Van Nuys Airport (VNY)

Van Nuys, California

CEQA Initial Study

Jet Aviation Tenant Improvement Project

Prepared for:

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Acronyms

ACI ACA	Airports Council International Airport Carbon Accreditation program
AOA	Airport Operations Area
APSA	Aboveground Petroleum Storage Act
AQCCIA	Air Quality and Climate Change Impact Assessment Report
AvGas	Aviation Gas
BMP	best management practice
CalGreen	California Green Buildings Standards Code
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CO2	carbon dioxide
CO2e	carbon dioxide equivalents
CUPA	California EPA Certified Unified Program Agency
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
EPNL	Effective Perceived Noise Level
EV	electric vehicle
FAA	Federal Aviation Administration
FBO	Fixed Based Operation
GAC	Gulfstream Aerospace Corporation
GCC	global climate change
GHG	greenhouse gas
GWP	global warming potential
Jet	Jet Aviation
LAFD	Los Angeles Fire Department
LAGBC	Los Angeles Green Building Code
LAWA	Los Angeles World Airports
MRO	Maintenance, Repair, and Overhaul
MRZ	Mineral Resource Zone
MT	metric tons
NAHC	Native American Heritage Commission
NOI	Notice of Intent
Project	Jet Aviation Tenant Improvement Project
RCRA	Resource Conservation and Recovery Act
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
sf	square feet
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
the Site	16644 Roscoe Boulevard, Van Nuys, California 91406
UBC	Uniform Building Code
UST	underground storage tank
VNY	Van Nuys Airport
VNY Plan	Van Nuys Master Plan
VOC	volatile organic compound

CEQA Appendix G:
Environmental Checklist Form

NOTE: The following is a sample form and may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. **Project title**: Jet Aviation (Jet) Tenant Improvement Project
2. **Lead agency name and address**: Los Angeles World Airports (LAWA), 1 World Way, Los Angeles, CA 90045
3. **Contact person and phone number**: Angelica Espiritu, (424) 646-6495
4. **Project location:** Van Nuys Airport (VNY), 16644 Roscoe, Van Nuys, CA 91406
5. **Project sponsor's name and address**: Jet Aviation (Jet), 16644 Roscoe, Van Nuys, CA 91406
6. **General plan designation**: City of Los Angeles General Plan – Light Manufacturing, Van Nuys Master Plan (VNY Plan)[1] (2006, Element of the Los Angeles General Plan) – Aviation Area
7. **Zoning:** [T][Q]M2-1VL – Light Industrial
8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

8.1.0 Introduction

The Jet Aviation (Jet) Tenant Improvement Project (Project) involves upgrading an existing tenant aircraft support facility, which would result in a full-service state-of-the-art Fixed Based Operation (FBO) at the Van Nuys Airport (VNY). The FBO would provide the full complement of services permitted by an FBO at VNY including, but not limited, to an FBO hangar, a Maintenance, Repair and Overhaul (MRO) hangar, an FBO terminal, and Airport Operations Area (AOA) compliant and perimeter fencing around the Project site. The Project would be jointly operated by Jet and Gulfstream Aerospace Corporation (GAC).

The Project is located within VNY as shown on Figures 1 (Attachment A). Jet has a 30-year lease with Los Angeles World Airports (LAWA) for the Project site. Schematics of the Project layout and a perspective view are shown on Figures 2 and 3 (Attachment A).

8.2.0 Project Location and Surrounding Uses

The Project is located at 16644 Roscoe Boulevard, Van Nuys, California 91406 (the site) in an area designated as light manufacturing and zoned for light industrial use by the City of Los Angeles in their General Plan (Figure 1). The site consists of two parcels, Parcel A (12.4 acres) and Parcel B (5.01 acres) (Figure 4). Light industrial uses include airport and airport-related uses. Under the VNY Plan, the site is designated as an Aviation Area. The VNY Plan defines Aviation Areas as "aircraft performance areas that support aircraft operations including hangars, aircraft tie down parking, aircraft ramp and maneuvering area, aircraft maintenance, flight training, fueling, military aviation functions, air tour, air taxi and other aircraft uses that are classified as primary general aviation uses." The proposed Project use fits within this definition.

The VNY runway is directly to the east of the site, the VNY taxiway is adjacent to site on the south, other aircraft and aviation businesses are located to the west, and a commercial complex is to the north. Roscoe Boulevard, a major thoroughfare, and a railroad track are also adjacent to the site on the north (see Figure 1). The closest residential areas are 0.4 miles to the west and 0.3 miles to the northeast. The closest school is Stagg Street Elementary located 0.65 miles to the southwest.

