified that the LUTE would improve the viability of walking, biking, and transit that would reduce vehicle use. However, the LUTE EIR concluded that construction and operational air quality impacts of the implementation of the LUTE were significant and unavoidable under project and cumulative conditions (Impact 3.5.8).

Construction- and operational-related emissions of air pollutants as a result of the project were calculated using the California Emissions Estimator Model Version 2016.3.2 computer program (CalEEMod) (CAPCOA 2016), as recommended by BAAQMD and other air districts in the state. Air quality modeling input and output parameters, detailed assumptions, and construction and operational emissions estimates are provided in Appendix A.

Construction of the project would include demolition of existing buildings and construction of a new building and associated parking and landscaping. Demolition and removal of existing buildings, parking lots, and other improvements can generate dust and possible hazardous emissions due to the use of hazardous materials in older buildings. New construction could generate dust and particulate matter from soil disturbance. The use of heavy equipment for demolition and construction activities would generate exhaust emissions such as oxides of nitrogen (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), reactive organic gases (ROG), respirable particulate matter with an aerodynamic diameter of 10 microns or smaller (PM₁₀), and fine particulate matter with an aerodynamic diameter of 2.5 microns or smaller (PM_{2.5}). Project construction is anticipated to occur between winter 2018 and spring 2020. There is nothing peculiar about the project's demolition or construction or the project's parcel that would require non-standard demolition or construction techniques.

Maximum daily construction emissions of criteria pollutants and precursors are summarized in Table 4.3-1. Exhaust emissions generated by construction activities would not exceed BAAQMD's applicable thresholds of significance. However, fugitive PM₁₀ and PM_{2.5} dust emissions could contribute to localized pollutant

concentrations that exceed applicable National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS) if dust control measures are not implemented. Construction of the intersection signal improvement would not substantially alter these conclusions. As noted above, LUTE EIR Mitigation Measure 3.5.3 requires construction projects to implement BAAQMD's basic construction mitigation measures, which include the following dust control measures: (1) all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; (2) all haul trucks transporting soil, sand, or other loose material off-site shall be covered; (3) all visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; (4) all vehicle speeds on unpaved roads shall be limited to 15 mph; (5) all roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used; and (6) post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.

Table 4.3-1 Summary of Maximum Daily Exhaust Emissions of Criteria Air Pollutants and Precursors Associated with Project Construction

	Maximum Daily Exhaust Emissions (lb/day)					
	ROG	NO _X	PM ₁₀ Exhaust	PM _{2.5} Exhaust		
Project Construction (Winter 2018–Spring 2020)	33	49	21	12		
BAAQMD Threshold	54	54	82	54		

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; Maximum Daily Exhaust Emissions represent maximum daily level for each pollutant over the entire construction period.

Source: Modeling performed by Ascent Environmental in 2018

Table 4.3-2 shows the maximum estimate for operational emissions from the proposed project. Based on the project's construction timeline, the expected completion date would be April 2020. For the purposes of this analysis, the year 2020 was considered the project's first full operational year. Though this is unlikely, it represents a conservative estimate of operational emissions as using future operational years within CalEEMod would assume additional improvements in energy efficient technology for buildings and vehicles.

Table 4.3-2	Summary of Maximum Daily Operational Emissions of Criteria Air Pollutants and Precursors during
	Summer and Winter at Full Buildout (2021)

	lb/day						
Emissions Source	ROG	NOx	PM ₁₀ Exhaust	PM _{2.5} Exhaust			
Area Sources ¹	4	<1	<1	<1			
Natural Gas Combustion	<1	1	1	1			
Mobile Sources (Vehicle Trips) ²	3	12	9	3			
Total Maximum Daily Emissions	7	12	10	3			
BAAQMD Thresholds of Significance	54	54	82	54			

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; PM_{2.5} = fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less;

Totals may not sum exactly due to rounding.

¹ Area-source emissions include emissions from landscape maintenance activity, the application of architectural coatings as part of regular maintenance, and consumer products.

² Mobile-source emissions were estimated using emission factors in the transportation module of CalEEMod and trip generation estimated by the traffic analysis prepared for the project by Hexagon Transportation Consultants in September 2018.

See Appendix A for detailed input parameters and modeling results.

Source: Modeling conducted by Ascent Environmental in 2018.

See Appendix A for detailed input parameters and modeling results.

The modeling results shown indicate that the project would not exceed BAAQMD thresholds. Similar to the LUTE EIR, construction emissions could be significant. The project would be required to implement Mitigation Measure 3.5.3, identified in the LUTE EIR, to reduce the air quality impacts of short-term construction. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

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

Impact 3.5.8 of the LUTE Draft EIR evaluated the cumulative impacts to air quality. The analysis noted that, while contribution of the LUTE to adverse impacts to air quality would be cumulatively considerable, the BAAQMD-recommended significance thresholds, as applied to each individual project, would be used to determine whether a project's contribution to a significant impact to air quality would be cumulatively considerable.

As discussed above in b), emissions of criteria air pollutants and precursors associated with construction and operation of the project would not exceed BAAQMD-recommended mass emission thresholds, and therefore would not make a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, the project's land use and development intensities are consistent with the LUTE. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Impacts 3.5.4, 3.5.5, 3.5.6, and 3.5.8 of the LUTE Draft EIR evaluated whether construction and operational activities would expose sensitive receptors to substantial pollutant concentrations of TACs. Sensitive receptors include residences, schools, medical facilities, family day cares, and places of worship. Construction-related TACs potentially affecting sensitive receptors include off-road diesel-powered equipment, and operational TACs include mobile and stationary sources of diesel particulate matter. Both of these impacts are identified in the LUTE EIR as potentially significant. Implementation of Mitigation Measure 3.5.5 and Mitigation Measure 3.5.6, in addition to BAAQMD permitting requirements, were determined in the LUTE EIR to provide adequate mitigation to reduce these impacts to less than significant under project conditions, but found that the LUTE's contribution to significant cumulative impacts would be cumulatively considerable (Impact 3.5.8).

The project would not result in the regular use during operation of any TAC sources, such as regular and frequent visits by diesel-powered haul trucks. However, the project includes a backup diesel generator for use in emergencies, such as power outages. Project construction, would involve the use of diesel particulate matter-emitting off-road construction equipment. Sensitive receptors in the vicinity of the project include residential developments approximately 750 feet south of the project site. Otherwise, the project site is generally surrounded by industrial and commercial uses in all directions.

In compliance with LUTE EIR Mitigation Measure 3.5.5, the applicant prepared a health risk assessment to analyze the health risks on the nearest sensitive receptor, as required by LUTE EIR Mitigation Measure 3.5.5. Results of this assessment indicate that the maximum concentration of PM_{2.5} during construction would be 0.017 micrograms per cubic meter (μ g/m³), which is below the BAAQMD significance threshold of 0.3 μ g/m³. The highest calculated carcinogenic risk from project construction is 3.29 per million, which is below

the BAAQMD threshold of 10 in one million. Non-cancer hazards for diesel PM would be below BAAQMD threshold of 1.0, with a chronic hazard index computed at 0.003 and an acute hazard index of 0.07. (Kimley-Horn and Associates 2018c.)

Considering the highly dispersive properties of diesel particulate matter, the relatively low mass of diesel particulate matter that would generated during project construction (see Table 4.3-1), the intermittent use of the backup diesel generator, the distance to sensitive receptors (750 feet south of the project site), and the relatively short period during which particulate matter-emitting construction activity would take place, the impact of operation- and construction-related activities exposing sensitive receptors to a substantial pollutant concentration would be less than significant.

Implementation of Mitigation Measure 3.5.6 was determined to be unnecessary given that the project does not propose adding new sensitive receptors to the project area that could be adversely affected by construction emissions and the project would not be a significant operational source of TACs or generate 100 heavy-duty truck trips daily.

The project would be consistent with land use and zoning designations and would not include any development beyond that allowed by the LUTE EIR. Therefore, with application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR concerning the exposure of sensitive receptors to substantial pollutant concentrations remain valid and no further analysis is required.

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

Impact 3.5.7 of the LUTE Draft EIR identified that development associated with the LUTE could create objectionable odors affecting a substantial number of people. The LUTE Draft EIR concluded that implementation Mitigation Measure 3.5.7 would reduce this impact to less than significant.

The project does not include any long-term uses that are considered to be sources of objectionable odors (e.g., landfill, wastewater treatment plant). Operation of the project may include a limited number of diesel-fueled trucks delivering materials to the project area; however, truck deliveries would be infrequent and not involve constant emissions of odorous diesel exhaust. Office/research and development land uses are not typically considered to be sources of objectionable odors and would not be subject to implementation of Mitigation Measure 3.5.7. Thus, the project is not a source of objectionable odors and the surrounding development, which also consists of primarily commercial and office/R&D uses, is not a source of objectionable odors, and there is no cumulative impact related to objectionable orders. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to odors remain valid and no further analysis is required.

Mitigation Measures

The following mitigation measures were referenced in the LUTE Draft EIR analysis and are applicable to the project.

Mitigation Measure MM 3.5.3 Short-Term Construction Emissions: The following will be added as policies to the Environmental Management Chapter of the General Plan:

NEW POLICY: Prior to the issuance of grading or building permits, the City of Sunnyvale shall ensure that the Bay Area Air Quality Management District's (BAAQMD) basic construction mitigation measures from Table 8-1 of the BAAQMD 2011 CEQA Air Quality Guidelines (or subsequent updates) are noted on the construction documents.

NEW POLICY: In the cases where construction projects are projected to exceed the BAAQMD's air pollutant significance thresholds for NO_x, PM_{10} , and/or $PM_{2.5}$, all off-road diesel-fueled equipment (e.g., rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, tractors) shall be at least California Air Resources Board (CARB) Tier 3 Certified or better.

CONCLUSION

While the project-specific analyses provide additional detail for the project site, the analysis confirms that with application of uniformly applied development standards and policies the project would result no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR regarding air quality impacts remain valid and no additional analysis is required.

4.4 BIOLOGICAL RESOURCES

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any .Adverse Impact More Severe Based on Substantial New Information?	Do .EIR Mitigation. Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
4.	Biological Resources. Would	the project:					
а.	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?	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.1 and 3.9.5	No	No	No	No	NA, impact remains less than significant
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.2 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
с.	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?	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.2 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
d.	Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.3 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.4 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
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?	Draft EIR Setting pp. 3.9-1 to 3.9-13 Impact 39.4 and 3.9.5	No	No	No	No	NA, impact remains less than significant.

4.4.1 Discussion

No new information pertaining to biological resources has become available since the LUTE EIR was certified in April 2017.

To determine if there was substantial new information about the project setting, the project sponsor had a qualified biologist evaluate the project site and the project. The biologist confirmed that the site has no natural plant communities, other natural habitat, or sensitive habitat, no suitable habitat for any special-status species, and no wetlands or other waters of the United States. The biologist also concluded project site does not support any suitable habitat for wildlife nursery sites, including bird rookeries or roosting bat colonies and that the project would comply with the City of Sunnyvale's Bird Safe Design Guidelines and state law to prevent impacts to nesting and flying birds. The biologist also noted that the project would comply with the City of Sunnyvale's 2018a.)

 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 the U.S. Fish and Wildlife Service?

As identified in LUTE Draft EIR Impact 3.9.1, the urbanized portions of the city are largely built out and do not have large areas of natural habitat. Ruderal infill lots could support burrowing owl and Congdon's tarplant. Urban parks, open space, and riparian areas could support nesting birds. Active nests of all migratory birds, including raptors, are protected by state and federal law. Direct impacts on special-status species could occur as a result of construction of private development and/or public projects supporting future uses (e.g., trails). The LUTE policies and actions include protections that address natural habitat conditions in the city. The City of Sunnyvale is also required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection. This would include ensuring that nesting birds and raptors are not impacted during construction activities. Thus, the LUTE Draft EIR identified this impact as less than significant under project and cumulative conditions (Impact 3.9.5).

The project site consists of buildings, paved parking areas, and landscaped areas with trees. No natural habitat conditions exist to support special-status species. The project also is required to comply with the federal and state provisions that prohibit harm to nesting birds and raptors. To ensure compliance, the project plans include the following statement: "In accordance with the Migratory Bird Treaty Act, the California Fish and Game Code, and other relevant statutory authorities, tree removals will be avoided that are identified to contain an active bird or raptor nest and provide an appropriate non-disturbance buffer around the nest site until the birds leave the nest." (901 Kifer Planning Application.)

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

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

LUTE Draft EIR Impact 3.9.2 and 3.9.5 address potential impacts to wetlands and other sensitive habitats from implementation of the LUTE. The analysis identifies that subsequent projects under the LUTE are required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection in addition to LUTE policies and actions and the City's Municipal Code. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).
As identified above (a), the project contains no riparian or other sensitive natural habitat community. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant offsite impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding biological impacts remain valid and no further analysis is required.

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?

LUTE Draft EIR Impact 3.9.2 and 3.9.5 address potential impacts to wetlands from implementation of the LUTE. The analysis identifies that subsequent projects under the LUTE are required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection in addition to LUTE policies and actions and the City's Municipal Code. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).

As identified above (a), the project contains no wetland resources. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding wetlands and waters of the United States remain valid and no further analysis is required.

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

LUTE Draft EIR Impact 3.9.3 and 3.9.5 identified no significant impacts to wildlife movement as planned development of the city under the LUTE would occur within existing developed areas of the city and would not extend into wetlands and open space areas along San Francisco Bay that provide habitat and movement corridors for wildlife species in the region. In addition, creek and waterway corridors within the City (Stevens Creek, Calabazas Creek, and Moffett Channel) would be retained in their current condition under the Draft LUTE. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).

The project is located within an existing developed area and provides no wildlife movement corridors. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant offsite impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding migratory fish and wildlife movement and use of native wildlife nursery sites remain valid and no further analysis is required.

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

As identified in Impact 3.9.4, the LUTE includes policies that support the objectives of the San Francisco Bay Plan and would not conflict with the City's tree protection provisions provided in Chapter 19.94 of the City's Municipal Code. Thus, no significant impacts were identified.

The project would remove 17 trees (five that have health issues) that are protected under the Municipal Code Section 19.94.030. The project would comply with the City's tree requirements and is required to replace these trees with a minimum of 20 trees ranging in size from 24-inch box to 48-inch box (see Exhibit 2-7). Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR

regarding consistency with local policies and ordinances protecting biological resources remain valid and no further analysis is required.

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 City is not located in a habitat conservation plan area. As a result, the LUTE EIR determined there would be no conflict with an adopted habitat conservation plan would occur, and no impact would result. Therefore, no significant impact was identified at under project or cumulative conditions. No new conservation plans have been adopted since approval of the LUTE. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR.. The findings of the certified LUTE EIR concerning conflicts with adopted conservation plans remain valid and no further analysis is required.

Mitigation Measures

No significant biological resource impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

With the application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR... Therefore, the findings of the certified LUTE EIR regarding biological resources remain valid and no further analysis is required.

4.5 CULTURAL RESOURCES

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final-EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information ?	Do EIR Mitigation. Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
5.	Cultural Resources. Would the	e project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Draft EIR Setting pp. 3.10-1 to 3.10-11 Impact 3.10.1 and 3.10.3	No	No	No	No	NA, but impact remains significant and unavoidable
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Draft EIR Setting pp. 3.10-1 to 3.10-11 Impact 3.10.2	No	No	No	No	NA, impacts would remain less than significant.
C.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Draft EIR Setting pp. 3.7-1 to 3.7-13 Impact 3.7.4	No	No	No	No	NA, impacts would remain less than significant.
d.	Disturb any human remains, including those interred outside the formal cemeteries?	Draft EIR Setting pp. 3.10-1 to 3.10-11 Impact 3.10.2	No	No	No	No	NA, impacts would remain less than significant.

4.5.1 Discussion

In July 2018, the project applicant requested a report from the Northwest Information Center (NWIC) of the California Historic Resources Information System (CHRIS). The letter report (CHRIS 2018) noted that a review of records indicates there is no record of any cultural resources studies that formally covered the project site and no recorded archaeological resources or historic structures. The applicant prepared a Historic Resource Evaluation for the project site that identified no significant historic resources that could be eligible under the California Register of Historic Places criteria or Section 19.96.050 of the City of Sunnyvale Municipal Code (LSA 2018b).

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

LUTE Draft EIR Impact 3.10.1 identified that the City includes numerous buildings that have historical value that are associated with its previous industrial and military related industries and subsequent actions under the LUTE have the potential to directly (i.e., demolition) or indirectly (i.e., adverse effects to historical setting from adjacent construction) impact historic buildings and structures that qualify as historic resources under CEQA. The Community Character chapter of the Sunnyvale General Plan includes various policies addressing this issue. Policy CC-5.1 states that the City will preserve existing landmarks and cultural resources and their environmental settings, Policy CC-5.3 seeks to identify and work to resolve conflicts between the preservation of historic resources and alternative land uses, and Policy CC-5.4 states that the City will seek out, catalog, and evaluate heritage resources that may be significant. The LUTE EIR concluded that the implementation of the LUTE would result significant and unavoidable impacts under project and cumulative conditions (Impact 3.10.3).

The project site does not include any known historic resources (LSA 2018b). Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating

that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding historical resources remain valid and no further analysis is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Impact 3.10.2 of the LUTE Draft EIR noted that implementation of the LUTE could impact buried archaeological resources during construction activities. The LUTE Draft EIR concluded that implementation of Policy 10 Action 6 (now Policy LT-1.10f) identified below would ensure that impacts to archaeological resources and human remains (in combination with Health and Safety Code Section 7050.5[b])are reduced to a less-than-significant level under project and cumulative conditions (Impact 3.10.3).

LT-1.10f: Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

The project area does not include any known archaeological resources or human remains and the project would be required to comply with General Plan Policy LT-1.10f. Therefore, with the application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding archaeological resources remain valid and no further analysis is required.

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

Impact 3.7.4 of the LUTE Draft EIR noted that while implementation of the LUTE could impact undiscovered paleontological resources during construction activities. The LUTE Draft EIR concluded that implementation of Policy 10 Action 6 (now Policy LT-1.10f) identified below would ensure that impacts to paleontological resources are reduced to a less-than-significant level under project and cumulative conditions (Impact 3.10.3).

LT-1.10f: Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

The project area does not include any known paleontological resources and the project would be required to comply with General Plan Policy LT-1.10f. Therefore, with the application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding paleontological and unique geologic features remain valid and no further analysis is required.

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

See analysis provided in Item b) above.

Mitigation Measures

No significant cultural resource impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding cultural resources remain valid and no further analysis is required.

4.6 GEOLOGY AND SOILS

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
6.	Geology and Soils. Would the project:						
a.	 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides? 	Draft EIR Setting pp. 3.7-1 to 3.7-13 Impact 3.7.1	No	No	No	No	NA, impact remains less than significant.
b.	Result in substantial soil erosion or the loss of topsoil?	Draft EIR Setting pp. 3.7-1 to 3.7-13 Impact 3.7.2	No	No	No	No	NA, impact remains less than significant.
с.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in: on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Draft EIR Setting pp. 3.7-1 to 3.7-13 Impact 3.7.3	No	No	No	No	NA, impact remains less than significant.
d.	Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Draft EIR Setting pp. 3.7-1 to 3.7-13 Impact 3.7.3	No	No	No	No	NA, impact remains less than significant.
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Scoped out in Draft EIR on page 3.7- 14.	No	No	No	No	NA

4.6.1 Discussion

No substantial change in the environmental and regulatory settings related to geology and soils, described in the LUTE Draft EIR Section 3.7 Geology, Soils, and Paleontological Resources, has occurred since certification of the LUTE EIR. The regional and local settings remain the same as stated Section 3.7.

Since preparation of the LUTE Draft EIR, a California Supreme Court decision (California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377) has clarified CEQA with

regard to the effects of existing environmental conditions on a project's future users or residents. The effects of the environment on a project are generally outside the scope of CEQA unless the project would exacerbate these conditions. Changes to the CEQA Guidelines to reflect this decision are in process by the State but have not been adopted. Local agencies are not precluded from considering the impact of locating new development in areas subject to existing environmental hazards; however, CEQA cannot be used by a lead agency to require a developer or other agency to obtain an EIR or implement mitigation measures solely because the occupants or users of a new project would be subjected to the level of hazards specified. However, previous discussions of effects of the environment related to geology and soils is included herein for disclosure purposes.

- 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 delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)
- ii) Strong seismic ground shaking?
- iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

As addressed in Impact 3.7.1, the City's Municipal Code has adopted the California Building Code (CBC) by reference in Chapter 16.16.020, with changes and modifications providing a higher standard of protection. All new development and redevelopment would be required to comply with the current adopted CBC, which includes design criteria for seismic loading and other geologic hazards. Compliance with the CBC requires that new developments incorporate design criteria for geologically induced loading that governs sizing of structural members and provides calculation methods to assist in the design process. While ground shaking could result in damage to structures, incorporation of CBC criteria that recognize this potential would lessen those impacts. The CBC includes provisions for buildings to structures to the foundation and structural frame design. The LUTE EIR concludes that impacts related to landslides would be less than significant under project and cumulative conditions.

In addition, the geotechnical report prepared for the project provided recommendations for construction of proposed structures (Rockridge Geotechnical 2018:16).

The project would be subject to CBC and Municipal Code provisions for geologic stability. The project applicant's design-level geotechnical report (Rockridge Geotechnical 2018) addresses project-specific geologic and seismic stability issues. The final design would incorporate seismic design recommendations as necessary, which would safeguard against significant damage to structures that could result from seismic activity. With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding geologic hazards remain valid.