8.3.0 Tenant Improvement Project Description

The Project involves upgrading an outdated tenant aircraft support facility to a full-service state-of-the-art FBO. The FBO would provide the full complement of services permitted by an FBO at VNY, including but not limited to an FBO hangar, a MRO hangar, and an FBO terminal, and upgraded fueling operations to support the facility. The Project would be jointly operated by Jet and GAC.

8.3.1 Existing Facility. The previous tenant's operation had 11 hangars with a footprint of approximately 250,000 square feet (sf). The existing facility includes Hangar Buildings 1 through 6, four umbrella tie down hangars, the Chevron hangar, a ramp and taxi lanes, the main office building, and an underground storage tank (UST) fuel farm, as shown on Figure 45.

[1] Los Angeles World Airports, *Van Nuys Master Plan*. Available at http://www.vnymasterplan.org/. Accessed: August 2017.

A Phase I Environmental Site Assessment (ESA) was conducted at the existing facility by Brown and Caldwell in 2016[2]. The ESA found that the facility had cracked concrete within the buildings and cracked asphalt outside of the buildings. The UST fuel farm was removed in 2016 under the oversight of the City of Los Angeles Fire Department (LAFD) and the associated Los Angeles Regional Water Quality Control Board case was officially closed on July 26, 2016. Figures 5 through 7 provide photographs from the ESA. It has also been determined by Jet that the ramp and taxi lanes do not have the structural integrity to the support larger, heavier jet aircraft.

8.3.2 Proposed Improvements. The Project would construct an upgraded support facility with an approximately 50,939 sf FBO hangar, an approximately 67,697 sf MRO hangar, a two-story approximately 14,208 sf FBO terminal, an upgraded ramp and taxi lanes, a water tower and UST for a fire suppression system, improved car parking and landscaping, and AOA-compliant perimeter fencing to surround the facility. The Project would reduce the square footage of on-site structures by approximately 177,156 sf.

It is anticipated that the construction of the Project would take approximately 15 to 16 months to complete after all required approvals and permits are obtained for the construction to begin.

Table 1 shows the key changes between the existing facility and the Project. These are discussed in more detail in the following sections and in the Environmental Checklist evaluations.

Table 1. Comparison of existing conditions and the proposed Project

	Existing	Proposed Project	Net Change
Square Footage of Structures	250,000 sf.	132,844 sf.	Square footage of structures reduced by 117,156 sf (47% reduction).
Number and Type of Aircraft	115 small, mid and large cabin aircraft (primarily propeller driven).	30 mid to large cabin aircraft (primarily business jets).	Number of aircraft reduced by approximately 85 aircraft (74% reduction).
FAA Noise Certification Level*	Stage 3 and 4.	Stage 3 and 4.	No change.
Condition of Taxi Lanes/Ramps	Signs of deterioration – cracks/patches per Phase I ESA (Brown Caldwell 2016).	Removal of old concrete and asphalt; replace with new material meeting structural standards for larger, heavier aircraft.	Improved safety and appearance of taxi lanes/ramps.
Car Parking	Parking available in parking lot for 98 vehicles plus private vehicles allowed to park within the FBO at hangars.	Parking only available in parking lot (222 spaces). No parking within FBO at hangars. Electric vehicle (EV) charging station, bike racks and Americans with Disabilities Act (ADA) spaces.	Increased parking spaces in parking lot but decreased parking inside FBO/hangars. Improved safety due to no private vehicles inside FBO.
Visual and Landscaping	Outdated construction subject to inefficient energy and water use.	CALGreen-compliant buildings and landscaping, all constructed with updated and modern architecture.	Increased energy and water use efficiency. Improved and updated appearance.

*See Section 8.3.6 for Stage 3 and Stage 4 Noise Requirements

8.3.2.1 FBO Hanger. The FBO hangar would be operated by Jet and rented to aircraft operators who desire a permanent home base for their aircraft operations (Figures 2 and 3). The FBO hangar would be located on the north side of the site and capable of accommodating long-range business aircraft such as the Gulfstream 650 and Falcon 7X. The hangar would be approximately 50,939 sf, including office space and support facilities. The offices would be divided into individual office areas for rent by the flight departments who are renting the hangar space.