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

Impact 3.7.2 identifies that implementation of the LUTE would allow new development, redevelopment, and infrastructure improvements. Grading and site preparation activities associated with such development could temporarily remove buildings and pavement, which could expose the underlying soils to wind and

water erosion. Ground-disturbing activities would be required to comply with CBC Chapter 70 standards, which would ensure implementation of appropriate site-specific measures during grading activities to reduce and control soil erosion. Additionally, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres would be required to prepare and comply with a stormwater pollution prevention plan (SWPPP), which provides a schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details and a time schedule. The SWPPP would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions. As further discussed in LUTE Draft EIR Section 3.8, Hydrology and Water Quality, the State Water Resources Control Board has adopted a Construction General Permit (Order No. 20090009-DWQ, as amended by Order No. 2010-0014-DWQ and Order 2012-0006-DWO) that provides additional standards and requirements to avoid soil erosion. In addition, the City's grading standards (Municipal Code Section 18.12.110) specify that when grading will create a nuisance or hazard to other properties, public way, or public facilities due to erosion from storm runoff or rainfall, grading cannot commence or continue without specific consent in writing from the Director of Public Works or the Director of Community Development. The grading standards also regulate gradients for cut-and-fill slopes. The LUTE EIR concluded that impacts from soil erosion and loss of topsoil would be less than significant under both project and cumulative conditions (Impact 3.7.5).

The project is subject to the above standards. With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding loss of topsoil and erosion remain valid.

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

The LUTE EIR indicates that future structures and improvements that could be developed in the City under the LUTE could experience stresses on various sections of foundations and connected utilities, as well as structural failure and damage to infrastructure if located on expansive or unstable soils (Impact 3.7.3). The City requires preparation of geotechnical reports for all development projects, which include soil sampling and laboratory testing to determine the soil's susceptibility to expansion and differential settlement and would provide recommendations for design and construction methods to reduce potential impacts, as necessary. The LUTE EIR concluded that impacts from geologic instability would be less than significant under both project and cumulative conditions (Impact 3.7.5).

The preliminary geotechnical investigation prepared for the project identified potentially expansive and settlement-prone soils within the project site. Depending on the results of final geotechnical investigations, construction measures may be incorporated to address the effects of expansive and settlement-prone soils during final design. To reduce the potential effects of expansive soils, final design features could include moisture-treating the soil, use of non-expansive fill or lime-treated soil beneath interior and exterior slabs, and either supporting foundations below the zone of severe moisture change or providing stiff, shallow foundations that can limit deformation of the superstructures as the underlying soil shrinks and swells. For settlement-prone soils, this could include adoption of various foundation designs appropriate for the overlying structures (Rockridge Geotechnical 2018).

In addition to the above, the CBC includes common engineering practices requiring special design and construction methods to reduce potential expansive soil and settlement-related impacts. Preparation of final geotechnical reports and continued compliance with CBC regulations would ensure the adequate design and construction of building foundations, and ground preparation to resist soil movement. Adherence to the City's Municipal Code and the CBC would reduce potential impacts associated with development on unstable soils to a less-than-significant level for the LUTE under project and cumulative conditions.

The project is subject to the above standards and have included soil stability and erosion controls within project plans. The project applicant has submitted a geotechnical report (Rockridge Geotechnical 2018) that addresses project-specific geologic and soil stability issues. With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding geologic and soil stability remain valid.

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

See analysis under item c) above.

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

As described in the LUTE EIR, development in the City, as well as the project, would utilize the existing City's wastewater conveyance and treatment. Septic systems would not be required and there would be no impact under project or cumulative conditions. This condition has not changed. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding waste disposal systems where sewers are not available remain valid and no further analysis is required.

Mitigation Measures

No significant geologic impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR regarding geology and soils remain valid and no additional analysis is required.

4.7 GREENHOUSE GAS EMISSIONS

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
7.	Greenhouse Gas Emissions.	Would the project:					
	a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Draft EIR Setting pp. 3.13-1 to 3.13-9 Impact 3.13.1 Final EIR pp. 3.0-5 to 3.0-6	No.	No	No	No	NA, impact remains less than significant.
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Draft EIR Setting pp. 3.13-1 to 3.13-9 Impact 3.13.1 Final EIR pp. 3.0-5 to 3.0-6	No.	No	No	No	NA, impact remains less than significant.

4.7.1 Discussion

The City tracks the progress of the Climate Action Plan (CAP) through biennial progress reporting. According to the City's 2018 CAP Biennial Progress Report, communitywide GHG emissions in 2016 were approximately 12 percent less than 1990 levels and that an estimated 28 percent less than 1990 levels is achievable by 2020 (City of Sunnyvale 2018). According to the report, the City is ahead of schedule in meeting its GHG reduction goals.

The City's CAP and its reduction targets are aligned with the statewide GHG target for 2020 established by Assembly Bill (AB) 32 of 2006; however, the CAP was prepared prior to the establishment of a statewide GHG target for 2030 by Senate Bill (SB) 32 in 2016. SB 32 established a statewide target of 40 percent less than 1990 emissions levels by 2030. The City is currently in the process of updating its CAP (CAP 2.0) to be aligned with the statewide target for 2030.

There have been several new or updated GHG executive orders, plans, policies, or regulations issued since certification of the LUTE EIR, but none of these new items, which are part of the regulatory setting, constitute substantial information indicating that the project would have a significant impact not analyzed in the LUTE EIR. For references, updates to the regulatory setting are briefly summarized below:

- ▲ Executive Order B-55-18: Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter."
- Scoping Plan Update: Executive Order B-30-15 and SB 32 require CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, the California Air Resources Board (CARB) approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target.
- 2017 Update to the SB 375 Targets: Under SB 375, CARB is required to update the emission reduction targets for the metropolitan planning organizations (MPOs) every eight years. CARB adopted the updated

targets and methodology in March 2018 and subsequent sustainable community strategies (SCSs) adopted after this date are subject to these new targets.

- Senate Bill 100: SB 100 raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon free electricity target.
- Building Energy Efficiency Standards: Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards, which were recently adopted on May 9, 2018, go into effect starting January 1, 2020.
- CALGreen Updates: CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The recently adopted 2019 Standards will take effect on January 1, 2020. Each iteration of the CALGreen standards improves the energy efficiency and sustainability of new development from the prior iteration.

The changes to the regulatory environment will act to reduce the project's long term GHG emissions by reducing emissions from energy and automobiles and therefore do not constitute substantial new information that would cause a more severe adverse impact on climate change than discussed in the LUTE EIR.

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

Impact 3.13.1 of the LUTE EIR evaluated the projected GHG emissions associated with implementation of the LUTE (176,672 metric tons of carbon dioxide-equivalent per year [MTCO₂e/year] at buildout in 2035). The LUTE is intended to implement local land use and transportation planning efforts in a manner consistent with the CAP and MTC's Sustainable Communities Strategy (Plan Bay Area) and seeks to reduce the environmental impact (including GHG emissions) of land use development as described above.

However, the LUTE has different growth projections than what were utilized in the CAP. The GHG estimates presented in the LUTE EIR were based on different assumptions and inputs using CalEEMod than the activity-based estimates used in the City's CAP. For this reason, there is no straightforward method to determine whether the LUTE is consistent with the GHG reduction targets in the CAP for 2035. The LUTE Final EIR also acknowledged the adoption of SB 32, which established a statewide GHG target for 2030. Mitigation Measure 3.13.1 requires the City to update the CAP to reflect the LUTE growth projections, and with this mitigation measure the LUTE EIR concluded that the LUTE would make a less than cumulatively considerable contribution to the significant cumulative impact of global climate change. As noted above the City is currently in the process of developing CAP 2.0.

Based on project specific data and default assumptions in CalEEMod, construction of the project is estimated to generate approximately 828 MTCO₂e and operation of the project is estimated to generate to generate approximately 1,899 MTCO₂e/year at full buildout. Refer to Appendix A for detailed modeling input and results.

The project's land use and development intensities are consistent with the LUTE and what was assumed in the GHG analysis in the LUTE EIR. No changes in the GHG conditions for the project site have occurred since approval of the LUTE and the LUTE EIR. The project would not include any development beyond that assumed and analyzed in the LUTE EIR. Therefore, with the application of uniformly applied development

standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding GHG emissions remain valid and no further analysis is required.

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

See discussion in a) above.

Mitigation Measures

Mitigation Measure 3.13.1 referenced in the LUTE EIR analysis is currently being implemented by the City.

Mitigation Measure 3.13.1. Upon adoption of the Draft LUTE, the City will update the Climate Action Plan to include the new growth projections of the Draft LUTE and make any necessary adjustments to the CAP to ensure year 2020 and 2035 greenhouse gas emission reduction targets are attained.

CONCLUSION

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR regarding climate change impacts remain valid and no additional analysis is required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
8.	Hazards and Hazardous Materials	. Would the project:	-				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.1	No	No	No	No	NA, impacts would remain less than significant.
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?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.2	No	No	No	No	NA, impacts would remain less than significant.
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.3	No	No	No	No	NA, impacts would remain less than significant.
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.2	No	No	No	No	NA, impacts would remain less than significant.
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.4 and Final EIR pp 3.0-2 to 3.0-3	No	No	No	No	NA, impact would remain less than significant.
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working on the project area?	Draft EIR Setting pp. 3.3-1 to 3.3-9 and p. 3.6-28 Impact 3.3.4	No	No	No	No	NA, no impact would occur.
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Draft EIR Setting pp. 3.3-1 to 3.3-9 Impact 3.3.5	No	No	No	No	NA, impacts would remain less than significant.
h.	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?	Draft EIR page 3.3- 15 No Impact	No	No	No	No	NA, no impact would occur.

4.8.1 Discussion

No substantial change in the environmental and regulatory settings related to hazards and hazardous materials, described in LUTE Draft EIR Section 3.3, Hazards and Human Health, has occurred since certification of the LUTE Draft EIR.

Phase I Environmental Site Assessments (ESAs) were prepared for the project site by AEI Consultants in May 2018. A Limited Phase II Subsurface Investigation was also performed at the project site by AEI Consultants. The Phase I ESA and Limited Phase II investigation identified the following recognized environmental conditions (RECs; AEI Consultants 2018a):

Elevated concentrations of tetrachloroethene (PCE) were detected within the project site, which is located within the Mohawk Plume Commercial Street Operable Unit (CSOU) Subunit 1 (CSOU Subunit 1), and are likely associated with the CSOU Subunit 1. Given the elevated concentrations of PCE detected in soil gas, and the project site location above recognized groundwater plume, it is recommended that the results of this investigation be submitted to the San Francisco Bay Regional Water Quality Control Board (RWQCB) for discussion. The need for and design of vapor mitigation systems to be constructed as part of the proposed development should be discussed with the RWQCB.

The project design assumes construction of a vapor intrusion mitigation system to address the potential for vapor intrusion into the building (see 901 Kifer Planning Application). The vapor intrusion mitigation system will be designed and constructed in accordance with requirements mandated by the RWQCB.

The Phase I ESAs for the parcels containing buildings in the project site, identified the following Other Environmental Considerations (OECs; AEI Consultants 2018b, 2018c, 2018d, 2018e, 2018f, 2018g, 2018h, 2018i, 2018j, 2018k):

- ▲ Due to the age of the buildings in the project site, there is a potential that asbestos-containing building materials (ACMs) are present in the buildings in the project site.
- Due to the age of the buildings in the project site, there is a potential that lead-based paint is present in the buildings in the project site.
- According to the California Department of Health Services Radon Database, 46 tests were conducted for radon levels in the subject property zip code (94086) in 2016. Only five of the tests exceeded the action level of 4.0 pCi/L set forth by the US EPA. Based on the commercial nature of the property and the lack of subsurface areas, radon does not appear to be a concern.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 3.3.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would increase the routine transport, use, or disposal of hazardous materials. The analysis stated that although LUTE policies provide for additional nonresidential growth, hazardous materials use would not be expected to expand appreciably because the types of new businesses that would be expected would not involve extensive use of hazardous materials, as has occurred historically, but rather primarily green technology and office/R&D uses. The analysis also stated that the transport, storage, use, and storage of hazardous materials in land use activities associated with the LUTE would be required to comply with all applicable federal, state, and local regulations during construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous materials releases. Compliance with federal, state, and local regulations and implementation of LUTE policies (Policy 78, Policy 95 Action 3, and Policy 101 Action 2) would ensure that the LUTE would have less-than-significant impacts related to creating a significant hazard to the public or the environment through the

routine transport, use, or disposal of hazardous materials and that the LUTE would make a less than cumulatively considerable contribution to significant cumulative impacts (Impact 3.3.6).

Operation of the project would result in similar office and R&D uses as those currently existing within the project site. The project would be subject to the federal, state, and local regulations that regulate hazardous material use and safety measures as discussed in the LUTE Draft EIR. With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding impacts from the routine transport, use, or disposal of hazardous materials remain valid and no further analysis is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Impact 3.3.2 in the LUTE Draft EIR evaluated whether implementation of LUTE policies and actions would provide for land uses that would involve the transportation, storage, use, and disposal of hazardous materials. These activities could result in the release of hazardous materials into the environment and exposure of the public to hazardous materials as a result of inadvertent releases or accidents. The analysis states that the transport, storage, and use of hazardous materials by developers, contractors, business owners, and others must occur in compliance with local, state, and federal regulations. Facilities that store or use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous material releases. Special regulations apply to operations that may result in hazardous emissions or use large quantities of regulated materials to ensure accidental release scenarios are considered and measures included in project design and operation to reduce the risk of accidents. In addition, transportation of hazardous materials into and within the City of Sunnyvale is regulated to reduce the potential for transportation accidents involving hazardous materials. The LUTE EIR concludes that such impacts would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

Operation of the project would result in office and R&D uses that do not involve the routine use of large amounts of hazardous materials. The project would be subject to the federal, state, and local regulations that regulate hazardous material use and safety measures as discussed in the LUTE Draft EIR. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to hazardous material handling remain valid and no further analysis is required.

Impact 3.3.2 also identified that implementation of the LUTE could expose the public to hazardous materials if new development or redevelopment were to be located on a site where historical uses have resulted in hazardous materials contamination of soil or groundwater due to discharges that may not have been regulated prior to the enactment of stringent regulations in place today, or through illegal waste disposal activities. In addition, buildings and/or sites could contain electrical transformers containing PCBs and persistent residual chemicals, including pesticides, herbicides, and fertilizers. In addition, redevelopment activities associated with the LUTE could result in exposure to hazardous materials by disturbing and thus releasing asbestos and/or lead during demolition and remodeling activities. Prior to approving any project at a site that is known to have contamination from historic uses or at a site where the potential exists based on historic or current uses but has not yet been evaluated, the City must ensure the project is consistent with General Plan Safety and Noise Chapter Policy SN-1.1. This policy directs that land use decisions be based on an awareness of the hazards and potential hazards for the specific parcel of land. In addition, under Policy SN-1.5, the City intends to promote a living and working environment safe from exposure to hazardous materials. The LUTE EIR concludes that the potential for impacts from hazards released through

redevelopment of contaminated sites would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

In compliance with City requirements, Phase I ESAs and a Limited Phase II have been completed for the project to assess potential hazards at the project site. As described above, these documents identified elevated concentrations of PCE in groundwater and soil vapor within the project site, which is likely associated with CSOU Subunit 1. Given the elevated concentrations of PCE detected in soil gas, and the project site location above recognized groundwater plume, there is a potential for the project to expose the public to a significant hazard. The project design therefore assumes construction of a vapor intrusion mitigation system, pursuant to RWOCB requirements and specifications, as part of the building foundation to avoid hazardous vapor intrusion into the building. The project is also proposing modification of the RWOCB's groundwater monitoring program for the property, and will seek RWQCB's permission to decommission (destroy) groundwater and soil vapor wells at the project site. The RWQCB would approve the modification of the well monitoring program and disposition of the wells (including identification of the wells to be replaced after completion of project construction), and the Santa Clara Valley Water District would oversee well destruction and reconstruction, and disposal of hazardous materials. Regulation by these two agencies would ensure compliance with the Porter-Cologne Water Quality Control Act, the California Department of Water Resources' California Well Standards, set forth in Bulletin Nos. 74-81 and 74-90, which establish statewide standards for safe well construction and destruction, and applicable Santa Clara Valley Water District ordinances that include detailed well construction and destruction procedures.

The Phase I ESAs also noted that due to the date of construction of the buildings in the project site, that they may contain ACM and/or lead-based paint. Demolition activities are required to follow BAAQMD and California Department of Occupational Safety and Health (Cal/OSHA) regulations regarding abatement of asbestos-containing materials and lead-based paint. The Sunnyvale Municipal Code also includes requirements for the management of hazardous materials. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to hazardous material handling remain valid and no further analysis is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact 3.3.3 in the LUTE Draft EIR analyzes the potential for implementation of the LUTE to locating schools in the vicinity of land uses involving the use, transport, disposal, or release of hazardous materials. The LUTE EIR concludes that such impacts would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

There are no schools located within one-quarter mile of the project site. The closest school to the project site is The King's Academy, located approximately one-half mile northwest of the project site. The project consists of office and R&D uses and would not handle large quantities of hazardous materials. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding impacts from hazardous materials near schools remain valid and no further analysis is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

See discussion under b) above.

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

Impact 3.3.4 in the LUTE Draft EIR evaluated the potential for hazards associated with exposing additional workers and visitors to aircraft-related safety hazards by locating additional development within the approach path of the Moffett Federal Airfield. The analysis noted that the Moffett Federal Airfield Comprehensive Land Use Plan (CLUP) includes land use policies and height restrictions for construction and new structures near the airfield. The LUTE also contains several policies and actions that would assist in reducing airport hazards (Policy 8 and associated Actions 1, 4, and 5). In the LUTE Draft EIR, this impact was determined to be less than significant because compliance with FAA regulations and ALUC requirements, including CLUP restrictions, as well as implementation of LUTE policies and actions would reduce airport safety hazards. The LUTE EIR concludes that the LUTE's contribution to aircraft-related safety hazards would be less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

The project site is located approximately 2.25 miles southeast of Moffett Federal Airfield and is outside CLUP boundaries. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant offsite impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to airport safety hazards remain valid and no further analysis is required.

f) 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 LUTE Draft EIR page 3.6-28 identifies that the City does not include and is not proximate to any private airfields. Therefore, no impacts related to private airfield safety under project or cumulative conditions were identified in the LUTE EIR.

No new private airports have been developed near the project site. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding hazards from proximity to private airstrips remain valid and no further analysis is required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact 3.3.5 in the LUTE Draft EIR evaluated the potential for implementation of the LUTE to interfere with the City of Sunnyvale Emergency Plan. The analysis stated that the proposed roadway system in the LUTE would improve city roadway conditions from existing conditions, allowing better emergency vehicle access to residences as well as evacuation routes for area residents. Thus, impacts from implementation of the LUTE would result in a less-than-significant impact under project conditions and would make a less than cumulatively considerable contribution under cumulative conditions related to interference with an adopted emergency response plan or emergency evacuation plan.

The project is infill development and would not modify the roadway network in the City in a manner that would obstruct emergency access. The project would add a signal at the intersection of Commercial Street and Kifer Road, which would promote traffic flow at that location. With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to impacts from interference with emergency plans remain valid and no further analysis is required.

h) 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?

As identified on page 3.3-15 in the LUTE Draft EIR, the LUTE was determined to have no impact under project or cumulative conditions related to this threshold.

No changes to the location of the project have occurred and no changes to the risks from wildfires has occurred since approval of the LUTE. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to impacts from wildland fires remain valid and no further analysis is required.

Mitigation Measures

No significant hazard impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR related to impacts from hazards and hazardous materials remain valid and the project would require additional CEQA analysis.

4.9 HYDROLOGY AND WATER QUALITY

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
9.	Hydrology and Water Quality. Woul	d the project:					
a.	Violate any water quality standards or waste discharge requirements?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	Draft EIR Setting pp. 3.11-1 to 3.11-11 Impact 3.11.1.1 and 3.11.1.2	No	No	No	No	NA, impacts would remain less than significant.
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.2 and 3.8.5	No	No	No	No	NA, impacts would remain less than significant.
e.	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
f.	Otherwise substantially degrade water quality?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
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?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.2 and 3.8.5	No	No	No	No	NA, impacts would remain less than significant.

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
9.	Hydrology and Water Quality. Would	d the project:	-				
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.2 and 3.8.5	No	No	No	No	NA, impacts would remain less than significant.
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?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.2 and 3.8.5	No	No	No	No	NA, impacts would remain less than significant.
j.	Inundation by seiche, tsunami, or mudflow?	Draft EIR Setting pp. 3.8-1 to 3.8-15 Impact 3.8.3	No	No	No	No	NA, impacts would remain less than significant.

4.9.1 Discussion

No substantial change in the environmental and regulatory settings related to hydrology and water quality, described in LUTE Draft EIR Section 3.8, Hydrology and Water Quality, has occurred since certification of the LUTE EIR.

a) Violate any water quality standards or waste discharge requirements?

As addressed in LUTE EIR Impact 3.8.1, construction activities associated with development of projects allowed under the LUTE would include grading, demolition, and vegetation removal which would disturb and expose soils to water erosion, potentially increasing the amount of silt and debris entering downstream waterways. In addition, refueling and parking of construction equipment and other vehicles onsite during construction could result in oil, grease, or related pollutant leaks and spills that may discharge into storm drains. Individual development projects would be required to comply with Chapter 12.60 Stormwater Management of the Sunnyvale Municipal Code, as well as implement best management practices (BMPs) for the prevention of erosion and the control of loose soil and sediment, to ensure that construction does not result in the movement of unwanted material into waters within or outside the plan area. The Stormwater Management chapter provides regulations and gives legal effect to certain requirements. During construction of projects in the city, the dischargers, through individual coverage under the State's General Construction NPDES permit must develop and implement a SWPPP and perform monitoring of discharges to stormwater systems to ensure compliance with State regulations and General Plan Policy EM-8.5. Construction impacts would be less than significant under project and cumulative conditions (Impact 3.8.4).

The LUTE EIR indicates that urban runoff pollutants such as heavy metals, oil, and grease, sediment, and other chemicals would continue to be generated, but because the changes in land use are primarily related to increased intensity of development and not new land uses, the types and amounts of pollutants in stormwater runoff would not vary considerably from existing conditions. All private development projects would be required to include appropriate features to meet applicable regional Municipal Regional Stormwater Permit (MRP) Provision C.3 requirements and implement low impact design (LID). Common LID strategies that would be appropriate for the plan area would include treatment methods such as bio-retention basins and flow-through planters, green roofs, media filtration devices, and pervious surfaces. These features would be included within individual sites on a project-by-project basis. Compliance with existing requirements of Chapter 12.60 of the

Municipal Code, the City's Municipal Code Chapter 12.60, the City of Sunnyvale Urban Runoff Management Plan, and MRP Provision C.3 requirements, along with implementation of General Plan policies EM-8.6, EM-10.1, and EM-10.3, would reduce surface water quality impacts associated with occupancy of projects in the LUTE to a less than significant level under project and cumulative conditions (Impact 3.8.4).

The project is subject to the water quality control requirements identified above. Project design plans include water quality control features for the site (see Sheets C 2.0 and C 4.0 in the 901 Kifer Planning Application). With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to impacts from conflicts with water quality standards and waste discharge requirements remain valid and no further analysis is required.

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

The LUTE EIR indicates that implementation of projects allowed by the LUTE would have little or no effect on groundwater recharge because the City largely built out and would not reduce the amount of permeable surfaces. The City has historically relied on groundwater to meet between 4 and 11 percent of its total demand (approximately 1,000–2,700 acre-feet per year [AFY]). Currently, the City projects producing approximately 1,000 AFY from the groundwater basin through 2035 (LUTE Draft EIR page 3.11-5). Groundwater production is not expected to increase beyond 1,000 acre-feet per year except in multiple dry year conditions and is actively managed by the Santa Clara Valley Water District to avoid groundwater overdraft through its conjunctive use efforts. The LUTE EIR concludes that impacts related to groundwater would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.1.3). No mitigation was required.

The project would not substantially change development patterns and the areas of impermeable surfaces from that approved in the LUTE. The project decreases the project site's impervious surface area from 677,585 square feet to 588,648 square feet. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to groundwater impacts remain valid and no further analysis is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?

See discussion under a) above.

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

As identified in LUTE EIR Impact 3.8.2, there are some locations in the City that are within FEMA-designated 100-year flood hazard Zone AO or could be inundated from levee failure. The Prevention of Flood Damage Chapter (Chapter 16.62) of Sunnyvale's Buildings and Construction Ordinance provides standards for construction in 100-year flood hazard areas. The standards for construction generally require that the lowest floor of any structure be elevated to or above the base flood elevation, anchoring, and the use of flood

damage-resistant materials and methods. Individual development projects are required under Section 12.60.160 of the City's Municipal Code to demonstrate that development each individual development project would not increase runoff over pre-project rates and durations. In addition, General Plan policy EM-9.1 requires that the City maintain and operate the storm drain system so that stormwater is drained from 95 percent of the streets within one hour after a storm stops. For flood-prone locations, policy EM10.2 requires incorporation of appropriate controls to detain excess stormwater. Compliance with the existing regulations contained in the City's Municipal Code would reduce potential impacts associated with flooding and stormwater drainage to a level that is less than significant for the LUTE under project and cumulative conditions (Impact 3.8.5).

The project site is not located within the 100-year flood hazard Zone AO. The project is required to comply with Section 12.60.160 of the City's Municipal Code. Project design plans include water quality control and drainage features for the site (see Sheets C 2.0 and C 4.0 in the 901 Kifer Planning Application). With the application of uniformly applied development standards and policies, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to flooding impacts remain valid and no further analysis is required.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

See discussion under item a) and d) above.

f) Otherwise substantially degrade water quality?

See discussion under item a) above.

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?

See discussion under item d) above. The project does not include housing.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

See discussion under item d) above.

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?

See discussion under item (d) above.

The project is not located in an inundation area. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding impacts from levee and dam failure remain valid and no further analysis is required.

j) Result in inundation by seiche, tsunami, or mudflow?

As described in LUTE Draft EIR Impact 3.8.3, seiches and tsunamis would not be expected to affect areas developed as part of the LUTE. It is probable that an earthquake similar to the 1906 earthquake would be the largest to occur in the Bay Area; consequently, seiches with an increase in water elevation of more than 4 inches would be considered unlikely. Tsunamis would only be expected to affect low-lying marsh areas and bayward portions of sloughs. Mudflow (a type of landslide) would not be a hazard in Sunnyvale because of the city's generally flat terrain and distance from hilly or mountainous areas. The LUTE EIR concludes that

impacts related to inundation by seiche, tsunami, or mudflow would be less than significant under project conditions. The LUTE would not exacerbate the likelihood for inundation by seiche, tsunami, or mudflow.

The project is the inland portion of the City and outside of the marsh areas of the bay. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to impacts from inundation by seiche, tsunami, and mudflow remain valid and no further analysis is required.

Mitigation Measures

No significant hydrology impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been found requiring new analysis or verification. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there are no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR regarding impacts to hydrology and water quality remain valid and the project does not require additional analysis under CEQA.

4.10 LAND USE AND PLANNING

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off- Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
10.	Land Use and Planning. Wou	uld the project:					
a.	Physically divide an established community?	DEIR EIR Setting pp. 3.1-1 to 3.1- 10 Impact 3.1.1 and 3.1.5	No	No	No	No	NA, this impact would remain less than significant.
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	DEIR EIR Setting pp. 3.1-1 to 3.1- 10 Impact 3.1.2, 3.1.3, and 3.1.5	No	No	No	No	NA, this impact would remain less than significant.
C.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	DEIR EIR Setting pp. 3.1-1 to 3.1- 10 Impact 3.1.4	No	No	No	No	NA, no impact would occur.

4.10.1 Discussion

No substantial change in the environmental and regulatory settings related to land use and planning, described in LUTE EIR Section 3.1, Land Use, has occurred since certification of the LUTE EIR.

a) Physically divide an established community?

Impact 3.1.1 of the LUTE Draft EIR, identifies that the LUTE does not include large-scale infrastructure projects such as new freeways or high volume roadways that would divide an established community. Likewise, critical transportation infrastructure linking one neighborhood to another would not be removed as part of the LUTE. Implementation of the policy provisions of the LUTE would ensure integration and compatibility of new development with existing land use conditions. This impact was determined to be less than significant under project and cumulative conditions (Impact 3.1.5).

No changes in development at the site has occurred since approval of the LUTE. The project and the required intersection signal improvement are considered infill development and would not alter local land use patterns or obstruct movement through the area. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the

LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to physical divisions of established communities remain valid and no further analysis is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact 3.1.2 and 3.1.3 of the LUTE EIR evaluated whether the LUTE would be consistent with adopted City and regional land use plans and policies, and concluded that the LUTE's impact would be less than significant under project and cumulative conditions (Impact 3.1.5).

The project is consistent with the LUTE and City regulations, including FAR regulations. Consistent with the General Plan, the project is meeting the requirements of the Green Building Program to obtain an FAR increase from 0.35 to 0.45. Consistent with the zoning, the project meets the requirement for a 0.10 FAR increase by meeting the Green Building Program requirements. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding consistency with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects remain valid and no further analysis is required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? LUTE EIR Impact 3.1.4 noted that no habitat conservation plans (HCPs) or natural community conservation plans (NCCPs) have been adopted that apply to the City. As a result, no conflict with an adopted habitat conservation plan would occur, and no impact would result. No new conservation plans have been adopted since approval of the LUTE. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to conflicts with adopted conservation plans remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were needed for the LUTE regarding land use. No additional mitigation measures are required for project for this topic.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been identified requiring new analysis or verification. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR regarding land use and planning remain valid and no additional CEQA review is required for approval of the project.

4.11 MINERAL RESOURCES

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
11.	Mineral Resources. Would the	he Project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Draft EIR p. 3.7-14. Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Draft EIR p. 3.7-14. Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.

4.11.1 Discussion and Conclusion

LUTE Draft EIR page 3.7-14 identifies that there are no active mines and no known areas with mineral resource deposits or resources of statewide importance in the city. Therefore, no impact to availability of a known mineral resource would result. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to mineral resources remain valid and no further analysis is required.

4.12 NOISE

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
12.	Noise. Would the project result i	n:		-			-
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Draft EIR Setting pp. 3.6-1 to 3.6-27 Impact 3.6.1	No	No	No	No	NA, impact remains less than significant.
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Draft EIR Setting pp. 3.6-1 to 3.6-27 Impact 3.6.3	No	No	No	No	Yes, impact remains less than significant.
C.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Draft EIR Setting pp. 3.6-1 to 3.6-27 Impact 3.6.2 and 3.6.6	No	No	No	No	NA, but impact remains significant and unavoidable.
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Draft EIR Setting pp. 3.6-1 to 3.6-27 Impact 3.6.4	No	No	No	No	Yes, impact remains less than significant.
e.	For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Draft EIR Setting pp. 3.6-1 to 3.6-27 Impact 3.6.5	No	No	No	No	NA, impact remains less than significant.
f.	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?	Draft EIR p. 3.6-28 Scoped out of impact analysis	No	No	No	No	NA, no impact would occur.

4.12.1 Discussion

No substantial change in the environmental and regulatory settings related to noise and vibration, described in LUTE EIR Section 3.6, Noise, has occurred since certification of the EIR. No new substantial noise sources have been introduced near the project since the LUTE EIR was prepared.

An acoustical assessment for the project was prepared for the project by Kimley-Horn and Associates in June 2018 (Kimley-Horn and Associates 2018b). The acoustical assessment provides site-specific analysis of existing noise conditions and the extent of project noise and vibration impacts as compared to the LUTE EIR. The assessment concludes that with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR.

The findings of the certified LUTE EIR pertaining to noise and vibration remain valid and no further analysis is required.

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Impact 3.6.1 of the LUTE EIR identified less significant impacts related to subsequent development generating noise levels that exceed City noise standards.

The project's land uses and development intensity is consistent with the LUTE and was programmatically factored in the traffic noise analysis. The project's acoustical analysis identifies that the project's stationary noise sources would not exceed City noise standards set forth in the City's Municipal Code (Kimley-Horn and Associates 2018b: 23-25). With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to exposure of persons to noise in excess of applicable standards remain valid and no further analysis is required.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impact 3.6.3 of the LUTE EIR evaluated the potential for construction activities to generate excess groundborne vibration and identified that damage to older buildings can occur at 0.25 inches per second of peak particle velocity (PPV) and at 0.5 for conventional buildings. This impact was identified as potentially significant. Mitigation Measure 3.6.3 requires noise and vibration reducing pile-driving techniques shall be employed during construction and will be monitored to ensure no damage to nearby structures occurs (i.e., vibrations above PPVs of 0.25 inch per second at nearby structures). The LUTE Draft EIR identified that implementation of this mitigation measure would reduce the construction vibration impact to a less-than-significant level.

The project's acoustical analysis evaluated potential vibration impacts to the Moose Lodge that is adjacent to the project site. The analysis identified that construction vibration levels at the Moose Lodge would range from 0.001 to 0.032 inches per second of PPV. This would be below the standard set forth in Mitigation Measure 3.6.3. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to groundborne vibration and noise remain valid and no further analysis is required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact 3.6.2 and 3.6.6 of the LUTE Draft EIR identified that predicted increases in traffic noise levels associated with the LUTE would be significant for Pastoria Avenue between Evelyn Avenue and El Camino Real, and Remington Avenue between Hollenbeck Avenue and Sunnyvale Avenue. This impact was identified as significant and unavoidable under project and cumulative conditions.

The project's land use and development intensity is consistent with the LUTE. The project's acoustical analysis identifies that the project's traffic noise would not result in significant traffic noise impacts at the project level or at the cumulative level (Kimley-Horn and Associates 2018b: 25 and 31). Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is substantial new information indicating that an impact would

be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to ambient noise remain valid and no further analysis is required.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

LUTE EIR Impact 3.6.4 evaluated whether the LUTE would result in a temporary increase in ambient noise levels during construction of subsequent development. The analysis noted that project construction could take place in close proximity to sensitive receptors, which could cause a substantial temporary or periodic increase in ambient noise levels at sensitive receptor locations. The LUTE Draft EIR identified that compliance with Sunnyvale Municipal Code Chapter 16.08 (limitations on hours of construction activity) and Mitigation Measure MM 3.6.4 that requires projects to employ site-specific noise attenuation measures during construction to reduce the generation of construction noise would reduce this impact to a less-than-significant level. Construction noise impacts tend to be localized and not combine with construction noise from other projects unless the construction of those other projects is in the same vicinity and occurs at the same time.

The project's acoustical analysis identifies that the nearest sensitive noise receptors consist of single-family residential units approximately 1,500 feet to the west of the site and medium density residential development approximately 750 south of the site. The analysis concludes that implementation of the City's Municipal Code construction activity restrictions and Mitigation Measure 3.6.4 would ensure no significant construction noise impacts consistent with the conclusions of Impact 3.6.4 of the LUTE Draft EIR (Kimley-Horn and Associates 2018b: 21). The analysis also concludes that cumulative construction noise impacts from other construction projects, in conjunction with project-specific noise impacts, would not be cumulatively significant. Therefore, the findings of the certified LUTE EIR remain valid and no further analysis is required.

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

Impact 3.6.5 of the LUTE Draft EIR identified that compliance with the Comprehensive Land Use Plan (CLUP) for Moffett Field Airfield and with the City's normally acceptable noise level standards effectively reduces potential aircraft noise impacts.

The project is located outside of the CLUP noise contours of Moffett Field Airfield. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding exposure of people to excessive noise from airports remain valid and no further analysis is required.

f) 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?

LUTE Draft EIR page 3.6-28 identified that there are no private airfields are located near the city and thus there would be no impact.

No private airstrips have been developed in the project area since certification of the LUTE EIR. Therefore, there are no new circumstances or new information requiring new analysis or verification. Therefore, the conclusions of the LUTE EIR remain valid and no further analysis is required.

Mitigation Measures

The following mitigation measures were identified in the LUTE EIR and would continue to remain applicable if the project were approved.

Mitigation Measure MM 3.6.3. The following will be included as a policy or implementation measure to the Safety and Noise Chapter of the General Plan:

New development and public projects shall employ site-specific noise attenuation measures during construction to reduce the generation of construction noise and vibration. These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by the City. Measures specified in the Noise Control Plan and implemented during construction shall include, at a minimum, the following noise control strategies:

- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds;
- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
- Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.
- Noise and vibration reducing pile-driving techniques shall be employed during construction and will be monitored to ensure no damage to nearby structures occurs (i.e., vibrations above peak particle velocity (PPVs) of 0.25 inches per second at nearby structures). These techniques shall include:
 - Installing intake and exhaust mufflers on pile-driving equipment;
 - Vibrating piles into place when feasible, and installing shrouds around the pile-driving hammer where feasible;
 - Implementing "quiet" pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
 - Use cushion blocks to dampen impact noise, if feasible based on soil conditions. Cushion blocks are blocks of material that are used with impact hammer pile drivers. They consist of blocks of material placed atop a piling during installation to minimize noise generated when driving the pile. Materials typically used for cushion blocks include wood, nylon and micarta (a composite material); and
 - At least 48 hours prior to pile-driving activities, notifying building owners and occupants within 600 feet of the project area of the dates, hours, and expected duration of such activities.

CONCLUSION

No new circumstances or project changes have occurred nor has any substantially important new information been found requiring new analysis or verification. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR regarding noise and vibration remain valid and no further analysis is required.

4.13 POPULATION AND HOUSING

1.0							
	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
	13. Population and Housing. Would the	e project:					
	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)?	Draft EIR Setting pp. 3.2-1 to 3.2-3 Impact 3.2.1 and 3.2.3	No	No	No	No	NA, impacts would remain less than significant.
	b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Draft EIR Setting pp. 3.2-1 to 3.2-3 Impact 3.2.2 and 3.2.4	No	No	No	No	NA, impacts would remain less than significant.
	c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Draft EIR Setting pp. 3.2-1 to 3.2-3 Impact 3.2.2 and 3.2.4	No	No	No	No	NA, impacts would remain less than significant.

4.13.1 Discussion

No substantial change in the regulatory settings related to population and housing, described in LUTE EIR Section 3.2, Population, Housing, and Employment, has occurred since certification of the LUTE EIR.

As described in the project description, the project is consistent with the LUTE and would contribute to the anticipated employment growth expected under the LUTE.

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)?

Impact 3.2.1 in the LUTE Draft EIR evaluated whether new development in Sunnyvale under the LUTE would induce new growth. The analysis noted that the number of additional jobs that would be generated by the LUTE would be within the overall employment growth projections identified by the Association of Bay Area Governments (ABAG). The LUTE does not propose any new housing and would not directly induce population growth in the area under project or cumulative conditions (Impact 3.2.3).

The project would consolidate existing operations and employees of Fortinet into a single new building that is current housed in multiple buildings on the project site. As identified in the project's TDM, Fortinet intends to shift existing employees into the new building site with the addition of new employees over time as needed (Kimley-Horn Associates 2018a: 4). Employment growth of the City (including employment growth of Fortinet) is anticipated in the LUTE and was evaluated in the LUTE EIR (LUTE Draft EIR page 3.2-6).

The project is consistent with the land use designations and anticipated employment growth set forth in the LUTE. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR.

The findings of the certified LUTE EIR pertaining to population growth remain valid and no further analysis is required.

b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

See discussion under item (c) below.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

LUTE Draft EIR Impact 3.2.3 identifies that the intent of the LUTE is to accommodate anticipated growth through a compact urban form that seeks to make efficient use of existing infrastructure and public services, thus minimizing the need for new or significantly expanded infrastructure that could be the impetus for the removal of housing units and/or businesses. Because most of Sunnyvale has been developed with urban uses, the LUTE focuses on redeveloping existing properties. It is not expected that residential uses would convert to nonresidential uses. The LUTE EIR concludes that impacts related to displacement of people are less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.2.4).

The project site does not include any existing housing. Thus, the project would have no impact related to the displacement of housing or people. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to displacement remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were needed for the certified LUTE EIR regarding population and housing. No additional mitigation measures are required for the project for this issue.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been found requiring new analysis or verification. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR pertaining to population and housing remain valid and no further analysis is required.

4.14 PUBLIC SERVICES

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
14.	Public Services.	1		r	1		
а.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for any public services:						
	i. Fire protection?	Draft EIR Setting pp. 4.0-1 – 4.0-3 Impacts 4.1.1 and 4.1.2	No	No	No	No	NA, impact remains less than significant
	ii. Police protection?	Draft EIR Setting pp. 4.0-6 Impact 4.2.1 and 4.2.2	No	No	No	No	NA, impact remains less than significant
	iii. Schools?	Draft EIR Setting pp. 4.0-9 – 4.0- 10 Impact 4.3.1 and 4.3.2	No	No	No	No	NA, impact remains less than significant
	iv. Parks?	Draft EIR Setting pp. 4.0-15 Impact 4.4.1 and 4.4.2	No	No	No	No	NA, impact remains less than significant

4.14.1 Discussion

No substantial change in the regulatory settings related to public services, described in LUTE EIR Chapter 4, Public Services, has occurred since certification of the LUTE EIR.

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

Fire protection?

Impact 4.1.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would increase the demand for fire protection and emergency medical services. The analysis noted that it is anticipated that population and employment growth resulting from implementation of the LUTE would increase the demand for fire protection services. The LUTE includes Policy 104 that provides general direction regarding how public services should be provided and the Sunnyvale General Plan contains fire protection policies that address maintaining timely response to emergencies and ensuring adequate equipment and facilities are maintained (Policies SN-3.1 and SN-5.1). Additionally, Impact 4.1.2 notes that development under the LUTE would be subject to developer fees, which would provide sufficient resources to serve the projected needs of the Sunnyvale Department of Public Safety Bureau of Fire Services (Fire Bureau) under cumulative conditions. Implementation of the LUTE would result in a less-than-significant impact under project conditions and be less than cumulatively considerable impact under cumulative conditions (Impact 4.1.2).

The project is consistent with development assumptions analyzed in the LUTE Draft EIR. Further, the project would be required to meet all City requirements regarding fire protection and public safety, including fire access. The project would also be redeveloping an existing site and the net increase in demand for fire protection and emergency medical services would not be substantial. Additionally, the project applicant would pay all required development impact fees, including those related to fire services. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to fire protection services remain valid and no further analysis is required.

Police protection?

Impact 4.2.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would increase the demand for law enforcement services. The analysis noted that it is anticipated that population, the number of housing units, and increase in employment resulting from implementation of the LUTE would increase the demand for law enforcement services. The LUTE includes Policy 104 that provides general direction regarding how public services should be provided and the Sunnyvale General Plan contains Policy SN-3.1 that addresses maintaining timely response to emergencies. Implementation of the LUTE would result in a less-than-significant impact under project conditions and be less than cumulatively considerable under cumulative conditions (Impact 4.2.2)

The project is consistent with development assumptions analyzed in the LUTE Draft EIR. The project would also be redeveloping an existing site and the net increase in demand for law enforcement services would not be substantial. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to law enforcement services remain valid and no further analysis is required.

Schools?

Impact 4.3.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would increase population in the local school districts' service areas, which would subsequently increase student enrollment

in local schools. Subsequent development under the Draft LUTE, including residential and commercial development, would be subject to school facility fees to pay for additional school facility needs. With payment of school facility fees, this impact from buildout of the LUTE would be less than significant under project conditions and less then cumulatively considerable under cumulative conditions (Impact 4.3.2).

The project is consistent with development assumptions analyzed in the LUTE Draft EIR. The project site is within the Sunnyvale School District (K-8) and the Fremont Union High School District, and would be required to pay impact fees to these districts. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to schools remain valid and no further analysis is required.

Parks?

See discussion under items a) and b) in Section 3.15, Recreation.

Mitigation Measures

No mitigation measures were needed for the certified LUTE EIR regarding public services. No additional mitigation measures are required for the project.