The hangar would be protected by both sprinkler and foam fire suppression systems. A water tower would be built at the southwest corner of the site to provide sufficient water pressure for the fire suppression systems. The water tower would be 45 feet tall and 46 feet in diameter, have a 500,000-gallon capacity, and be built of bolted steel. A UST would be located just east of the hangar under the ramp and would provide containment for foam and water in the event the foam fire suppression system is discharged.

[2] Brown and Caldwell, *Phase I Environmental Site Assessment*, September 27, 2016.

8.3.2.2 MRO Hangar. The MRO hangar would be operated by GAC and built at the south side of the site (Figures 2 and 3). It would be approximately 67,697 sf, including office space and support facilities. It would be used exclusively for aircraft maintenance activities, which require upgraded infrastructure compared to a typical FBO hangar. The MRO hangar would include upgraded electrical power and distribution, compressed air systems, and hydraulic equipment. The hangar floors would have embedded support capabilities throughout the facility, which would include electrical outlets, compressed air lines, and other services that support the maintenance activities.

The MRO hangar would also contain sprinkler and foam fire suppression systems supported by the water tower and UST located next to the FBO hangar.

8.3.2.3 FBO Terminal. The FBO terminal would be operated by Jet and built on the north end of the site. It would be a two-story building with approximately 14,208 sf. The first floor of the terminal would have a main customer service counter staffed 24 hours per day. It would include a passenger lounge, pilot lounge, line technician office, tenant space, aircraft catering refrigerators, ice machines, dishwashers, and a general holding/storage area for customer needs.

The second floor would consist of conference rooms, a customer reservation office and other administrative offices, locker rooms, fitness center, and flight planning and pilot rest areas.

8.3.2.4 Fueling Operations. As discussed above in Section 8.3.1, the previous tenant used USTs for fuel storage. These tanks have been removed and two 30,000-gallon ASTs with the same capacity as the previous fuel farm, totaling 60,000 gallons, are being constructed. The proposed AST fuel farm would be located outside of the Runway Protection Zone in the northwest area of site and would be operated in accordance with the California Aboveground Petroleum Storage Act (APSA) regulations and the site Spill Prevention, Control and Countermeasure (SPCC) Plan. The previous USTs were located within the RPZ.

There would be no changes to the current aircraft fueling procedures. Fuel would be loaded into existing mobile fuel trucks at the fuel farm in accordance with the APSA regulations and the site SPCC Plan. There would not be an increase in the number of mobile fuel trucks or fuel capacity needed for the proposed operations. As described in the SPCC Plan, the mobile fuel trucks would transport the fuel to the aircraft and all fueling operations would be performed on the aircraft ramp. A Jet operator would be required to be present during the entire operation. Aircraft fuel loads are determined prior to filling and active spill response measures are implemented to prevent accidental fuel spills from reaching storm drain inlets or unpaved surfaces. Active spill response measures are used to contain and clean up a spill on the ramp, as discussed in the SPCC Plan.

The mobile fuel trucks would be inspected prior to, during, and after fueling operations. The mobile fuel trucks are equipped with a dead man control device that shuts down the fuel flow, brake interlocks to prevent drive-offs during fuel transfer activities, and emergency shut-off switches.

Jet personnel would be trained in all elements of the SPCC Plan within their areas of responsibility including, fuel handling, equipment operation, preventative maintenance inspections, and spill prevention and response procedures to minimize the potential for accidental spills.

In accordance with APSA requirements, prior to the startup of the Project operations, a copy of the updated SPCC Plan specific to the Project would be prepared. The SPCC Plan would be similar to the current site SPCC Plan[3]. The primary difference would be the location of the fuel farm; the fueling procedures would remain the same.

8.3.2.5 Ramp and Taxi Lanes. The approximate 189,000 sf ramp would be upgraded to meet the demands of heavier (up to 100,000 pounds), larger business aircraft, as well as meeting environmental requirements (i.e., maintenance of cracks in concrete and asphalt). To promote an orderly and safe flow of arriving and departing aircraft, specific areas of the ramp would be designated as taxi lanes. The taxi lanes would be at least 125 feet wide and would allow ingress and egress from the site from either the south or the east. It is anticipated that arrivals would enter from the south taxiway and depart to the east taxiway to the maximum extent possible. A portion of the taxiway would be built in Parcel B to allow access to the main airport taxiway and runway. All other ramp areas would be appropriately marked to indicate safe boundary lines, and personal vehicles on the ramp would be limited.

8.3.2.6 Number and Type of Aircraft. The Project is designed to accommodate more modern long range business aircraft than those serviced by the previous tenant.