CONCLUSION

With the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR pertaining to public services remain valid and no further analysis is required.

4.15 RECREATION

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
15.	Recreation.						
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 would occur or be accelerated?	Draft EIR Setting p. 4.0-15 and 4.0-16 Impact 4.4.1 and 4.4.2	No	No	No	No	NA, impact remains less than significant
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?	Draft EIR Setting p. 4.0-15 and 4.0-16 Impact 4.4.1 and 4.4.2	No	No	No	No	NA, impact remains less than significant

4.15.1 Discussion

No substantial change in the regulatory settings related to recreation, described in LUTE EIR Chapter 4, Public Services, has occurred since certification of the LUTE EIR.

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

See discussion under item b) below.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Impact 4.4.1 and 4.4.2 of the LUTE Draft EIR evaluated whether the increase in employees and residents from implementation of the LUTE would increase demand for public parks. Per the City's Municipal Code, new residential development would also be required to dedicate land, pay a fee in lieu thereof, or both, for park or recreational purposes at a ratio of 5 acres per 1,000 residents. These fees may be used to upgrade existing park facilities. The LUTE Draft EIR also programmatically evaluated the environmental impacts of upgrading existing parks and the development of new park facilities as part of the overall development analyzed in the EIR (LUTE Draft EIR page 4.0-17), and therefore the impact conclusions in the LUTE EIR capture the impacts from construction of new parks and recreational facilities. The LUTE EIR concludes that the LUTE's impact on recreational facilities and parks would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 4.4.2).

The project consists of the development of a new office/R&D building and would not generate a direct demand for recreation facilities. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to recreation remain valid and no further analysis is required.
Mitigation Measures

No mitigation measures were identified in for the certified LUTE EIR regarding recreation, nor are any additional mitigation measures required the project.

CONCLUSION

The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR pertaining to recreation remain valid and no further analysis is required.

4.16 TRANSPORTATION/TRAFFIC

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
16.	Transportation/Traffic. Would	the project:		•			
а.	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?	Draft EIR Setting pp. 3.4-1 to 3.4-40 Impact 3.4.2 and 3.4.7	No	Yes, but it would be reduced to less than significant for the project with uniformly applied development standards.	No	No	Yes, but impact remains significant and unavoidable.
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?	Draft EIR Setting pp. 3.4-1 to 3.4-40 Impact 3.4.7	No	No	No	No	NA, but impact remains significant and unavoidable.
с.	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?	Draft EIR Setting pp. 3.4-47 No Impact	No	No	No	No	NA
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Draft EIR Setting pp. 3.4-1 to 3.4-40 Impact 3.4.5	No	No	No	No	NA, impact remains less than significant
e.	Result in inadequate emergency access?	Draft EIR Setting pp. 3.4-1 to 3.4-40 Impact 3.4.6	No	No	No	No	NA, impact remains less than significant
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Draft EIR Setting pp. 3.4-1 to 3.4-40 Impacts 3.4.1, 3.4.3, 3.4.4, and 3.4.5	No	No	No	No	NA, impact remains less than significant

4.16.1 Discussion

No substantial change in the settings related to transportation and traffic, described in LUTE Draft EIR Section 3.4, Transportation and Circulation, has occurred since certification of the LUTE EIR. A transportation operations analysis (TOA) was prepared for the project by Hexagon Transportation Consultants to address near-term project-specific impacts to City transportation facilities (Hexagon 2018).

a) 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?

See discussion under item b) below.

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?

Impact 3.4.7 of the LUTE Draft EIR analyzes the impacts of implementing the LUTE to contribute to significant traffic operational impacts to intersections and freeway segments under year 2035 conditions as compared to existing conditions. The analysis concluded that the LUTE would result in substantial contributions to a number of intersections and freeway segments within the City and the region resulting in unacceptable levels of service (LOS). These operational impacts would also significantly impact transit travel times (Impact 3.4.2). The Draft EIR identifies a number of mitigation measures to reduce these impacts; however, because implementation of some of these mitigation measures IMM 3.4.7a and MM 3.4.7b were determined to be feasible). The analysis also identifies LUTE policies (e.g., Policy LT-3.5, LT-3.6, LT-3.7, LT-3.13, and LT-11.4) that constitute elements of a Transportation Demand Management (TDM) program, which is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle trips to help relieve traffic congestion. Implementation of a TDM program helps proposed developments to meet City requirements for reducing vehicle trips by 20 to 35 percent, depending on the proposed land use and its location. The LUTE EIR concluded that Impact 3.4.2 and 3.4.7 were significant and unavoidable for project and cumulative conditions.

The TOA identifies that the project would result in an operational impact to the intersection of Commercial Street and Kifer Road. This impact was not identified in the LUTE EIR. Pursuant to General Plan Policy LT-3.24 and Sunnyvale City Council Policy 1.2.2 (Transportation Impact Mitigation), the City will require the installation of a traffic signal at the intersection of Commercial Street and Kifer Road to ensure proper operation of the intersection consistent with generally applicable City standards. The signalization of this intersection would not require the establishment of new dedicated traffic lanes on either roadway. Construction of this improvement would occur within the roadway right-of-way and would not significantly impact the environment because the area is already paved and disturbed. The City considers General Plan policies and City Council Policy 1.2.2 to be uniformly applied development policies that will address this impact consistent with State CEQA Guidelines Section 15183.

The Municipal Code Chapters 10.60 and 19.45 set forth the City's TDM program. Section 19.45.030(b)(2) requires a TDM for development seeking bonus FAR through the Green Building Program that reduces trips to no more than the trips produced by development at the generally permitted FAR in the applicable zoning district. Section 19.46.100 includes minimum and maximum requirements for off-street parking spaces. Section 19.46.150 establishes minimum requirements for bicycle parking (number and type of spaces). The project would implement a TDM program. The project's preliminary TDM program would result in reducing project vehicle trips to the number trips that would be generated by an office/R&D development developed

at the project site at an intensity of 0.35 FAR, which is the intensity generally permitted by the applicable zoning (Kimley-Horn and Associates 2018a).

The project would have a transportation impact at the intersection of Commercial Street and Kifer Road that was not identified in the LUTE EIR. However, application of generally applicable development policies would reduce this impact to less than significant, and therefore the impact is not peculiar. With compliance with uniformly applied development policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

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?

As noted on page 3.4-47 of the LUTE Draft EIR, this impact is not evaluated in detail because the LUTE would not involve changes in air traffic operations. Similarly, the project does not propose changes in air traffic operations. There would be no impact.

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

Impact 3.4.5 in the LUTE Draft EIR analyzes the potential for implementation of the LUTE to increase the number of people and vehicles in the Planning Area, which could increase the risk of vehicle and bicycle/pedestrian conflicts, and would intensify urban uses in areas adjacent to the Caltrain tracks. Proposed LUTE policies incorporated a "complete streets" approach for circulation planning that accommodates all travel modes and improves safety. The LUTE EIR also notes that the anticipated circulation improvements in the LUTE would help reduce the potential for pedestrian/bicycle and vehicle conflicts and all roadway and pedestrian/bicycle facilities would be designed in accordance with City standards. The LUTE EIR concludes that hazards impacts from design features would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

The project is infill, does not propose any changes to roadways adjacent to the project site, and is not located adjacent to the Caltrain tracks. The project would result in a continuation of R&D and office uses similar to existing conditions at the project site and would not introduce incompatible uses to the project site or adjacent roadways. In compliance with generally applicable development policies, the project would signalize the intersection of Commercial Street and Kifer Road, which will promote safe traffic flow through the intersection. Thus, with compliance with generally uniformly applied development policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to hazards from design features and incompatible uses remain valid and no further analysis is required.

e) Result in inadequate emergency access?

Impact 3.4.6 in the LUTE Draft EIR evaluated whether implementation of the LUTE would adversely affect emergency access. The analysis noted that LUTE policies incorporate a complete streets approach for circulation planning that accommodates all travel modes as well as improves safety and access. Complete streets are designed and operated to enable safe and convenient access for all users. Additionally, all improvements would be required to meet City of Sunnyvale roadway design standards. The LUTE EIR concludes that impacts related to inadequate emergency access would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

The site plan for the project has been designed to provide two locations for fire truck access into and out of the project site as well as ensuring sufficient space for fire trucks to circulate throughout the project site. The TOA found that all driving aisles on the project site exceed the minimum 20-foot width requirement for

emergency vehicle access and circulation and meet the City standards. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to adequate emergency access remain valid and no further analysis is required.

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

Impact 3.4.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would result in increased demand for transit service. Implementation of the LUTE would result in an increase in transit demand. The analysis notes that the City and VTA would coordinate to increase transit services in Sunnyvale. Additionally, the LUTE includes policies and actions to improve the transit network in Sunnyvale (e.g., Policies LT-3.6, LT-3.28, LT-3.30, and Actions LT-3.30a, LT-3.30b, and LT-3.30c associated with Policy 48). Thus, the LUTE's impact to transit facilities would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

The project would result in some net increase in demand for transit use associated with the net increase in new employees; however, the project would not be anticipated to result in a substantial increase in demand for transit services such that the performance or safety of transit facilities would be adversely affected. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

Impact 3.4.2 in the LUTE EIR evaluated whether implementation of the LUTE would adversely impact transit travel times. The LUTE EIR concludes that except for the eight intersections where the LUTE would have a significant and unavoidable impact, implementation of the LUTE would have a less than significant impact on transit travel time under project conditions and would be less than cumulatively considerable under cumulative conditions. However, for the eight intersections where the LUTE would have significant and unavoidable LOS impacts, the impact on transit travel times would be significant and unavoidable under project conditions and cumulatively considerable under significant and unavoidable LOS impacts, the impact on transit travel times would be significant and unavoidable under project conditions and cumulatively considerable under cumulative conditions.

With implementation of generally applicable policies related to traffic impacts, the project would not have any significant LOS impacts at intersections and would therefore not adversely affect transit travel times. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to transit travel times remain valid and no further analysis is required.

Impact 3.4.3 evaluated whether implementation of the LUTE would result in increased demand for bicycle facilities. Buildout under the LUTE would increase the population in the City. The LUTE includes policies that would support improving bicycle facilities as part of transportation improvement projects, providing linkages to all modes of travel, and implementation of a citywide bike plan to improve bicycle access (Policies LT-3.22, LT-3.23, LT-3.26, and LT-8.5and associated actions). The LUTE EIR concludes that the LUTE's impact on bicycle facilities would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

The project TDM program would support the increased use of bicycles for commuting. On-site bicycle facilities that could be constructed as part of the project include 32 bike lockers and 10 racks. Showers and lockers for bicycle commuters will also be provided within the building. The project would not be anticipated to result in a substantial increase in demand for bicycle facilities such that the performance or safety of

existing bicycle facilities would be adversely affected. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to bicycle facilities remain valid and no further analysis is required.

Impact 3.4.4 evaluated whether implementation of the LUTE would result in increased demand for pedestrian facilities. Buildout of subsequent projects under the Draft LUTE would increase demand for pedestrian facilities. Implementation of the LUTE Policies LT-3.22, LT-3.23, LT-3.26, and LT-8.5, and associated actions would close existing sidewalk gaps, build new pedestrian connections, enhance pedestrian intersection crossings, and enhance pedestrian comfort level on sidewalks. The LUTE EIR concludes that the LUTE's impact on pedestrian facilities would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

The project would include improvements to the streetscape along the boundaries of the project site, including adding sidewalks and street trees along Kifer Road and Commercial Street. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

Impact 3.4.5 evaluated whether implementation of the LUTE would increase the risk of vehicle and bicycle/pedestrian conflicts. The analysis noted that LUTE Policies LT-3.18, LT-3.19, LT-3.20, LT-3.22, LT-3.23, and LT-3.24 incorporate a "complete streets" approach for circulation planning that accommodates all travel modes and improves safety. Complete streets are designed and operated to enable safe and convenient access for all users, including pedestrians, bicyclists, and motorists. The anticipated circulation improvements in the LUTE would help reduce the potential for pedestrian/bicycle and vehicle conflicts. The LUTE EIR concludes that the LUTE's impact related to vehicle and bicycle/pedestrian conflicts would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

Currently, there are no complete sidewalk facilities along the streets that bound the project site. Thus, with the addition of sidewalks the project would reduce pedestrian and vehicle conflicts. The project would implement a TDM program that would encourage the use of transit, bicycling, and walking. The project would also provide streetscape improvements that would help improve pedestrian safety. Thus, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR The findings of the certified LUTE EIR pertaining to consistency with public transit, bicycle, and pedestrian plans and performance and safety of such facilities remain valid and no further analysis is required.

Mitigation Measures

LUTE EIR mitigation measures MM 3.4.7a and b are directed at the City to update its transportation impact fee program to incorporate additional transportation improvements and are not applicable to the project. The project would pay the applicable transportation impact fee.

CONCLUSION

With application of generally uniformly applied development policies and standards, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR pertaining to transportation and traffic remain valid.

4.17 UTILITIES AND SERVICE SYSTEMS

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
17	. Utilities and Service Systems. Wou	ld the project:	-	-			
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Draft EIR Setting pp. 3.11-17 to 3.11-19 Impact 3.11.2.1	No	No	No	No	NA, impact remains less than significant.
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?	Draft EIR Setting pp. 3.11-1 to 3.11- 9 and 3.11-17 to 3.11-19 Impacts 3.11.1.2 and 3.11.2.2	No	No	No	No	NA, impact remains less than significant.
C.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Draft EIR Setting pp. 3.8-1 – 3.8-3 Impact 3.8.1	No	No	No	No	NA, impact remains less than significant.
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Draft EIR Setting pp. 3.11-1 to 3.11- 9 Impact 3.11.1.1 and 3.11.1.3	No	No	No	No	NA, impact remains less than significant.
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?	Draft EIR Setting pp. 3.11-17 to 3.11-19 Impact 3.11.2.2 and 3.11.2.3	No	No	No	No	NA, impact remains less than significant.
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Draft EIR Setting pp. 3.11-24 Impact 3.11.3.1 and 3.11.3.3	No	No	No	No	NA, impact remains less than significant.
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	Draft EIR Setting pp. 3.11-24 Impact 3.11.3.2	No	No	No	No	NA, impact remains less than significant.
h.	Create demand for natural gas, electricity, telephone, and other utility services that cannot be met.	Draft EIR Setting pp. 3.11-30 to 3.11-31 Impact 3.11.4.1	No	No	No	No	NA, impact remains less than significant.
i.	Result in inefficient, wasteful, and unnecessary consumption of energy.	Draft EIR Setting pp. 3.11-30 to 3.11-31 Impact 3.11.4.1	No	No	No	No	NA, impact remains less than significant.

4.17.1 Discussion

A water supply assessment (WSA) was prepared that addressed the LUTE as well as the Peery Park Specific Plan and the Lawrence Station Area Plan in accordance with state water planning law. The information about existing and planned supplies, historic and future demand, and supply reliability presented in Section 3.11.1, Water Supply and Service, of the LUTE Draft EIR is taken from the WSA.

Since completion of the WSA, the City adopted a 2015 Urban Water Management Plan (UWMP) that is not reflected in the WSA. While there is some variation in the estimates for water demand and supply between the WSA and the 2015 UWMP, both documents conclude that there is adequate water supply for growth anticipated under the Draft LUTE under normal year and drought conditions. Thus, the 2015 UWMP does not substantially change water supply impact analysis provided in the LUTE Draft EIR.

Since completion of the LUTE EIR, the City of Sunnyvale as well as the cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, and unincorporated Santa Clara County became members of Silicon Valley Clean Energy (SVCE), which serves as the Community Choice Aggregation (CCA) for its member communities. SVCE works in partnership with Pacific Gas and Electric (PG&E) to deliver direct, renewable electricity to customers within its member jurisdictions. Consistent with State law, all electricity accounts within the city of Sunnyvale were automatically enrolled in SVCE; however, customers can choose to opt out or remain with PG&E. According to the Sunnyvale Climate Action Plan Biennial Progress Report released in 2018, 98 percent of residential and commercial accounts received carbon-free electricity from SVCE (City of Sunnyvale 2018). Electricity is supplied to the city using infrastructure built and maintained by PG&E.

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Impact 3.11.2.1 in the LUTE Draft EIR evaluated whether implementation of the LUTE would exceed wastewater treatment requirements of the San Francisco Bay RWQCB. The analysis noted that the increase in wastewater flows under the LUTE would be within the permitted design flow capacity of the Donald M. Sommers Water Pollution Control Plant (WPCP) and would be within the design flow capacity assumed in the Water Pollutant Control Plant Master Plan. The City would regulate any new industrial or commercial facilities through the pretreatment program. The analysis concluded that implementation of the LUTE would not exceed the requirements and the impact would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.2.3).

The project consists of R&D and office uses and is expected to generate constituents in the wastewater flows to the plant that would remain similar to existing conditions. Because the project would be consistent with the land use assumptions included in the LUTE, the project's contribution to wastewater flows were generally factored in the LUTE Draft EIR and the project would not exceed wastewater treatment requirements of the San Francisco Bay RWQCB. Thus, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to wastewater treatment remain valid and no further analysis is required.

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?

Impact 3.11.1.2 and 3.11.2.2 evaluated whether implementation of the LUTE would require the construction of new or expanded water and wastewater infrastructure and treatment facilities. The analysis identifies that the City's wastewater collection system has the capacity to convey sewage and industrial wastes generated when the city is fully developed in accordance with the development potential (with an approximately 55.7

million gallons per day [mgd] collection capacity) of the City. The City's Wastewater Collection System Master Plan, Water Master Plan, and Capital Improvement Program identify the conveyance improvements projects including improvements to lift stations, pump stations 1 and 2, and pipeline improvements. Wastewater treatment capacity is addressed under a) above. The LUTE EIR concludes that impacts related to construction of wastewater treatment facilities would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.2.3).

The project is within the development scope of the LUTE. Water or wastewater infrastructure improvements for the project would occur on-site and along the project's frontage of Kifer Road. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to the construction or expansion wastewater treatment facilities remain valid and no further analysis is required.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Impact 3.8.1 evaluated whether buildout under the LUTE would increase impervious surfaces, and as a result, alter drainage patterns and increase drainage rates and runoff over existing conditions. The analysis notes that the amount and type of runoff generated by various projects under the LUTE would be greater than that under existing conditions due to increases in impervious surfaces. These impacts would be reduced through compliance with existing regulatory programs, including the City's Municipal Code Chapter 12.60, and the City's Urban Runoff Management Plan. Implementation of the LUTE would result in a less-than-significant impact under project conditions and would be less than cumulatively considerable under cumulative conditions (Impact 3.8.4).

The project is consistent with development assumptions analyzed in the LUTE Draft EIR. The project is required to adhere to applicable regulatory programs Project design plans include drainage water quality control features for the site (see Sheets C 2.0 and C 4.0 in the 901 Kifer Planning Application). Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to the construction or expansion of storm water drainage facilities remain valid and no further analysis is required.

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

As described in Impact 3.11.1.1 and 3.11.1.3, cumulative development in Sunnyvale would result in a net additional water demand of 2,274 acre-feet per year. The LUTE Water Supply Assessment (WSA) identifies that there is adequate water supply available to meet build out of the City in year 2035 under normal, single-dry and multiple-dry years. This impact was identified as less than significant under project and cumulative conditions.

The project is consistent with LUTE land use designations and development intensities that were utilized in the WSA. As noted above, the City adopted a 2015 Urban Water Management Plan (UWMP) that is not reflected in the WSA, but both documents conclude that there is adequate water supply for growth anticipated under the Draft LUTE under normal year and drought conditions. Therefore, the 2015 UWMP does not substantially change water supply impact analysis provided in the LUTE EIR. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new

information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to water supplies remain valid and no further analysis is required.

e) Result in a determination by the wastewater treatment provider that 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?

Impact 3.11.2 evaluated whether implementation of the LUTE would require the construction of new or expanded wastewater infrastructure and treatment facilities. The analysis identifies that the City's wastewater collection system has the capacity to convey sewage and industrial wastes generated when the city is fully developed in accordance with the development potential (with an approximately 55.7 mgd collection capacity) of the City. The City's Wastewater Collection System Master Plan and Capital Improvement Program identify the conveyance improvements projects including improvements to lift stations, pump stations 1 and 2, and pipeline improvements. Wastewater treatment capacity is addressed under a) above. This impact was identified as less than significant under project and cumulative conditions.

The project is consistent with LUTE land use designations and development intensities that were utilized in the LUTE EIR wastewater impact analysis. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to wastewater treatment capacity remain valid and no further analysis is required.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

As identified in Impact 3.11.3.1 and 3.11.3.3 of the LUTE Draft EIR, the City would generate approximately 54,020 tons annually of solid waste at buildout. The LUTE Draft EIR identifies that there is available combined remaining capacity of 32.8 million tons at three local landfills. This includes the Waste Management–owned Guadalupe Landfill, which has 11,055,000 tons of remaining capacity. By 2035, approximately 412,979 pounds (206.49 tons) of solid waste would be generated per day in Sunnyvale (including the LUTE, Peery Park Specific Plan, and Lawrence Station Area Plan). This amount of waste represents approximately 12.6 percent of the permitted daily throughput of the Kirby Canyon Landfill or 5.9 percent of the throughput at the Monterey Peninsula Landfill. This impact was identified as less than significant under project and cumulative conditions.

The project's contribution to solid waste generation were factored in the LUTE EIR given that its land use and intensities are consistent with the LUTE. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to landfill capacity remain valid and no further analysis is required.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

As discussed in Impact 3.11.3.2 of the LUTE Draft EIR, Sunnyvale had a waste diversion rate of 66 percent as of 2011, and under current methods for tracking progress with AB 939, the per capita disposal rates are less than the targets. The City has developed its new Zero Waste Strategic Plan, intended to identify the new policies, programs, and infrastructure that will enable the City to reach its Zero Waste goals of 75% diversion by 2020 and 90 percent diversion by 2030. Additionally, the City of Sunnyvale has committed to the waste reduction programs, plans, and policies that would apply to new development. Construction of subsequent projects under the LUTE that would result in demolition or renovation of existing structures would generate solid waste, and the City requires the recycling and reuse of materials to reduce landfill disposal. Therefore, implementation of the LUTE would not conflict with a federal, state, or local statute or regulation related to

solid waste disposal. This impact would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.3.3).

The project would not generate solid waste in excess of what was evaluated in the LUTE EIR and is required to comply with City solid waste reduction standards. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to solid waste remain valid and no further analysis is required.

h) Create demand for natural gas, electricity, telephone, and other utility services that cannot be met.

See discussion under item i) below.

i) Result in inefficient, wasteful, and unnecessary consumption of energy.

As described in Impact 3.11.4.1, implementation of the LUTE would increase the consumption of energy. However, subsequent development would comply with Building Energy Efficiency Standards included in Title 24 of the California Code of Regulations and implement the energy efficiency requirements of the City's CAP. This would include obtaining carbon-free electricity from SVCE. Implementation of the LUTE would also result in an improvement in vehicle miles traveled (VMT) per capita as compared to citywide VMT under the previous General Plan. This impact was identified as less than significant under project and cumulative conditions.

The project would be required comply with Title 24 requirements as well as the City's CAP. In addition, the project would meet the requirements of the City's Green Building Program to obtain LEED Gold certification and implement a TDM that would reduce vehicle trips. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to energy consumption remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were identified in for the certified LUTE EIR regarding utilities or energy, nor are any additional mitigation measures required the project.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been identified requiring new analysis or verification. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR pertaining to utilities and energy remain valid and no further analysis is required.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Environmental Issue Area	Where Impact Was Analyzed in the LUTE Draft and Final EIR.	Any Peculiar Impact?	Any Impact Not Analyzed As Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
18.	Mandatory Findings of Significance.						
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, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory?	Draft EIR Sections 3.9, Biological Resources, and 3.10, Cultural Resources.	No	No	No	No	Yes, but impact remains significant and unavoidable.
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 view in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Draft EIR Sections 3.1 through 3.13 and Sections 4.1 through 4.4	No	No	No	No	Yes, but impact remains significant and unavoidable.
С.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Draft EIR Sections 3.3, Hazards and Human Health, 3.5, Air Quality, and 3.6, Noise	No	No	No	No	Yes, but impact remains significant and unavoidable.

CONCLUSION

Since the LUTE Final EIR was certified, there have been regulatory changes noted in the above checklist. However, these regulatory changes would not affect the analysis or conclusions of the LUTE EIR. Regarding the above-listed mandatory findings of significance, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR.

All applicable mitigation measures in the LUTE EIR would continue to be implemented with the project. Therefore, no new significant impacts would occur with implementation of the project.

5 LIST OF PREPARERS AND PERSONS CONSULTED

5.1 LIST OF PREPARERS

Ascent Environmental

Amanda Olekszulin	Principal-in-Charge
Pat Angell	Project Director
Jessica Mitchell	Environmental Planner
Ricky Williams	Air Quality and Greenhouse Gases
Gayiety Lane	Publishing Specialist
Lisa Merry	GIS/Graphics Specialist

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6 **REFERENCES**

- AEI Consultants. 2018a (May). Limited Phase II Subsurface Investigation. Property Identification: Fortinet, Inc. HQ Project, 901 Kifer Road, Sunnyvale, California 94086
- ------. 2018b (May). Phase I Environmental Site Assessment. Property Identification: 193 Commercial Street, Sunnyvale, Santa Clara County, California 94086.
- ———. 2018c (May). Phase I Environmental Site Assessment. Property Identification: 183 Commercial Street, Sunnyvale, Santa Clara County, California 94086.
 - -----. 2018d (May). Phase I Environmental Site Assessment. Property Identification: 181 Commercial Street, Sunnyvale, Santa Clara County, California 94086.
- ------. 2018e (May). Phase I Environmental Site Assessment. Property Identification: 169 171 Commercial Street, Sunnyvale, Santa Clara County, California 94086.
- ———. 2018f (May). Phase I Environmental Site Assessment. Property Identification: 155 Commercial Street, Sunnyvale, Santa Clara County, California 94086.
- ———. 2018g (May). Phase I Environmental Site Assessment. Property Identification: 917 Kifer Road, Sunnyvale, Santa Clara County, California 94086.
 - -----. 2018h (May). Phase I Environmental Site Assessment. Property Identification: APN 205-42-010, Sunnyvale, Santa Clara County, California 94086.
 - -----. 2018i (May). Phase I Environmental Site Assessment. Property Identification: APN 205-42-001, Sunnyvale, Santa Clara County, California 94086.
- ———. 2018j (May). Phase I Environmental Site Assessment. Property Identification: 905 Kifer Road, Sunnyvale, Santa Clara County, California 94086.
- ———. 2018k (May). Phase I Environmental Site Assessment. Property Identification: 919 Kifer Road, Sunnyvale, Santa Clara County, California 94086.

Heller Manus Architects. 2018 (October). 901 Kifer Planning Application. San Francisco, CA.

Hexagon. See Hexagon Transportation Consultants.

- Hexagon Transportation Consultants. 2018 (November). Fortinet (901 Kifer Road) Draft Transportation Analysis. Prepared for the City of Sunnyvale. San Jose, CA.
- Kimley-Horn and Associates. 2018a (June 11). Fortinet Site (899 Kifer and 901 Kifer Buildings) TDM Plan and Employee Occupancy, Sunnyvale, CA. Letter memorandum to Jon Wright of Sares Regis
 - —. 2018b (June). Acoustical Assessment for the Proposed Fortinet Project in the City of Sunnyvale, California. Orange, CA.
- LSA Associates. 2018a (June 21). *Biological Resources Report, 901 Kifer Road, Sunnyvale, Santa Clara County*. Letter memorandum to Larry Burnett of Fortinet.
 - -. 2018b (December). Historic Resources Evaluation for 901 Kifer Road.
- City of Sunnyvale. 2016 (August). Land Use and Transportation Element Update Draft EIR. SCH #2012032003. Prepared by Michael Baker International, Rancho Cordova, CA.

- —. 2017 (January). Land Use and Transportation Element Update Final Environmental Impact Report. SCH #2012032003. Prepared by Michael Baker International, Rancho Cordova, CA.
- —. 2018 (July). Climate Action Plan 2018 Biennial Progress Report. Available: https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?blobid=25798. Accessed September 2018.

California Energy Commission (CEC). 2018a (May). Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation, News Release. Available: https://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html. Accessed December 2018.

———. 2018b (March). 2019 Building Energy and Efficiency Standards Frequently Asked Questions. Available: https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standar ds_FAQ.pdf. Accessed December 2018.

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Appendix A

Air Quality and GHG Emission Modeling Outputs

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	120.92	1000sqft	3.20	120,918.00	0
Research & Development	51.82	1000sqft	0.86	51,822.00	0
Parking Lot	304.00	Space	2.74	121,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Com	pany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity 0 (Ib/MWhr)	.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match 6.8 acre site. Parking lot acreage represents default for the proposed number of parking spaces

Construction Phase - Construction timeline dates adjusted to match construction schedule provided by applicant on July 3, 2018. Paving construction assumed to occur over the same timeframe as building construction.

Grading - Based on the geotechnical report and proposed planning submittal, the project is expected to use soil on-site for all necessary fill.

Demolition - The project would demolish nine existing buildings, totaling 117,812 sq. ft.

Construction Off-road Equipment Mitigation - The project would be required to implement the "Basic Construction Mitigation Measures" based on BAAQMD guidelines. These emission reductions based on these measures are accounted for off-book.

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	230.00	305.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	PhaseEndDate	2/27/2020	1/1/2020
tblConstructionPhase	PhaseEndDate	1/2/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/3/2019	12/28/2018
tblConstructionPhase	PhaseEndDate	2/14/2019	1/30/2019
tblConstructionPhase	PhaseEndDate	1/30/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/17/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	1/31/2020	10/1/2019
tblConstructionPhase	PhaseStartDate	2/15/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	1/18/2019	1/16/2019
tblConstructionPhase	PhaseStartDate	1/3/2020	1/31/2019
tblConstructionPhase	PhaseStartDate	1/4/2019	1/2/2019
tblGrading	AcresOfGrading	5.50	10.00
tblLandUse	LandUseSquareFeet	120,920.00	120,918.00
tblLandUse	LandUseSquareFeet	51,820.00	51,822.00
tblLandUse	LotAcreage	2.78	3.20
tblLandUse	LotAcreage	1.19	0.86

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0328	0.3948	0.1993	5.4000e- 004	0.0635	0.0159	0.0793	0.0103	0.0148	0.0251	0.0000	49.8259	49.8259	8.7500e- 003	0.0000	50.0447
2019	1.4995	5.5507	4.6868	9.1600e- 003	0.2880	0.2826	0.5706	0.1117	0.2636	0.3753	0.0000	824.2721	824.2721	0.1670	0.0000	828.4476
2020	0.1490	1.2881	1.1887	2.3800e- 003	0.0422	0.0629	0.1050	0.0115	0.0586	0.0701	0.0000	211.2944	211.2944	0.0426	0.0000	212.3594
Maximum	1.4995	5.5507	4.6868	9.1600e- 003	0.2880	0.2826	0.5706	0.1117	0.2636	0.3753	0.0000	824.2721	824.2721	0.1670	0.0000	828.4476

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2018	0.0328	0.3948	0.1993	5.4000e- 004	0.0635	0.0159	0.0793	0.0103	0.0148	0.0251	0.0000	49.8258	49.8258	8.7500e- 003	0.0000	50.0446	
2019	1.4995	5.5507	4.6868	9.1600e- 003	0.2880	0.2826	0.5706	0.1117	0.2636	0.3753	0.0000	824.2714	824.2714	0.1670	0.0000	828.4470	
2020	0.1490	1.2881	1.1887	2.3800e- 003	0.0422	0.0629	0.1050	0.0115	0.0586	0.0701	0.0000	211.2942	211.2942	0.0426	0.0000	212.3592	
Maximum	1.4995	5.5507	4.6868	9.1600e- 003	0.2880	0.2826	0.5706	0.1117	0.2636	0.3753	0.0000	824.2714	824.2714	0.1670	0.0000	828.4470	

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-7-2018	3-6-2019	1.4283	1.4283
2	3-7-2019	6-6-2019	1.5500	1.5500
3	6-7-2019	9-6-2019	1.5483	1.5483
4	9-7-2019	12-6-2019	2.2513	2.2513
5	12-7-2019	3-6-2020	1.7175	1.7175
6	3-7-2020	6-6-2020	0.4008	0.4008
		Highest	2.2513	2.2513

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.7755	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003	
Energy	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	942.6831	942.6831	0.0380	0.0104	946.7383	
Mobile	0.3695	1.5525	4.3918	0.0138	1.2010	0.0138	1.2148	0.3215	0.0130	0.3345	0.0000	1,260.504 1	1,260.504 1	0.0453	0.0000	1,261.637 6	
Waste			, , , , ,			0.0000	0.0000		0.0000	0.0000	23.6282	0.0000	23.6282	1.3964	0.0000	58.5377	
Water						0.0000	0.0000		0.0000	0.0000	14.9018	87.3502	102.2519	1.5345	0.0370	151.6277	
Total	1.1630	1.7166	4.5340	0.0148	1.2010	0.0263	1.2273	0.3215	0.0254	0.3470	38.5299	2,290.545 9	2,329.075 9	3.0142	0.0474	2,418.550 5	

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2.2 Overall Operational

Mitigated Operational

	ROG	NO>	x	СО	SO2	Fug PN	itive /10	Exhaust PM10	PM10 Total	Fugi PM	itive Ex I2.5 F	xhaust PM2.5	PM2.5 Tot	al Bio)- CO2	NBio- CO2	? Tota	I CO2	CH4	•	N2O	CO26	е
Category							ton	s/yr										MT/y	/r				
Area	0.7755	4.0000 005	0e- 4	4.4100e- 003	0.000	0		2.0000e- 005	2.0000e 005)- 	2.	0000e- 005	2.0000e- 005	0.	.0000	8.5200e- 003	8.52 0	200e- 03	2.0000 005)e- 0	.0000	9.0900 003)e-
Energy	0.0180	0.164	40	0.1378	9.8000 004	e-		0.0125	0.0125	; ;	C).0125	0.0125	0.	.0000	942.6831	942.	.6831	0.038	0 0	.0104	946.73	83
Mobile	0.3695	1.552	25	4.3918	0.013	3 1.2	010	0.0138	1.2148	0.3	215 ().0130	0.3345	0.	.0000	1,260.504 1	1,26	0.504 1	0.045	3 0	.0000	1,261.6 6	337
Waste	r,							0.0000	0.0000) 	(0.0000	0.0000	23	.6282	0.0000	23.6	6282	1.396	4 0	.0000	58.53	77
Water	r,							0.0000	0.0000) 	(0.0000	0.0000	14	.9018	87.3502	102.	2519	1.534	5 0	.0370	151.62	277
Total	1.1630	1.716	66	4.5340	0.014	8 1.2	010	0.0263	1.2273	0.3	215 0).0254	0.3470	38	5.5299	2,290.545 9	2,32	9.075 9	3.014	2 0	.0474	2,418.5 5	i50
	ROG		NOx	((0	SO2	Fugi PN	itive Exh 110 Pi	aust M10	PM10 Total	Fugitive PM2.5	e Exh PN	aust Pl 12.5 T	12.5 otal	Bio- C	O2 NBio	-CO2	Total C	02	CH4	N2	20	CO2e
Percent Reduction	0.00		0.00) 0	.00	0.00	0.	00 0	.00	0.00	0.00	0.	.00 0	.00	0.00) 0.	00	0.00		0.00	0.0	00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/7/2018	12/28/2018	5	16	
2	Site Preparation	Site Preparation	1/2/2019	1/15/2019	5	10	
3	Grading	Grading	1/16/2019	1/30/2019	5	11	
4	Building Construction	Building Construction	1/31/2019	4/1/2020	5	305	
5	Paving	Paving	1/31/2019	4/1/2020	5	305	
6	Architectural Coating	Architectural Coating	10/1/2019	1/1/2020	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 259,110; Non-Residential Outdoor: 86,370; Striped Parking Area: 7,296 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	536.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	106.00	48.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0580	0.0000	0.0580	8.7800e- 003	0.0000	8.7800e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0298	0.3066	0.1784	3.1000e- 004		0.0155	0.0155		0.0144	0.0144	0.0000	28.0993	28.0993	7.7400e- 003	0.0000	28.2928
Total	0.0298	0.3066	0.1784	3.1000e- 004	0.0580	0.0155	0.0735	8.7800e- 003	0.0144	0.0232	0.0000	28.0993	28.0993	7.7400e- 003	0.0000	28.2928

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	2.5700e- 003	0.0879	0.0171	2.2000e- 004	4.5400e- 003	3.5000e- 004	4.8900e- 003	1.2500e- 003	3.4000e- 004	1.5800e- 003	0.0000	20.8583	20.8583	9.8000e- 004	0.0000	20.8829
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e- 004	3.7000e- 004	3.7800e- 003	1.0000e- 005	9.5000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8683	0.8683	3.0000e- 005	0.0000	0.8690
Total	3.0500e- 003	0.0882	0.0209	2.3000e- 004	5.4900e- 003	3.6000e- 004	5.8500e- 003	1.5000e- 003	3.5000e- 004	1.8400e- 003	0.0000	21.7266	21.7266	1.0100e- 003	0.0000	21.7519

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			1 1 1		0.0580	0.0000	0.0580	8.7800e- 003	0.0000	8.7800e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0298	0.3066	0.1784	3.1000e- 004		0.0155	0.0155		0.0144	0.0144	0.0000	28.0992	28.0992	7.7400e- 003	0.0000	28.2928
Total	0.0298	0.3066	0.1784	3.1000e- 004	0.0580	0.0155	0.0735	8.7800e- 003	0.0144	0.0232	0.0000	28.0992	28.0992	7.7400e- 003	0.0000	28.2928

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3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	ʻ/yr		
Hauling	2.5700e- 003	0.0879	0.0171	2.2000e- 004	4.5400e- 003	3.5000e- 004	4.8900e- 003	1.2500e- 003	3.4000e- 004	1.5800e- 003	0.0000	20.8583	20.8583	9.8000e- 004	0.0000	20.8829
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e- 004	3.7000e- 004	3.7800e- 003	1.0000e- 005	9.5000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8683	0.8683	3.0000e- 005	0.0000	0.8690
Total	3.0500e- 003	0.0882	0.0209	2.3000e- 004	5.4900e- 003	3.6000e- 004	5.8500e- 003	1.5000e- 003	3.5000e- 004	1.8400e- 003	0.0000	21.7266	21.7266	1.0100e- 003	0.0000	21.7519

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e- 004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e- 004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.5100e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.6319	0.6319	2.0000e- 005	0.0000	0.6323
Total	3.3000e- 004	2.4000e- 004	2.5100e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.6319	0.6319	2.0000e- 005	0.0000	0.6323

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			1 1 1		0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e- 004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e- 004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.5100e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.6319	0.6319	2.0000e- 005	0.0000	0.6323
Total	3.3000e- 004	2.4000e- 004	2.5100e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.6319	0.6319	2.0000e- 005	0.0000	0.6323

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0384	0.0000	0.0384	0.0188	0.0000	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.1559	0.0896	1.6000e- 004		7.6900e- 003	7.6900e- 003		7.0700e- 003	7.0700e- 003	0.0000	14.6532	14.6532	4.6400e- 003	0.0000	14.7692
Total	0.0142	0.1559	0.0896	1.6000e- 004	0.0384	7.6900e- 003	0.0461	0.0188	7.0700e- 003	0.0259	0.0000	14.6532	14.6532	4.6400e- 003	0.0000	14.7692

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.2000e- 004	2.3000e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5792	0.5792	2.0000e- 005	0.0000	0.5796
Total	3.0000e- 004	2.2000e- 004	2.3000e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5792	0.5792	2.0000e- 005	0.0000	0.5796

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust		, , ,			0.0384	0.0000	0.0384	0.0188	0.0000	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.1559	0.0896	1.6000e- 004		7.6900e- 003	7.6900e- 003		7.0700e- 003	7.0700e- 003	0.0000	14.6532	14.6532	4.6400e- 003	0.0000	14.7691
Total	0.0142	0.1559	0.0896	1.6000e- 004	0.0384	7.6900e- 003	0.0461	0.0188	7.0700e- 003	0.0259	0.0000	14.6532	14.6532	4.6400e- 003	0.0000	14.7691

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3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.2000e- 004	2.3000e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5792	0.5792	2.0000e- 005	0.0000	0.5796
Total	3.0000e- 004	2.2000e- 004	2.3000e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5792	0.5792	2.0000e- 005	0.0000	0.5796

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	'/yr		
Off-Road	0.2822	2.5189	2.0511	3.2200e- 003	J	0.1541	0.1541		0.1449	0.1449	0.0000	280.9495	280.9495	0.0684	0.0000	282.6606
Total	0.2822	2.5189	2.0511	3.2200e- 003		0.1541	0.1541		0.1449	0.1449	0.0000	280.9495	280.9495	0.0684	0.0000	282.6606

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0281	0.7243	0.1944	1.5700e- 003	0.0377	5.2000e- 003	0.0429	0.0109	4.9800e- 003	0.0159	0.0000	150.8865	150.8865	7.4800e- 003	0.0000	151.0737
Worker	0.0460	0.0343	0.3539	9.8000e- 004	0.1005	6.6000e- 004	0.1011	0.0267	6.1000e- 004	0.0273	0.0000	88.9329	88.9329	2.4200e- 003	0.0000	88.9934
Total	0.0741	0.7586	0.5483	2.5500e- 003	0.1382	5.8600e- 003	0.1441	0.0376	5.5900e- 003	0.0432	0.0000	239.8194	239.8194	9.9000e- 003	0.0000	240.0671

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2822	2.5189	2.0511	3.2200e- 003	1 1	0.1541	0.1541		0.1449	0.1449	0.0000	280.9492	280.9492	0.0684	0.0000	282.6602
Total	0.2822	2.5189	2.0511	3.2200e- 003		0.1541	0.1541		0.1449	0.1449	0.0000	280.9492	280.9492	0.0684	0.0000	282.6602

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0281	0.7243	0.1944	1.5700e- 003	0.0377	5.2000e- 003	0.0429	0.0109	4.9800e- 003	0.0159	0.0000	150.8865	150.8865	7.4800e- 003	0.0000	151.0737
Worker	0.0460	0.0343	0.3539	9.8000e- 004	0.1005	6.6000e- 004	0.1011	0.0267	6.1000e- 004	0.0273	0.0000	88.9329	88.9329	2.4200e- 003	0.0000	88.9934
Total	0.0741	0.7586	0.5483	2.5500e- 003	0.1382	5.8600e- 003	0.1441	0.0376	5.5900e- 003	0.0432	0.0000	239.8194	239.8194	9.9000e- 003	0.0000	240.0671

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Off-Road	0.0700	0.6331	0.5560	8.9000e- 004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4313	76.4313	0.0187	0.0000	76.8975
Total	0.0700	0.6331	0.5560	8.9000e- 004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4313	76.4313	0.0187	0.0000	76.8975

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3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2800e- 003	0.1804	0.0480	4.3000e- 004	0.0104	8.9000e- 004	0.0113	3.0100e- 003	8.5000e- 004	3.8700e- 003	0.0000	41.4125	41.4125	1.9000e- 003	0.0000	41.4600
Worker	0.0116	8.3500e- 003	0.0875	2.6000e- 004	0.0277	1.8000e- 004	0.0279	7.3800e- 003	1.7000e- 004	7.5400e- 003	0.0000	23.7916	23.7916	5.8000e- 004	0.0000	23.8062
Total	0.0179	0.1887	0.1356	6.9000e- 004	0.0382	1.0700e- 003	0.0392	0.0104	1.0200e- 003	0.0114	0.0000	65.2042	65.2042	2.4800e- 003	0.0000	65.2662