[3] Madison Environmental Group, Inc., *Spill Prevention, Control, and Countermeasure (SPCC) Plan*, October 2016.

Table 2 identifies the number and type of aircraft that were serviced by the previous tenant and those that would be serviced as part of the Project.

Table 2. Comparison of Existing and Proposed Aircraft				
	Small Cabin Aircraft	**Mid Cabin Aircraft**	**Large Cabin Aircraft**	**Total**
Current	76	20	9	115
Proposed Project	0	5	25	30
Change	**(76) decrease**	**(15) decrease**	**16 increase**	**(74) decrease**

As can be seen from Tables 1 and 2, the Project would reduce the number of aircraft being serviced at the facility by approximately 85 aircraft, representing an approximate 74 percent reduction. The Project is designed to support larger more modern business jets (25 out of 30 total aircraft), whereas the previous tenant primarily serviced small and mid-size aircraft (96 out of 115 total aircraft).

The FAA established limits on allowable levels of aircraft noise emissions under 40 CFR Part 36 "Noise Standards: Aircraft Type and Airworthiness Certification." Airplanes must meet these standards to operate in the United States. The regulations set separate measurement requirements and limits for takeoff, sideline, and approach locations, in terms of "Effective Perceived Noise Level" (EPNL or EPNdB). FAA has amended their regulations several times to define more stringent noise limits and introduced the concept of certification "stages" to provide terminology to differentiate between the original and revised standards. Stage 3 aircraft meet limits established in 1977, whereas Stage 4 aircraft must meet standards established in 2005. The Stage 4 noise limits are a cumulative 10 EPHdB less than those for Stage 3. All subsonic turbojet-powered and transport-category airplanes with maximum gross takeoff weights of 12,500 pounds or more for which application of a new type design submitted on or after January 1, 2006, must meet the Stage 4 noise certification standards. Virtually all recent civil subsonic turbojet aircraft under 75,000 pounds also meet Stage 4 standards[4].

It is not possible to predict with certainty whether all the business jets that would be serviced at the Project would be the quieter Stage 4 aircraft; however, the Project was designed to meet the needs of clients who operate this type of larger modern aircraft. Due to the approximate 74 percent reduction in the number of aircraft being serviced by the Project, there would also be a reduction in the amount of flying in and out of the facility, which results in a quieter space.

8.3.2.7 Number of Employees and Parking. Jet would employ 20 to 30 full-time employees to operate and/or manage the FBO terminal and FBO hangar. Some of these employees would work on rotating shifts to staff the FBO terminal 24 hours a day. GAC would require an additional approximately 130 employees working on rotating shifts to operate the MRO hangar. MRO operations would consist of two shifts, morning and afternoon, with approximately 85 employees potentially on each shift. The shift changes for both Jet and GAC employees would be scheduled in non-peak traffic hours. This is consistent with applicable VNY "Q" Conditions No. 27 (Attachment B), which encourages the reduction of vehicle trips during the most congested periods and spreading them throughout the day by introducing staggered work hours.

The number of employees to operate and/or manage the FBO terminal and FBO hangar (20 to 30) would not change from the previous tenant's terminal and hangar operations. However, the operation of the MRO hangar would result in an increase of approximately 130 employees at the facility. Although the total number of employees would increase, the square footage of office space would be reduced by 47 percent (250,000 sf to 132,844 sf). Therefore, even with the increase in employees, there would be a decrease in energy use (heating/cooling/lighting).

The Project would have 222 parking spaces located on the northwest side of the site. Specific portions would be dedicated to customers and other areas to employees. The required number of ADA compliant parking spaces would be provided and EV charging stations would be located throughout the parking area. Bicycle racks would be available near the FBO terminal. In addition, current parking has zero green space and, based on the proposed improvements, 15 percent of the new parking lots (approximately 51,058 sf) would be green/pervious space.

Although there would be an increase in parking spaces from 98 to 222 (a 126 percent increase), this does not necessarily represent an increase in number of vehicles at the facility. As can be seen in the photographs of the existing facility provided on Figures 5 through 7, due to the configuration of the existing facility and for the sake of convenience, customers currently drive their personal vehicles directly into the hangar locations instead of using the parking spaces provided in the lot. The Project is not designed to allow personal vehicle parking at the hangars because of safety reasons. Therefore, additional parking spaces would be required in the parking lot, but this does not mean more vehicles would be accessing the facility.