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0700	0.6331	0.5560	8.9000e- 004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4312	76.4312	0.0187	0.0000	76.8974	
Total	0.0700	0.6331	0.5560	8.9000e- 004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4312	76.4312	0.0187	0.0000	76.8974	

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3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	6.2800e- 003	0.1804	0.0480	4.3000e- 004	0.0104	8.9000e- 004	0.0113	3.0100e- 003	8.5000e- 004	3.8700e- 003	0.0000	41.4125	41.4125	1.9000e- 003	0.0000	41.4600		
Worker	0.0116	8.3500e- 003	0.0875	2.6000e- 004	0.0277	1.8000e- 004	0.0279	7.3800e- 003	1.7000e- 004	7.5400e- 003	0.0000	23.7916	23.7916	5.8000e- 004	0.0000	23.8062		
Total	0.0179	0.1887	0.1356	6.9000e- 004	0.0382	1.0700e- 003	0.0392	0.0104	1.0200e- 003	0.0114	0.0000	65.2042	65.2042	2.4800e- 003	0.0000	65.2662		

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Off-Road	0.1738	1.8217	1.7525	2.7200e- 003		0.0985	0.0985		0.0907	0.0907	0.0000	244.6784	244.6784	0.0774	0.0000	246.6138		
Paving	2.8100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.1766	1.8217	1.7525	2.7200e- 003		0.0985	0.0985		0.0907	0.0907	0.0000	244.6784	244.6784	0.0774	0.0000	246.6138		

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3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.5100e- 003	4.8500e- 003	0.0501	1.4000e- 004	0.0142	9.0000e- 005	0.0143	3.7800e- 003	9.0000e- 005	3.8700e- 003	0.0000	12.5848	12.5848	3.4000e- 004	0.0000	12.5934	
Total	6.5100e- 003	4.8500e- 003	0.0501	1.4000e- 004	0.0142	9.0000e- 005	0.0143	3.7800e- 003	9.0000e- 005	3.8700e- 003	0.0000	12.5848	12.5848	3.4000e- 004	0.0000	12.5934	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Off-Road	0.1738	1.8217	1.7525	2.7200e- 003		0.0985	0.0985		0.0907	0.0907	0.0000	244.6781	244.6781	0.0774	0.0000	246.6135		
Paving	2.8100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.1766	1.8217	1.7525	2.7200e- 003		0.0985	0.0985		0.0907	0.0907	0.0000	244.6781	244.6781	0.0774	0.0000	246.6135		
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Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5100e- 003	4.8500e- 003	0.0501	1.4000e- 004	0.0142	9.0000e- 005	0.0143	3.7800e- 003	9.0000e- 005	3.8700e- 003	0.0000	12.5848	12.5848	3.4000e- 004	0.0000	12.5934
Total	6.5100e- 003	4.8500e- 003	0.0501	1.4000e- 004	0.0142	9.0000e- 005	0.0143	3.7800e- 003	9.0000e- 005	3.8700e- 003	0.0000	12.5848	12.5848	3.4000e- 004	0.0000	12.5934

3.6 Paving - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0448	0.4642	0.4835	7.5000e- 004		0.0248	0.0248		0.0229	0.0229	0.0000	66.0931	66.0931	0.0214	0.0000	66.6275
Paving	7.8000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0456	0.4642	0.4835	7.5000e- 004		0.0248	0.0248		0.0229	0.0229	0.0000	66.0931	66.0931	0.0214	0.0000	66.6275

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e- 003	1.1800e- 003	0.0124	4.0000e- 005	3.9300e- 003	3.0000e- 005	3.9500e- 003	1.0400e- 003	2.0000e- 005	1.0700e- 003	0.0000	3.3667	3.3667	8.0000e- 005	0.0000	3.3688
Total	1.6400e- 003	1.1800e- 003	0.0124	4.0000e- 005	3.9300e- 003	3.0000e- 005	3.9500e- 003	1.0400e- 003	2.0000e- 005	1.0700e- 003	0.0000	3.3667	3.3667	8.0000e- 005	0.0000	3.3688

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0448	0.4642	0.4835	7.5000e- 004		0.0248	0.0248		0.0229	0.0229	0.0000	66.0931	66.0931	0.0214	0.0000	66.6275
Paving	7.8000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0456	0.4642	0.4835	7.5000e- 004		0.0248	0.0248		0.0229	0.0229	0.0000	66.0931	66.0931	0.0214	0.0000	66.6275

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Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e- 003	1.1800e- 003	0.0124	4.0000e- 005	3.9300e- 003	3.0000e- 005	3.9500e- 003	1.0400e- 003	2.0000e- 005	1.0700e- 003	0.0000	3.3667	3.3667	8.0000e- 005	0.0000	3.3688
Total	1.6400e- 003	1.1800e- 003	0.0124	4.0000e- 005	3.9300e- 003	3.0000e- 005	3.9500e- 003	1.0400e- 003	2.0000e- 005	1.0700e- 003	0.0000	3.3667	3.3667	8.0000e- 005	0.0000	3.3688

3.7 Architectural Coating - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.9123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7900e- 003	0.0606	0.0608	1.0000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	8.4257	8.4257	7.1000e- 004	0.0000	8.4435
Total	0.9211	0.0606	0.0608	1.0000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	8.4257	8.4257	7.1000e- 004	0.0000	8.4435

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3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5200e- 003	1.8700e- 003	0.0194	5.0000e- 005	5.5000e- 003	4.0000e- 005	5.5300e- 003	1.4600e- 003	3.0000e- 005	1.5000e- 003	0.0000	4.8654	4.8654	1.3000e- 004	0.0000	4.8688
Total	2.5200e- 003	1.8700e- 003	0.0194	5.0000e- 005	5.5000e- 003	4.0000e- 005	5.5300e- 003	1.4600e- 003	3.0000e- 005	1.5000e- 003	0.0000	4.8654	4.8654	1.3000e- 004	0.0000	4.8688

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.9123	, , ,				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7900e- 003	0.0606	0.0608	1.0000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	8.4257	8.4257	7.1000e- 004	0.0000	8.4435
Total	0.9211	0.0606	0.0608	1.0000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	8.4257	8.4257	7.1000e- 004	0.0000	8.4435

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3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5200e- 003	1.8700e- 003	0.0194	5.0000e- 005	5.5000e- 003	4.0000e- 005	5.5300e- 003	1.4600e- 003	3.0000e- 005	1.5000e- 003	0.0000	4.8654	4.8654	1.3000e- 004	0.0000	4.8688
Total	2.5200e- 003	1.8700e- 003	0.0194	5.0000e- 005	5.5000e- 003	4.0000e- 005	5.5300e- 003	1.4600e- 003	3.0000e- 005	1.5000e- 003	0.0000	4.8654	4.8654	1.3000e- 004	0.0000	4.8688

3.7 Architectural Coating - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0138					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e- 004	8.4000e- 004	9.2000e- 004	0.0000		6.0000e- 005	6.0000e- 005		6.0000e- 005	6.0000e- 005	0.0000	0.1277	0.1277	1.0000e- 005	0.0000	0.1279
Total	0.0139	8.4000e- 004	9.2000e- 004	0.0000		6.0000e- 005	6.0000e- 005		6.0000e- 005	6.0000e- 005	0.0000	0.1277	0.1277	1.0000e- 005	0.0000	0.1279

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3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	3.0000e- 005	2.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0715
Total	3.0000e- 005	3.0000e- 005	2.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0715

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0138	1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e- 004	8.4000e- 004	9.2000e- 004	0.0000		6.0000e- 005	6.0000e- 005		6.0000e- 005	6.0000e- 005	0.0000	0.1277	0.1277	1.0000e- 005	0.0000	0.1279
Total	0.0139	8.4000e- 004	9.2000e- 004	0.0000		6.0000e- 005	6.0000e- 005		6.0000e- 005	6.0000e- 005	0.0000	0.1277	0.1277	1.0000e- 005	0.0000	0.1279

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3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	3.0000e- 005	2.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0715
Total	3.0000e- 005	3.0000e- 005	2.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0715

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.3695	1.5525	4.3918	0.0138	1.2010	0.0138	1.2148	0.3215	0.0130	0.3345	0.0000	1,260.504 1	1,260.504 1	0.0453	0.0000	1,261.637 6
Unmitigated	0.3695	1.5525	4.3918	0.0138	1.2010	0.0138	1.2148	0.3215	0.0130	0.3345	0.0000	1,260.504 1	1,260.504 1	0.0453	0.0000	1,261.637 6

4.2 Trip Summary Information

	Aver	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	1,333.75	297.46	126.97	2,421,559	2,421,559
Research & Development	420.26	98.46	57.52	808,186	808,186
Parking Lot	0.00	0.00	0.00		
Total	1,754.01	395.92	184.49	3,229,745	3,229,745

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Research & Development	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	764.1016	764.1016	0.0346	7.1500e- 003	767.0955
Electricity Unmitigated	r:	,	 			0.0000	0.0000	 , , , ,	0.0000	0.0000	0.0000	764.1016	764.1016	0.0346	7.1500e- 003	767.0955
NaturalGas Mitigated	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125	 	0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2700e- 003	179.6428
NaturalGas Unmitigated	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125	**************************************	0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2700e- 003	179.6428

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	ıs/yr							МТ	/yr		
General Office Building	1.97943e +006	0.0107	0.0970	0.0815	5.8000e- 004		7.3700e- 003	7.3700e- 003		7.3700e- 003	7.3700e- 003	0.0000	105.6298	105.6298	2.0200e- 003	1.9400e- 003	106.2575
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 , , , ,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	1.36706e +006	7.3700e- 003	0.0670	0.0563	4.0000e- 004		5.0900e- 003	5.0900e- 003	 - - - -	5.0900e- 003	5.0900e- 003	0.0000	72.9518	72.9518	1.4000e- 003	1.3400e- 003	73.3853
Total		0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2800e- 003	179.6428

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	ſ/yr		
General Office Building	1.97943e +006	0.0107	0.0970	0.0815	5.8000e- 004		7.3700e- 003	7.3700e- 003	1 1 1	7.3700e- 003	7.3700e- 003	0.0000	105.6298	105.6298	2.0200e- 003	1.9400e- 003	106.2575
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	1.36706e +006	7.3700e- 003	0.0670	0.0563	4.0000e- 004		5.0900e- 003	5.0900e- 003		5.0900e- 003	5.0900e- 003	0.0000	72.9518	72.9518	1.4000e- 003	1.3400e- 003	73.3853
Total		0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2800e- 003	179.6428

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5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	7/yr	
General Office Building	2.15597e +006	627.1958	0.0284	5.8700e- 003	629.6533
Parking Lot	42560	12.3812	5.6000e- 004	1.2000e- 004	12.4297
Research & Development	428050	124.5246	5.6300e- 003	1.1600e- 003	125.0125
Total		764.1016	0.0346	7.1500e- 003	767.0955

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		Π	/yr	
General Office Building	2.15597e +006	627.1958	0.0284	5.8700e- 003	629.6533
Parking Lot	42560	12.3812	5.6000e- 004	1.2000e- 004	12.4297
Research & Development	428050	124.5246	5.6300e- 003	1.1600e- 003	125.0125
Total		764.1016	0.0346	7.1500e- 003	767.0955

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.7755	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003
Unmitigated	0.7755	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	'/yr		
Architectural Coating	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6825					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e- 004	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003
Total	0.7755	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6825					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e- 004	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003
Total	0.7755	4.0000e- 005	4.4100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.5200e- 003	8.5200e- 003	2.0000e- 005	0.0000	9.0900e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		MT	ī/yr	
Mitigated	102.2519	1.5345	0.0370	151.6277
Unmitigated	102.2519	1.5345	0.0370	151.6277

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
General Office Building	21.4916 / 13.1722	54.0605	0.7024	0.0170	76.6808
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Research & Development	25.4796 / 0	48.1915	0.8321	0.0200	74.9469
Total		102.2519	1.5345	0.0370	151.6277

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
General Office Building	21.4916 / 13.1722	54.0605	0.7024	0.0170	76.6808		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Research & Development	25.4796 / 0	48.1915	0.8321	0.0200	74.9469		
Total		102.2519	1.5345	0.0370	151.6277		

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	√yr	
Mitigated	23.6282	1.3964	0.0000	58.5377
Unmitigated	23.6282	1.3964	0.0000	58.5377

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
General Office Building	112.46	22.8284	1.3491	0.0000	56.5563
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	3.94	0.7998	0.0473	0.0000	1.9814
Total		23.6281	1.3964	0.0000	58.5377

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
General Office Building	112.46	22.8284	1.3491	0.0000	56.5563		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		
Research & Development	3.94	0.7998	0.0473	0.0000	1.9814		
Total		23.6281	1.3964	0.0000	58.5377		

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
						1

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type Number

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11.0 Vegetation

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Fortinet - Construction - Santa Clara County, Summer

Fortinet - Construction

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	120.92	1000sqft	3.20	120,918.00	0
Research & Development	51.82	1000sqft	0.86	51,822.00	0
Parking Lot	304.00	Space	2.74	121,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58				
Climate Zone	4			Operational Year	2020				
Utility Company	Pacific Gas & Electric Company								
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity 0. (Ib/MWhr)	006				

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match 6.8 acre site. Parking lot acreage represents default for the proposed number of parking spaces

Construction Phase - Construction timeline dates adjusted to match construction schedule provided by applicant on July 3, 2018. Paving construction assumed to occur over the same timeframe as building construction.

Grading - Based on the geotechnical report and proposed planning submittal, the project is expected to use soil on-site for all necessary fill.

Demolition - The project would demolish nine existing buildings, totaling 117,812 sq. ft.

Construction Off-road Equipment Mitigation - The project would be required to implement the "Basic Construction Mitigation Measures" based on BAAQMD guidelines. These emission reductions based on these measures are accounted for off-book.

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	230.00	305.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	PhaseEndDate	2/27/2020	1/1/2020
tblConstructionPhase	PhaseEndDate	1/2/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/3/2019	12/28/2018
tblConstructionPhase	PhaseEndDate	2/14/2019	1/30/2019
tblConstructionPhase	PhaseEndDate	1/30/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/17/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	1/31/2020	10/1/2019
tblConstructionPhase	PhaseStartDate	2/15/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	1/18/2019	1/16/2019
tblConstructionPhase	PhaseStartDate	1/3/2020	1/31/2019
tblConstructionPhase	PhaseStartDate	1/4/2019	1/2/2019
tblGrading	AcresOfGrading	5.50	10.00
tblLandUse	LandUseSquareFeet	120,920.00	120,918.00
tblLandUse	LandUseSquareFeet	51,820.00	51,822.00
tblLandUse	LotAcreage	2.78	3.20
tblLandUse	LotAcreage	1.19	0.86

2.0 Emissions Summary

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2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	day		
2018	4.0990	49.1162	24.8837	0.0673	7.9566	1.9829	9.9395	1.2905	1.8472	3.1377	0.0000	6,894.198 0	6,894.198 0	1.2032	0.0000	6,924.276 9
2019	32.5214	45.6162	39.5462	0.0779	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,718.018 0	7,718.018 0	1.4679	0.0000	7,754.716 2
2020	32.0668	40.6364	38.6045	0.0774	1.4915	2.0149	3.5064	0.4030	1.8863	2.2892	0.0000	7,585.008 3	7,585.008 3	1.4480	0.0000	7,621.208 8
Maximum	32.5214	49.1162	39.5462	0.0779	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,718.018 0	7,718.018 0	1.4679	0.0000	7,754.716 2

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	day							lb/c	lay		
2018	4.0990	49.1162	24.8837	0.0673	7.9566	1.9829	9.9395	1.2905	1.8472	3.1377	0.0000	6,894.198 0	6,894.198 0	1.2032	0.0000	6,924.276 9
2019	32.5214	45.6162	39.5462	0.0779	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,718.018 0	7,718.018 0	1.4679	0.0000	7,754.716 2
2020	32.0668	40.6364	38.6045	0.0774	1.4915	2.0149	3.5064	0.4030	1.8863	2.2892	0.0000	7,585.008 3	7,585.008 3	1.4480	0.0000	7,621.208 8
Maximum	32.5214	49.1162	39.5462	0.0779	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,718.018 0	7,718.018 0	1.4679	0.0000	7,754.716 2

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Fortinet - (Construction -	- Santa	Clara	County,	Summer
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	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Fortinet - Construction - Santa Clara County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Energy	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
Mobile	3.0448	10.8015	33.2521	0.1056	8.9703	0.0995	9.0698	2.3946	0.0933	2.4879		10,638.16 33	10,638.16 33	0.3661		10,647.31 70
Total	7.3955	11.7009	34.0561	0.1110	8.9703	0.1680	9.1383	2.3946	0.1618	2.5564		11,716.91 14	11,716.91 14	0.3871	0.0198	11,732.48 18

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Area	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Energy	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683	,	0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
Mobile	3.0448	10.8015	33.2521	0.1056	8.9703	0.0995	9.0698	2.3946	0.0933	2.4879		10,638.16 33	10,638.16 33	0.3661		10,647.31 70
Total	7.3955	11.7009	34.0561	0.1110	8.9703	0.1680	9.1383	2.3946	0.1618	2.5564		11,716.91 14	11,716.91 14	0.3871	0.0198	11,732.48 18

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	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/7/2018	12/28/2018	5	16	
2	Site Preparation	Site Preparation	1/2/2019	1/15/2019	5	10	
3	Grading	Grading	1/16/2019	1/30/2019	5	11	
4	Building Construction	Building Construction	1/31/2019	4/1/2020	5	305	
5	Paving	Paving	1/31/2019	4/1/2020	5	305	
6	Architectural Coating	Architectural Coating	10/1/2019	1/1/2020	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 259,110; Non-Residential Outdoor: 86,370; Striped Parking Area: 7,296 (Architectural Coating – sqft)

OffRoad Equipment

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Fortinet - Construction - Santa Clara County, Summe	Santa Clara County, Summer
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	536.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	106.00	48.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Fortinet - Construction - Santa Clara County, Summer

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		, , ,			7.2480	0.0000	7.2480	1.0974	0.0000	1.0974		1 1 1	0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.766 5	3,871.766 5	1.0667		3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	7.2480	1.9386	9.1866	1.0974	1.8048	2.9023		3,871.766 5	3,871.766 5	1.0667		3,898.434 4

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Fortinet - Construction - Santa Clara County, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.3169	10.7523	2.0636	0.0272	0.5854	0.0435	0.6289	0.1604	0.0416	0.2021		2,893.819 8	2,893.819 8	0.1326		2,897.135 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0632	0.0415	0.5160	1.2900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		128.6117	128.6117	3.8300e- 003		128.7074
Total	0.3801	10.7937	2.5796	0.0285	0.7086	0.0443	0.7529	0.1931	0.0424	0.2355		3,022.431 5	3,022.431 5	0.1364		3,025.842 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					7.2480	0.0000	7.2480	1.0974	0.0000	1.0974		1 1 1	0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.766 5	3,871.766 5	1.0667		3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	7.2480	1.9386	9.1866	1.0974	1.8048	2.9023	0.0000	3,871.766 5	3,871.766 5	1.0667		3,898.434 4

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Fortinet - Construction - Santa Clara County, Summer

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.3169	10.7523	2.0636	0.0272	0.5854	0.0435	0.6289	0.1604	0.0416	0.2021		2,893.819 8	2,893.819 8	0.1326	l l	2,897.135 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0632	0.0415	0.5160	1.2900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		128.6117	128.6117	3.8300e- 003		128.7074
Total	0.3801	10.7937	2.5796	0.0285	0.7086	0.0443	0.7529	0.1931	0.0424	0.2355		3,022.431 5	3,022.431 5	0.1364		3,025.842 5

3.3 Site Preparation - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

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Fortinet - Construction - Santa Clara County, Summer

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0435	0.5508	1.5000e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		149.7561	149.7561	4.0500e- 003		149.8574
Total	0.0685	0.0435	0.5508	1.5000e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		149.7561	149.7561	4.0500e- 003		149.8574

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		1 1 1 1			18.0663	0.0000	18.0663	9.9307	0.0000	9.9307		1 1 1	0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/o	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0435	0.5508	1.5000e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		149.7561	149.7561	4.0500e- 003		149.8574
Total	0.0685	0.0435	0.5508	1.5000e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		149.7561	149.7561	4.0500e- 003		149.8574

3.4 Grading - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		1 1 1			6.9862	0.0000	6.9862	3.4143	0.0000	3.4143			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.806 8	2,936.806 8	0.9292		2,960.036 1
Total	2.5805	28.3480	16.2934	0.0297	6.9862	1.3974	8.3835	3.4143	1.2856	4.6999		2,936.806 8	2,936.806 8	0.9292		2,960.036 1

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Fortinet - Construction - Santa Clara County, Summer

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812
Total	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust			1 1 1		6.9862	0.0000	6.9862	3.4143	0.0000	3.4143			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.806 8	2,936.806 8	0.9292		2,960.036 1
Total	2.5805	28.3480	16.2934	0.0297	6.9862	1.3974	8.3835	3.4143	1.2856	4.6999	0.0000	2,936.806 8	2,936.806 8	0.9292		2,960.036 1

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Fortinet - Construction - Santa Clara County, Summer

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812
Total	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812

3.5 Building Construction - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	lay		
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899	;	1.2127	1.2127		2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.580 2	2,591.580 2	0.6313		2,607.363 5

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Fortinet - Construction - Santa Clara County, Summer

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2312	5.9765	1.5314	0.0133	0.3250	0.0433	0.3682	0.0936	0.0414	0.1350		1,406.578 4	1,406.578 4	0.0668		1,408.247 1
Worker	0.4031	0.2562	3.2434	8.8600e- 003	0.8708	5.5500e- 003	0.8763	0.2310	5.1100e- 003	0.2361		881.8968	881.8968	0.0239		882.4937
Total	0.6343	6.2328	4.7747	0.0222	1.1957	0.0488	1.2446	0.3245	0.0465	0.3710		2,288.475 2	2,288.475 2	0.0906		2,290.740 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5

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Fortinet - Construction - Santa Clara County, Summer

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2312	5.9765	1.5314	0.0133	0.3250	0.0433	0.3682	0.0936	0.0414	0.1350		1,406.578 4	1,406.578 4	0.0668		1,408.247 1
Worker	0.4031	0.2562	3.2434	8.8600e- 003	0.8708	5.5500e- 003	0.8763	0.2310	5.1100e- 003	0.2361		881.8968	881.8968	0.0239		882.4937
Total	0.6343	6.2328	4.7747	0.0222	1.1957	0.0488	1.2446	0.3245	0.0465	0.3710		2,288.475 2	2,288.475 2	0.0906		2,290.740 8

3.5 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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Fortinet - Construction - Santa Clara County, Summer

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1865	5.3979	1.3671	0.0132	0.3250	0.0269	0.3519	0.0936	0.0257	0.1193		1,398.234 6	1,398.234 6	0.0613		1,399.768 1
Worker	0.3684	0.2262	2.9154	8.5700e- 003	0.8708	5.4300e- 003	0.8762	0.2310	5.0000e- 003	0.2360		854.3668	854.3668	0.0209		854.8895
Total	0.5549	5.6241	4.2824	0.0218	1.1957	0.0323	1.2281	0.3245	0.0307	0.3552		2,252.601 4	2,252.601 4	0.0823		2,254.657 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	Jay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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Fortinet - Construction - Santa Clara County, Summer

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1865	5.3979	1.3671	0.0132	0.3250	0.0269	0.3519	0.0936	0.0257	0.1193		1,398.234 6	1,398.234 6	0.0613		1,399.768 1
Worker	0.3684	0.2262	2.9154	8.5700e- 003	0.8708	5.4300e- 003	0.8762	0.2310	5.0000e- 003	0.2360		854.3668	854.3668	0.0209		854.8895
Total	0.5549	5.6241	4.2824	0.0218	1.1957	0.0323	1.2281	0.3245	0.0307	0.3552		2,252.601 4	2,252.601 4	0.0823		2,254.657 6

3.6 Paving - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.002 5	2,257.002 5	0.7141		2,274.854 8
Paving	0.0235	1 1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4780	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.002 5	2,257.002 5	0.7141		2,274.854 8
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Fortinet - Construction - Santa Clara County, Summer

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812
Total	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.002 5	2,257.002 5	0.7141		2,274.854 8
Paving	0.0235					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.4780	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.002 5	2,257.002 5	0.7141		2,274.854 8

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812
Total	0.0570	0.0363	0.4590	1.2500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		124.7967	124.7967	3.3800e- 003		124.8812

3.6 Paving - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3801	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0320	0.4126	1.2100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		120.9010	120.9010	2.9600e- 003		120.9749
Total	0.0521	0.0320	0.4126	1.2100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		120.9010	120.9010	2.9600e- 003		120.9749

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0235					0.0000	0.0000		0.0000	0.0000		 	0.0000			0.0000
Total	1.3801	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, , ,	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, i	0.0000
Worker	0.0521	0.0320	0.4126	1.2100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		120.9010	120.9010	2.9600e- 003	, , , , , , , , , , , , , , , , , , ,	120.9749
Total	0.0521	0.0320	0.4126	1.2100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		120.9010	120.9010	2.9600e- 003		120.9749

3.7 Architectural Coating - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Archit. Coating	27.6446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	27.9110	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

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3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0508	0.6426	1.7500e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		174.7154	174.7154	4.7300e- 003		174.8337
Total	0.0799	0.0508	0.6426	1.7500e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		174.7154	174.7154	4.7300e- 003		174.8337

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	27.6446	1 1 1				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	27.9110	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

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3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0508	0.6426	1.7500e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		174.7154	174.7154	4.7300e- 003		174.8337
Total	0.0799	0.0508	0.6426	1.7500e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		174.7154	174.7154	4.7300e- 003		174.8337

3.7 Architectural Coating - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	27.6446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	27.8868	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0730	0.0448	0.5776	1.7000e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		169.2613	169.2613	4.1400e- 003		169.3649
Total	0.0730	0.0448	0.5776	1.7000e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		169.2613	169.2613	4.1400e- 003		169.3649

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	27.6446	, , ,				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	27.8868	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0730	0.0448	0.5776	1.7000e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		169.2613	169.2613	4.1400e- 003		169.3649
Total	0.0730	0.0448	0.5776	1.7000e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		169.2613	169.2613	4.1400e- 003		169.3649

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Fortinet - Construction - Santa Clara County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	3.0448	10.8015	33.2521	0.1056	8.9703	0.0995	9.0698	2.3946	0.0933	2.4879		10,638.16 33	10,638.16 33	0.3661		10,647.31 70
Unmitigated	3.0448	10.8015	33.2521	0.1056	8.9703	0.0995	9.0698	2.3946	0.0933	2.4879		10,638.16 33	10,638.16 33	0.3661		10,647.31 70

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	1,333.75	297.46	126.97	2,421,559	2,421,559
Research & Development	420.26	98.46	57.52	808,186	808,186
Parking Lot	0.00	0.00	0.00		
Total	1,754.01	395.92	184.49	3,229,745	3,229,745

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Research & Development	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
NaturalGas Mitigated	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
NaturalGas Unmitigated	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	day		
General Office Building	5423.09	0.0585	0.5317	0.4466	3.1900e- 003		0.0404	0.0404	- - - -	0.0404	0.0404		638.0105	638.0105	0.0122	0.0117	641.8019
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	3745.38	0.0404	0.3672	0.3084	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		440.6332	440.6332	8.4500e- 003	8.0800e- 003	443.2516
Total		0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	day		
General Office Building	5.42309	0.0585	0.5317	0.4466	3.1900e- 003		0.0404	0.0404		0.0404	0.0404		638.0105	638.0105	0.0122	0.0117	641.8019
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	3.74538	0.0404	0.3672	0.3084	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		440.6332	440.6332	8.4500e- 003	8.0800e- 003	443.2516
Total		0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Unmitigated	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	day							lb/d	day		
Architectural Coating	0.5075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7397	,	,	,) 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6100e- 003	4.5000e- 004	0.0490	0.0000	,	1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Total	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/o	day		
Architectural Coating	0.5075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7397					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6100e- 003	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Total	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type Indiniber India/Day Days/Teal Those Tower Ebau Tactor Tuer Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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Fortinet - Construction - Santa Clara County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Vegetation						

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Fortinet - Construction - Santa Clara County, Winter

Fortinet - Construction

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	120.92	1000sqft	3.20	120,918.00	0
Research & Development	51.82	1000sqft	0.86	51,822.00	0
Parking Lot	304.00	Space	2.74	121,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Comp	pany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity 0. (Ib/MWhr)	006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match 6.8 acre site. Parking lot acreage represents default for the proposed number of parking spaces

Construction Phase - Construction timeline dates adjusted to match construction schedule provided by applicant on July 3, 2018. Paving construction assumed to occur over the same timeframe as building construction.

Grading - Based on the geotechnical report and proposed planning submittal, the project is expected to use soil on-site for all necessary fill.

Demolition - The project would demolish nine existing buildings, totaling 117,812 sq. ft.

Construction Off-road Equipment Mitigation - The project would be required to implement the "Basic Construction Mitigation Measures" based on BAAQMD guidelines. These emission reductions based on these measures are accounted for off-book.

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Fortinet - Construction - Santa Clara County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	230.00	305.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	PhaseEndDate	2/27/2020	1/1/2020
tblConstructionPhase	PhaseEndDate	1/2/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/3/2019	12/28/2018
tblConstructionPhase	PhaseEndDate	2/14/2019	1/30/2019
tblConstructionPhase	PhaseEndDate	1/30/2020	4/1/2020
tblConstructionPhase	PhaseEndDate	1/17/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	1/31/2020	10/1/2019
tblConstructionPhase	PhaseStartDate	2/15/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	1/18/2019	1/16/2019
tblConstructionPhase	PhaseStartDate	1/3/2020	1/31/2019
tblConstructionPhase	PhaseStartDate	1/4/2019	1/2/2019
tblGrading	AcresOfGrading	5.50	10.00
tblLandUse	LandUseSquareFeet	120,920.00	120,918.00
tblLandUse	LandUseSquareFeet	51,820.00	51,822.00
tblLandUse	LotAcreage	2.78	3.20
tblLandUse	LotAcreage	1.19	0.86

2.0 Emissions Summary

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Fortinet - Construction - Santa Clara County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/c	day		
2018	4.1125	49.4030	25.0273	0.0668	7.9566	1.9837	9.9404	1.2905	1.8480	3.1386	0.0000	6,836.661 5	6,836.661 5	1.2099	0.0000	6,866.909 1
2019	32.5661	45.6259	39.4572	0.0766	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,586.893 3	7,586.893 3	1.4711	0.0000	7,623.670 5
2020	32.1080	40.7658	38.5083	0.0761	1.4915	2.0154	3.5068	0.4030	1.8867	2.2896	0.0000	7,456.446 2	7,456.446 2	1.4508	0.0000	7,492.716 2
Maximum	32.5661	49.4030	39.4572	0.0766	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,586.893 3	7,586.893 3	1.4711	0.0000	7,623.670 5

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/o	day							lb/d	day		
2018	4.1125	49.4030	25.0273	0.0668	7.9566	1.9837	9.9404	1.2905	1.8480	3.1386	0.0000	6,836.661 5	6,836.661 5	1.2099	0.0000	6,866.909 1
2019	32.5661	45.6259	39.4572	0.0766	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,586.893 3	7,586.893 3	1.4711	0.0000	7,623.670 5
2020	32.1080	40.7658	38.5083	0.0761	1.4915	2.0154	3.5068	0.4030	1.8867	2.2896	0.0000	7,456.446 2	7,456.446 2	1.4508	0.0000	7,492.716 2
Maximum	32.5661	49.4030	39.4572	0.0766	18.2141	2.3913	20.6054	9.9699	2.2000	12.1699	0.0000	7,586.893 3	7,586.893 3	1.4711	0.0000	7,623.670 5

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Fortinet -	Construction -	Santa	Clara	Countv	. Winter
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	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Fortinet - Construction - Santa Clara County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Area	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Energy	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
Mobile	2.6582	11.4622	33.0159	0.0984	8.9703	0.1001	9.0704	2.3946	0.0939	2.4885		9,910.068 0	9,910.068 0	0.3686		9,919.283 3
Total	7.0089	12.3615	33.8199	0.1038	8.9703	0.1686	9.1389	2.3946	0.1624	2.5570		10,988.81 60	10,988.81 60	0.3896	0.0198	11,004.44 82

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Energy	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
Mobile	2.6582	11.4622	33.0159	0.0984	8.9703	0.1001	9.0704	2.3946	0.0939	2.4885		9,910.068 0	9,910.068 0	0.3686		9,919.283 3
Total	7.0089	12.3615	33.8199	0.1038	8.9703	0.1686	9.1389	2.3946	0.1624	2.5570		10,988.81 60	10,988.81 60	0.3896	0.0198	11,004.44 82

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Fortinet - Construction - Santa Clara County, Winter

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/7/2018	12/28/2018	5	16	
2	Site Preparation	Site Preparation	1/2/2019	1/15/2019	5	10	
3	Grading	Grading	1/16/2019	1/30/2019	5	11	
4	Building Construction	Building Construction	1/31/2019	4/1/2020	5	305	
5	Paving	Paving	1/31/2019	4/1/2020	5	305	
6	Architectural Coating	Architectural Coating	10/1/2019	1/1/2020	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 259,110; Non-Residential Outdoor: 86,370; Striped Parking Area: 7,296 (Architectural Coating – sqft)

OffRoad Equipment

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Fortinet -	Construction -	Santa	Clara	County,	Winter
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Fortinet - Construction -	Santa Clara	County, Winter
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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	536.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	106.00	48.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		, , ,			7.2480	0.0000	7.2480	1.0974	0.0000	1.0974		1 1 1	0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.766 5	3,871.766 5	1.0667		3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	7.2480	1.9386	9.1866	1.0974	1.8048	2.9023		3,871.766 5	3,871.766 5	1.0667		3,898.434 4

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Fortinet - Construction - Santa Clara County, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o				lb/c	day						
Hauling	0.3263	11.0298	2.2393	0.0267	0.5854	0.0444	0.6298	0.1604	0.0425	0.2029		2,846.728 3	2,846.728 3	0.1396		2,850.217 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0507	0.4840	1.1900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		118.1667	118.1667	3.6000e- 003		118.2568
Total	0.3935	11.0805	2.7233	0.0279	0.7086	0.0452	0.7538	0.1931	0.0432	0.2363		2,964.895 0	2,964.895 0	0.1432		2,968.474 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust			1 1 1		7.2480	0.0000	7.2480	1.0974	0.0000	1.0974			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.766 5	3,871.766 5	1.0667		3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	7.2480	1.9386	9.1866	1.0974	1.8048	2.9023	0.0000	3,871.766 5	3,871.766 5	1.0667		3,898.434 4

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Fortinet - Construction - Santa Clara County, Winter

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay				lb/c	lay					
Hauling	0.3263	11.0298	2.2393	0.0267	0.5854	0.0444	0.6298	0.1604	0.0425	0.2029		2,846.728 3	2,846.728 3	0.1396	, , , , , , , , , , , , , , , , , , ,	2,850.217 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0507	0.4840	1.1900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		118.1667	118.1667	3.6000e- 003	, , , , , , , , , , , , , , , , , , ,	118.2568
Total	0.3935	11.0805	2.7233	0.0279	0.7086	0.0452	0.7538	0.1931	0.0432	0.2363		2,964.895 0	2,964.895 0	0.1432		2,968.474 7

3.3 Site Preparation - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

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Fortinet - Construction - Santa Clara County, Winter

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0727	0.0532	0.5131	1.3800e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		137.5827	137.5827	3.8000e- 003		137.6777
Total	0.0727	0.0532	0.5131	1.3800e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		137.5827	137.5827	3.8000e- 003		137.6777

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		1 1 1 1			18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5

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Fortinet - Construction - Santa Clara County, Winter

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0727	0.0532	0.5131	1.3800e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		137.5827	137.5827	3.8000e- 003		137.6777
Total	0.0727	0.0532	0.5131	1.3800e- 003	0.1479	9.4000e- 004	0.1488	0.0392	8.7000e- 004	0.0401		137.5827	137.5827	3.8000e- 003		137.6777

3.4 Grading - 2019

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.9862	0.0000	6.9862	3.4143	0.0000	3.4143			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.806 8	2,936.806 8	0.9292		2,960.036 1
Total	2.5805	28.3480	16.2934	0.0297	6.9862	1.3974	8.3835	3.4143	1.2856	4.6999		2,936.806 8	2,936.806 8	0.9292		2,960.036 1

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Fortinet - Construction - Santa Clara County, Winter

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314
Total	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		1 1 1 1			6.9862	0.0000	6.9862	3.4143	0.0000	3.4143		1 1 1	0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.806 8	2,936.806 8	0.9292		2,960.036 1
Total	2.5805	28.3480	16.2934	0.0297	6.9862	1.3974	8.3835	3.4143	1.2856	4.6999	0.0000	2,936.806 8	2,936.806 8	0.9292		2,960.036 1

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Fortinet - Construction - Santa Clara County, Winter

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, ,	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, , , , , , , , , , , , , , , , , , ,	0.0000
Worker	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334	,	114.6523	114.6523	3.1700e- 003	, , , , , , , , , , , , , , , , , , ,	114.7314
Total	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314

3.5 Building Construction - 2019

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899	1 1	1.2127	1.2127		2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.580 2	2,591.580 2	0.6313		2,607.363 5

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2421	6.0610	1.7394	0.0130	0.3250	0.0439	0.3689	0.0936	0.0420	0.1356		1,371.487 7	1,371.487 7	0.0719		1,373.285 8
Worker	0.4283	0.3132	3.0217	8.1400e- 003	0.8708	5.5500e- 003	0.8763	0.2310	5.1100e- 003	0.2361		810.2095	810.2095	0.0224		810.7687
Total	0.6704	6.3742	4.7611	0.0211	1.1957	0.0495	1.2452	0.3245	0.0471	0.3717		2,181.697 1	2,181.697 1	0.0943		2,184.054 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2421	6.0610	1.7394	0.0130	0.3250	0.0439	0.3689	0.0936	0.0420	0.1356		1,371.487 7	1,371.487 7	0.0719		1,373.285 8
Worker	0.4283	0.3132	3.0217	8.1400e- 003	0.8708	5.5500e- 003	0.8763	0.2310	5.1100e- 003	0.2361		810.2095	810.2095	0.0224		810.7687
Total	0.6704	6.3742	4.7611	0.0211	1.1957	0.0495	1.2452	0.3245	0.0471	0.3717		2,181.697 1	2,181.697 1	0.0943		2,184.054 5

3.5 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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Fortinet - Construction - Santa Clara County, Winter

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1963	5.4602	1.5575	0.0129	0.3250	0.0273	0.3523	0.0936	0.0261	0.1197		1,362.739 7	1,362.739 7	0.0661		1,364.391 2
Worker	0.3919	0.2764	2.7014	7.8800e- 003	0.8708	5.4300e- 003	0.8762	0.2310	5.0000e- 003	0.2360		784.8941	784.8941	0.0195		785.3806
Total	0.5882	5.7365	4.2589	0.0208	1.1957	0.0327	1.2285	0.3245	0.0311	0.3557		2,147.633 8	2,147.633 8	0.0855		2,149.771 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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Fortinet - Construction - Santa Clara County, Winter

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1963	5.4602	1.5575	0.0129	0.3250	0.0273	0.3523	0.0936	0.0261	0.1197		1,362.739 7	1,362.739 7	0.0661		1,364.391 2
Worker	0.3919	0.2764	2.7014	7.8800e- 003	0.8708	5.4300e- 003	0.8762	0.2310	5.0000e- 003	0.2360		784.8941	784.8941	0.0195		785.3806
Total	0.5882	5.7365	4.2589	0.0208	1.1957	0.0327	1.2285	0.3245	0.0311	0.3557		2,147.633 8	2,147.633 8	0.0855		2,149.771 8

3.6 Paving - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.002 5	2,257.002 5	0.7141		2,274.854 8
Paving	0.0235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4780	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.002 5	2,257.002 5	0.7141		2,274.854 8

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Fortinet - Construction - Santa Clara County, Winter

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314
Total	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.002 5	2,257.002 5	0.7141		2,274.854 8
Paving	0.0235					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.4780	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.002 5	2,257.002 5	0.7141		2,274.854 8

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	Jay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	,	0.0000
Worker	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314
Total	0.0606	0.0443	0.4276	1.1500e- 003	0.1232	7.9000e- 004	0.1240	0.0327	7.2000e- 004	0.0334		114.6523	114.6523	3.1700e- 003		114.7314

3.6 Paving - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3801	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0555	0.0391	0.3823	1.1100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		111.0699	111.0699	2.7500e- 003		111.1388
Total	0.0555	0.0391	0.3823	1.1100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		111.0699	111.0699	2.7500e- 003		111.1388

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3801	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	1	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	J I	0.0000
Worker	0.0555	0.0391	0.3823	1.1100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		111.0699	111.0699	2.7500e- 003	1 1 1	111.1388
Total	0.0555	0.0391	0.3823	1.1100e- 003	0.1232	7.7000e- 004	0.1240	0.0327	7.1000e- 004	0.0334		111.0699	111.0699	2.7500e- 003		111.1388

3.7 Architectural Coating - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	27.6446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	27.9110	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
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3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0849	0.0620	0.5986	1.6100e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		160.5132	160.5132	4.4300e- 003		160.6240
Total	0.0849	0.0620	0.5986	1.6100e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		160.5132	160.5132	4.4300e- 003		160.6240

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	27.6446	, , ,				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	27.9110	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

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3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	,	0.0000
Worker	0.0849	0.0620	0.5986	1.6100e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		160.5132	160.5132	4.4300e- 003		160.6240
Total	0.0849	0.0620	0.5986	1.6100e- 003	0.1725	1.1000e- 003	0.1736	0.0458	1.0100e- 003	0.0468		160.5132	160.5132	4.4300e- 003		160.6240

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	27.6446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	27.8868	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0548	0.5352	1.5600e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		155.4979	155.4979	3.8500e- 003		155.5943
Total	0.0776	0.0548	0.5352	1.5600e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		155.4979	155.4979	3.8500e- 003		155.5943

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	27.6446					0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	27.8868	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0548	0.5352	1.5600e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		155.4979	155.4979	3.8500e- 003		155.5943
Total	0.0776	0.0548	0.5352	1.5600e- 003	0.1725	1.0800e- 003	0.1736	0.0458	9.9000e- 004	0.0468		155.4979	155.4979	3.8500e- 003		155.5943

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Fortinet - Construction - Santa Clara County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	ay		
Mitigated	2.6582	11.4622	33.0159	0.0984	8.9703	0.1001	9.0704	2.3946	0.0939	2.4885		9,910.068 0	9,910.068 0	0.3686		9,919.283 3
Unmitigated	2.6582	11.4622	33.0159	0.0984	8.9703	0.1001	9.0704	2.3946	0.0939	2.4885		9,910.068 0	9,910.068 0	0.3686		9,919.283 3

4.2 Trip Summary Information

	Aver	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	1,333.75	297.46	126.97	2,421,559	2,421,559
Research & Development	420.26	98.46	57.52	808,186	808,186
Parking Lot	0.00	0.00	0.00		
Total	1,754.01	395.92	184.49	3,229,745	3,229,745

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Research & Development	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5
NaturalGas Unmitigated	0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

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Fortinet - Construction - Santa Clara County, Winter

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
General Office Building	5423.09	0.0585	0.5317	0.4466	3.1900e- 003		0.0404	0.0404	- - - -	0.0404	0.0404		638.0105	638.0105	0.0122	0.0117	641.8019
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	3745.38	0.0404	0.3672	0.3084	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		440.6332	440.6332	8.4500e- 003	8.0800e- 003	443.2516
Total		0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	day		
General Office Building	5.42309	0.0585	0.5317	0.4466	3.1900e- 003		0.0404	0.0404	1 1 1	0.0404	0.0404		638.0105	638.0105	0.0122	0.0117	641.8019
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	3.74538	0.0404	0.3672	0.3084	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		440.6332	440.6332	8.4500e- 003	8.0800e- 003	443.2516
Total		0.0989	0.8989	0.7551	5.3900e- 003		0.0683	0.0683		0.0683	0.0683		1,078.643 7	1,078.643 7	0.0207	0.0198	1,085.053 5

6.0 Area Detail

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Fortinet - Construction - Santa Clara County, Winter

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	Jay		
Mitigated	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Unmitigated	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	day							lb/e	day		
Architectural Coating	0.5075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7397	,	,	,	1 1 1 1 1	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6100e- 003	4.5000e- 004	0.0490	0.0000	 	1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Total	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/o	day		
Architectural Coating	0.5075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7397					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6100e- 003	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113
Total	4.2518	4.5000e- 004	0.0490	0.0000		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004		0.1043	0.1043	2.8000e- 004		0.1113

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

|--|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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Fortinet - Construction - Santa Clara County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Boilers						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Vegetation						

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Fortinet - Existing Buildings - Santa Clara County, Annual

Fortinet - Existing Buildings

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	14.15	1000sqft	0.80	14,149.00	0
Research & Development	47.07	1000sqft	2.70	47,072.00	0
Unrefrigerated Warehouse-No Rail	56.59	1000sqft	3.30	56,591.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2018
Utility Company	Pacific Gas & Ele	ctric Company			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity C (Ib/MWhr)	.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - NOTE: Intensity factor defaults were used for existing buildings. Represents 2008 historical emissions.

Land Use - Lot acreage adjusted to reflect existing 6.8 acre site. Split between each land use propotionaly.

Existing land uses were taken from teh trip generation table produced by Hexagon (9/13/18)

Construction Phase - Operational Phase of existing buildings. No construction.

Vehicle Trips - Weekday trip rates adjusted to match rates for each use based on ITEs Trip Generation Manual, 10th Edition.

Energy Use - Existing

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LandUseSquareFeet	14,150.00	14,149.00
tblLandUse	LandUseSquareFeet	47,070.00	47,072.00
tblLandUse	LandUseSquareFeet	56,590.00	56,591.00
tblLandUse	LotAcreage	0.32	0.80
tblLandUse	LotAcreage	1.08	2.70
tblLandUse	LotAcreage	1.30	3.30
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	8.11	11.26
tblVehicleTrips	WD_TR	1.68	1.74

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.5217	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003
Energy	0.0103	0.0932	0.0783	5.6000e- 004		7.0800e- 003	7.0800e- 003		7.0800e- 003	7.0800e- 003	0.0000	382.0804	382.0804	0.0146	4.4900e- 003	383.7828
Mobile	0.2055	0.8461	2.4991	6.9100e- 003	0.5715	8.2700e- 003	0.5797	0.1530	7.7900e- 003	0.1608	0.0000	630.3659	630.3659	0.0249	0.0000	630.9891
Waste						0.0000	0.0000		0.0000	0.0000	14.1952	0.0000	14.1952	0.8389	0.0000	35.1679
Water						0.0000	0.0000		0.0000	0.0000	12.2921	62.5594	74.8516	1.2654	0.0304	115.5433
Total	0.7374	0.9393	2.5784	7.4700e- 003	0.5715	0.0154	0.5868	0.1530	0.0149	0.1679	26.4873	1,075.007 8	1,101.495 1	2.1438	0.0349	1,165.485 4

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	(CO	SO2	Fugi PM	tive I10	Exhaust PM10	PM10 Total	Fugi PM	itive I I2.5	Exhaust PM2.5	PM2.5 To	tal B	io- CO2	NBio- CO	2 Tota	al CO2	CH4	١	120	CO2	е
Category							tons	s/yr										MT/y	/r				
Area	0.5217	1.0000 005)e- 1.	.1000e- 003	0.0000			0.0000	0.0000			0.0000	0.0000	(0.0000	2.1100e- 003	2.1 ⁴ 0	100e- 003	1.0000e 005	ə- 0.	0000	2.2500 003)e-
Energy	0.0103	0.093	32 (0.0783	5.6000e- 004			7.0800e- 003	7.0800e 003		7	7.0800e- 003	7.0800e 003	- (0.0000	382.0804	382	.0804	0.0146	; 4.4 (900e-)03	383.78	328
Mobile	0.2055	0.846	61 2	2.4991	6.9100e- 003	0.5	715	8.2700e- 003	0.5797	0.1	530	7.7900e- 003	0.1608	(0.0000	630.3659	630	.3659	0.0249	0.	0000	630.98	391
Waste	r,							0.0000	0.0000			0.0000	0.0000	1	14.1952	0.0000	14.	1952	0.8389	0.	0000	35.16 ⁻	79
Water	n							0.0000	0.0000			0.0000	0.0000	1	2.2921	62.5594	74.	8516	1.2654	0.	0304	115.54	133
Total	0.7374	0.939	93 2	2.5784	7.4700e- 003	0.57	715	0.0154	0.5868	0.1	530	0.0149	0.1679	2	26.4873	1,075.007 8	7 1,10	1.495 1	2.1438	5 O.	0349	1,165.4 4	485
	ROG		NOx	С	;o ;	602	Fugi PM	tive Exh 110 Pl	aust F M10	PM10 Total	Fugitiv PM2.	ve Exh 5 PM	aust F 12.5	M2.5 Fotal	Bio- (CO2 NBi	o-CO2	Total C	02	CH4	N2	0	CO2e
Percent Reduction	0.00		0.00	0.	00).00	0.0	00 0	.00	0.00	0.00	0	.00	0.00	0.0	0 0	.00	0.00		0.00	0.0	0	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/25/2018	9/24/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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3.2 Demolition - 2018

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.2055	0.8461	2.4991	6.9100e- 003	0.5715	8.2700e- 003	0.5797	0.1530	7.7900e- 003	0.1608	0.0000	630.3659	630.3659	0.0249	0.0000	630.9891
Unmitigated	0.2055	0.8461	2.4991	6.9100e- 003	0.5715	8.2700e- 003	0.5797	0.1530	7.7900e- 003	0.1608	0.0000	630.3659	630.3659	0.0249	0.0000	630.9891

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	137.82	34.81	14.86	252,212	252,212
Research & Development	530.01	89.43	52.25	999,535	999,535
Unrefrigerated Warehouse-No Rail	98.47	95.07	95.07	284,642	284,642
Total	766.30	219.31	162.18	1,536,389	1,536,389

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841
Research & Development	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841
Unrefrigerated Warehouse-No Rail	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	280.6404	280.6404	0.0127	2.6300e- 003	281.7400
Electricity Unmitigated	n					0.0000	0.0000		0.0000	0.0000	0.0000	280.6404	280.6404	0.0127	2.6300e- 003	281.7400
NaturalGas Mitigated	0.0103	0.0932	0.0783	5.6000e- 004		7.0800e- 003	7.0800e- 003		7.0800e- 003	7.0800e- 003	0.0000	101.4400	101.4400	1.9400e- 003	1.8600e- 003	102.0428
NaturalGas Unmitigated	0.0103	0.0932	0.0783	5.6000e- 004		7.0800e- 003	7.0800e- 003	 	7.0800e- 003	7.0800e- 003	0.0000	101.4400	101.4400	1.9400e- 003	1.8600e- 003	102.0428

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					tor	ıs/yr							MT	ſ/yr		
General Office Building	282414	1.5200e- 003	0.0138	0.0116	8.0000e- 005		1.0500e- 003	1.0500e- 003		1.0500e- 003	1.0500e- 003	0.0000	15.0707	15.0707	2.9000e- 004	2.8000e- 004	15.1603
Research & Development	1.37686e +006	7.4200e- 003	0.0675	0.0567	4.0000e- 004		5.1300e- 003	5.1300e- 003		5.1300e- 003	5.1300e- 003	0.0000	73.4743	73.4743	1.4100e- 003	1.3500e- 003	73.9109
Unrefrigerated Warehouse-No Rail	241644	1.3000e- 003	0.0119	9.9500e- 003	7.0000e- 005		9.0000e- 004	9.0000e- 004	r	9.0000e- 004	9.0000e- 004	0.0000	12.8950	12.8950	2.5000e- 004	2.4000e- 004	12.9717
Total		0.0102	0.0932	0.0783	5.5000e- 004		7.0800e- 003	7.0800e- 003		7.0800e- 003	7.0800e- 003	0.0000	101.4400	101.4400	1.9500e- 003	1.8700e- 003	102.0428

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	ſ/yr		
General Office Building	282414	1.5200e- 003	0.0138	0.0116	8.0000e- 005		1.0500e- 003	1.0500e- 003		1.0500e- 003	1.0500e- 003	0.0000	15.0707	15.0707	2.9000e- 004	2.8000e- 004	15.1603
Research & Development	1.37686e +006	7.4200e- 003	0.0675	0.0567	4.0000e- 004		5.1300e- 003	5.1300e- 003	1	5.1300e- 003	5.1300e- 003	0.0000	73.4743	73.4743	1.4100e- 003	1.3500e- 003	73.9109
Unrefrigerated Warehouse-No Rail	241644	1.3000e- 003	0.0119	9.9500e- 003	7.0000e- 005		9.0000e- 004	9.0000e- 004		9.0000e- 004	9.0000e- 004	0.0000	12.8950	12.8950	2.5000e- 004	2.4000e- 004	12.9717
Total		0.0102	0.0932	0.0783	5.5000e- 004		7.0800e- 003	7.0800e- 003		7.0800e- 003	7.0800e- 003	0.0000	101.4400	101.4400	1.9500e- 003	1.8700e- 003	102.0428

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5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	7/yr	
General Office Building	291045	84.6683	3.8300e- 003	7.9000e- 004	85.0001
Research & Development	443889	129.1324	5.8400e- 003	1.2100e- 003	129.6384
Unrefrigerated Warehouse-No Rail	229759	66.8397	3.0200e- 003	6.3000e- 004	67.1016
Total		280.6404	0.0127	2.6300e- 003	281.7400

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
General Office Building	291045	84.6683	3.8300e- 003	7.9000e- 004	85.0001
Research & Development	443889	129.1324	5.8400e- 003	1.2100e- 003	129.6384
Unrefrigerated Warehouse-No Rail	229759	66.8397	3.0200e- 003	6.3000e- 004	67.1016
Total		280.6404	0.0127	2.6300e- 003	281.7400

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	is/yr							Π	ī/yr		
Mitigated	0.5217	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003
Unmitigated	0.5217	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003

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6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003
Total	0.5216	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	7/yr		
Architectural Coating	0.0614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000	1 1 1 1 1	0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003
Total	0.5216	1.0000e- 005	1.1000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1100e- 003	2.1100e- 003	1.0000e- 005	0.0000	2.2500e- 003

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	74.8516	1.2654	0.0304	115.5433
Unmitigated	74.8516	1.2654	0.0304	115.5433

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
General Office Building	2.51493 / 1.54141	6.3261	0.0822	1.9900e- 003	8.9732	
Research & Development	23.144 / 0	43.7741	0.7558	0.0182	68.0770	
Unrefrigerated Warehouse-No Rail	13.0864 / 0	24.7514	0.4274	0.0103	38.4931	
Total		74.8516	1.2654	0.0304	115.5433	

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.51493 / 1.54141	6.3261	0.0822	1.9900e- 003	8.9732
Research & Development	23.144 / 0	43.7741	0.7558	0.0182	68.0770
Unrefrigerated Warehouse-No Rail	13.0864 / 0	24.7514	0.4274	0.0103	38.4931
Total		74.8516	1.2654	0.0304	115.5433

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
Mitigated	14.1952	0.8389	0.0000	35.1679		
Unmitigated	14.1952	0.8389	0.0000	35.1679		

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	13.16	2.6714	0.1579	0.0000	6.6182
Research & Development	3.58	0.7267	0.0430	0.0000	1.8004
Unrefrigerated Warehouse-No Rail	53.19	10.7971	0.6381	0.0000	26.7493
Total		14.1952	0.8389	0.0000	35.1679

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
General Office Building	13.16	2.6714	0.1579	0.0000	6.6182	
Research & Development	3.58	0.7267	0.0430	0.0000	1.8004	
Unrefrigerated Warehouse-No Rail	53.19	10.7971	0.6381	0.0000	26.7493	
Total		14.1952	0.8389	0.0000	35.1679	

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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11.0 Vegetation

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Fortinet - Operational

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	120.92	1000sqft	4.80	120,918.00	0
Research & Development	51.82	1000sqft	2.00	51,822.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric	Company			
CO2 Intensity (Ib/MWhr)	290	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted to reflect PG&E Emissions factor projections for 2020.

Land Use - Land uses based on trip generation table provided by Hexagon (9/13/18) Lot acreage adjusted proportionally to use to match proposed development on 6.8 acres

Construction Phase - Includes operational phase of proposed buildings only, no construction.

Vehicle Trips - Weekday trip rates adjusted to reflect ITE Trip Generation, 10th edition rates for each use.

Energy Use -

Energy Mitigation - The project is committed to LEED Gold Outdoor lighting is 16 percent more efficient with LEDs (CAPCOA 2010)

Waste Mitigation - The project would be required to meet the State requirement of 75 percent waste reduction

Mobile Commute Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LandUseSquareFeet	120,920.00	120,918.00
tblLandUse	LandUseSquareFeet	51,820.00	51,822.00
tblLandUse	LotAcreage	2.78	4.80
tblLandUse	LotAcreage	1.19	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	8.11	11.26

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				МТ	/yr						
Area	0.7649	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003
Energy	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	518.4879	518.4879	0.0374	0.0103	522.4945
Mobile	0.3714	1.5624	4.4223	0.0139	1.2107	0.0139	1.2246	0.3241	0.0131	0.3372	0.0000	1,270.295 9	1,270.295 9	0.0457	0.0000	1,271.437 3
Waste						0.0000	0.0000		0.0000	0.0000	23.6282	0.0000	23.6282	1.3964	0.0000	58.5377
Water						0.0000	0.0000		0.0000	0.0000	14.9018	39.4972	54.3990	1.5345	0.0370	103.7748
Total	1.1543	1.7264	4.5617	0.0149	1.2107	0.0264	1.2371	0.3241	0.0255	0.3496	38.5299	1,828.284 1	1,866.814 0	3.0140	0.0473	1,956.247 6

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2.2 Overall Operational

Mitigated Operational

	ROG	NO:	x	CO	SO2	Fugi PM	tive 10	Exhaust PM10	PM10 Total	Fugit PM	tive Ex 2.5 P	haust M2.5	PM2.5 Tota	l Bio-	CO2	NBio- CO2	Total	I CO2	CH4	1	120	CO2e	•
Category							tons/	′yr										MT/	yr				
Area	0.7649	1.000 005	0e- 1	.6000e- 003	0.0000			1.0000e- 005	1.0000e- 005		1.0	000e- 005	1.0000e- 005	0.0	000	3.0900e- 003	3.09 00	000e- 03	1.0000 005	le- 0.	0000	3.2900 003	e-
Energy	0.0180	0.164	40 (0.1378	9.8000e- 004			0.0125	0.0125	 	0.	0125	0.0125	0.0	000	505.2543	505.	2543	0.036	1 0.	0100	509.146	63
Mobile	0.3714	1.562	24	4.4223	0.0139	1.2	107	0.0139	1.2246	0.32	241 0.	0131	0.3372	0.0	000	1,270.295 9	1,270	0.295 9	0.045	7 0.	0000	1,271.4 3	37
Waste	F;							0.0000	0.0000		0.	0000	0.0000	5.9	070	0.0000	5.9	070	0.349	1 0.	0000	14.634	14
Water	F;							0.0000	0.0000		0.	0000	0.0000	14.9	9018	39.4972	54.3	3990	1.534	5 0.	0370	103.774	48
Total	1.1543	1.720	64 4	4.5617	0.0149	1.2	107	0.0264	1.2371	0.32	241 0.	0255	0.3496	20.8	8088	1,815.050 5	1,83	5.859 3	1.965	4 0.	0470	1,898.9 0	96
	ROG		NOx	C	;o ;	602	Fugiti PM1	ive Exh 0 PM	aust P 110 T	V10 otal	Fugitive PM2.5	Exh PN	aust PM //2.5 To	2.5 Ital	Bio- C	O2 NBio	-CO2	Total C	02	CH4	N2	0	CO2e
Percent Reduction	0.00		0.00	0.	.00 (0.00	0.00	0 0.	00 0	.00	0.00	0	.00 0.0	00	45.9	9 0.	72	1.66	5	34.79	0.5	i9	2.93

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/19/2019	11/18/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 259,110; Non-Residential Outdoor: 86,370; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				МТ	/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.3714	1.5624	4.4223	0.0139	1.2107	0.0139	1.2246	0.3241	0.0131	0.3372	0.0000	1,270.295 9	1,270.295 9	0.0457	0.0000	1,271.437 3
Unmitigated	0.3714	1.5624	4.4223	0.0139	1.2107	0.0139	1.2246	0.3241	0.0131	0.3372	0.0000	1,270.295 9	1,270.295 9	0.0457	0.0000	1,271.437 3

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	1,177.76	297.46	126.97	2,155,295	2,155,295
Research & Development	583.49	98.46	57.52	1,100,402	1,100,402
Total	1,761.25	395.92	184.49	3,255,697	3,255,697

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Research & Development	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	7/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	326.6727	326.6727	0.0327	6.7600e- 003	329.5035
Electricity Unmitigated	n					0.0000	0.0000		0.0000	0.0000	0.0000	339.9063	339.9063	0.0340	7.0300e- 003	342.8518
NaturalGas Mitigated	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2700e- 003	179.6428
NaturalGas Unmitigated	0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125	 , , ,	0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2700e- 003	179.6428

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	ıs/yr							МТ	/yr		
General Office Building	1.97943e +006	0.0107	0.0970	0.0815	5.8000e- 004		7.3700e- 003	7.3700e- 003	1 1 1	7.3700e- 003	7.3700e- 003	0.0000	105.6298	105.6298	2.0200e- 003	1.9400e- 003	106.2575
Research & Development	1.36706e +006	7.3700e- 003	0.0670	0.0563	4.0000e- 004		5.0900e- 003	5.0900e- 003		5.0900e- 003	5.0900e- 003	0.0000	72.9518	72.9518	1.4000e- 003	1.3400e- 003	73.3853
Total		0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2800e- 003	179.6428

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
General Office Building	1.97943e +006	0.0107	0.0970	0.0815	5.8000e- 004		7.3700e- 003	7.3700e- 003		7.3700e- 003	7.3700e- 003	0.0000	105.6298	105.6298	2.0200e- 003	1.9400e- 003	106.2575
Research & Development	1.36706e +006	7.3700e- 003	0.0670	0.0563	4.0000e- 004		5.0900e- 003	5.0900e- 003		5.0900e- 003	5.0900e- 003	0.0000	72.9518	72.9518	1.4000e- 003	1.3400e- 003	73.3853
Total		0.0180	0.1640	0.1378	9.8000e- 004		0.0125	0.0125		0.0125	0.0125	0.0000	178.5816	178.5816	3.4200e- 003	3.2800e- 003	179.6428

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5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	7/yr	
General Office Building	2.15597e +006	283.5999	0.0284	5.8700e- 003	286.0574
Research & Development	428050	56.3064	5.6300e- 003	1.1600e- 003	56.7944
Total		339.9063	0.0340	7.0300e- 003	342.8518

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
General Office Building	2.0809e +006	273.7256	0.0274	5.6600e- 003	276.0976
Research & Development	402512	52.9471	5.2900e- 003	1.1000e- 003	53.4059
Total		326.6727	0.0327	6.7600e- 003	329.5035

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.7649	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003
Unmitigated	0.7649	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	0.0901					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e- 004	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003
Total	0.7649	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0901					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e- 004	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003
Total	0.7649	1.0000e- 005	1.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.0900e- 003	3.0900e- 003	1.0000e- 005	0.0000	3.2900e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e				
Category	MT/yr							
Mitigated	54.3990	1.5345	0.0370	103.7748				
Unmitigated	54.3990	1.5345	0.0370	103.7748				

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
General Office Building	21.4916 / 13.1722	28.1798	0.7024	0.0170	50.8002
Research & Development	25.4796 / 0	26.2192	0.8321	0.0200	52.9746
Total		54.3990	1.5345	0.0370	103.7748

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
General Office Building	21.4916 / 13.1722	28.1798	0.7024	0.0170	50.8002
Research & Development	25.4796 / 0	26.2192	0.8321	0.0200	52.9746
Total		54.3990	1.5345	0.0370	103.7748

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e				
	MT/yr							
Mitigated	5.9070	0.3491	0.0000	14.6344				
Unmitigated	23.6282	1.3964	0.0000	58.5377				

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
General Office Building	112.46	22.8284	1.3491	0.0000	56.5563
Research & Development	3.94	0.7998	0.0473	0.0000	1.9814
Total		23.6281	1.3964	0.0000	58.5377

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
General Office Building	28.115	5.7071	0.3373	0.0000	14.1391
Research & Development	0.985	0.2000	0.0118	0.0000	0.4954
Total		5.9070	0.3491	0.0000	14.6344

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
	Number	Tiours/Day	riours, real		Eddd i doloi	i dei type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
	Number	ficat input bay	ricat input i cai	Boller Raung	Тисттурс

User Defined Equipment

Equipment Type Number

11.0 Vegetation

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