[4]Harris Miler Miller & Hanson, Inc., *Overview of Part 36 Aircraft Certification Stages*. Available at https://www.lawa.org/uploadedFiles/lax/noise/presentation/noiseRT_090408_Part%2036%20Aircraft%20Noise%20Certification%20Stages.pdf. Accessed: August 2017.

8.3.2.8 Project Design and Landscaping. The FBO and MRO hangars and the FBO terminal would be a clean modern design, enhancing the surrounding area within and around the airport. Figures 5 through 7 show that the existing structures are outdated, rundown, and require updating to meet the current needs of Jet and GAC.

The proposed buildings and landscaping would meet or exceed the 2016 California Green Building Standards Code – Nonresidential Mandatory Measures (CALGreen) disclosed on their webpage[5]. CALGreen standards require water efficiency and conservation, material conservation and resource efficiency, light pollution reduction, EV charging stations, restrictions on outdoor water use, drought tolerant landscaping, irrigation controls, and waste management plans.

The Project design would also be compliant with the requirements identified in the applicable VNY "Q" Conditions (Attachment B), such as Condition No. 44 that requires that project glass surface areas be tinted to decrease reflection and to reduce the emission of ambient light, and Condition No. 45 that requires exterior nighttime lighting to be shielded and directed on site and downward, except as exempted by FAA.

8.3.2.9 Construction. It is anticipated that the construction of the Project would take approximately 15 to 16 months after all necessary approvals and construction/building permits are obtained. The construction activities would be conducted in compliance with all applicable regulatory requirements including, but not limited to, the Construction Stormwater Pollution Prevention Plan, South Coast Air Quality Management District regulations, applicable VNY "Q" Conditions, FAA requirements, LAWA approvals, and fire/building codes.

9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

The Project site is located entirely within the VNY property. The VNY runway is directly to the east of the site, the VNY taxiway is adjacent to site on the south, other aircraft and aviation businesses are located to the west, and a commercial complex is to the north. Roscoe Boulevard, a major thoroughfare, and a railroad track are also adjacent to the site on the north (see Figures 1 and 2 provided in Attachment A).

The site location is designated as Light Manufacturing in the City of Los Angeles General Plan and zoned for Light Industrial uses. Airport and airport-related uses are permitted in this zone. Under the VNY Plan, the site is designated as Aviation Areas. The VNY Plan defines Aviation Areas as "aircraft performance areas that support aircraft operations including hangars, aircraft tie down parking, aircraft ramp and maneuvering area, aircraft maintenance, flight training, fueling, military aviation functions, air tour, air taxi, and other aircraft uses that are classified as primary general aviation uses." The proposed uses fit within this definition.

The closest residential areas are 0.4 miles to the west and 0.3 miles to the northeast. The closest school is Stagg Street Elementary 0.65 miles to the southwest. The nearest school, Stagg Street Elementary, is 0.65 miles to the southwest.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

Federal Aviation Administration (FAA) to cover requirements under National Environmental Protection Act, South Coast Air Quality Management District (SCAQMD), California State Water Resources Board Construction and Industrial Storm Water Permits, City of Los Angeles Building Permit, and City of Los Angeles Fire Department approval.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

LAWA has notified Native American tribal representatives regarding this project.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code section 21083.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96, and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

[5] California Building Standard Commission, *CalGreen Building Standards.* Available at http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed: August 2017

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Tribal Cultural Resources	☐ Utilities/Service Systems
☐ Mandatory Findings of Significance		

DETERMINATION:

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Signature _____ Date _____

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
    a) The significance criteria or threshold, if any, used to evaluate each question; and
    b) The mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

I a) No Impact. The Project is located within an airport in a light industrial area. The area surrounding the Project is essentially flat terrain (0 to 2% grade) such that there is no potential for views from nearby higher elevations. According to the City of Los Angeles General Plan Conservation Element, there are no scenic vistas within the vicinity of the Project[6]. The Project would not result in a change from the current land use that would negatively impact aesthetics. Therefore, the Project would have no impact on a scenic vista.

I b) No Impact. The Project would not result in the removal of any scenic resources such as trees, rock outcropping, or historic buildings within a scenic highway. According to the City of Los Angeles General Plan Transportation Element, the Project is located approximately 1.15 miles north of Sherman Way, a designated scenic highway in the City of Los Angeles[7]. The Project would not be visible from Sherman Way due to the flat terrain and existing development between the site and Sherman Way. Therefore, the Project would have no impact on these resources.

I c) No Impact. The previous tenant at the Project site operated an airport support facility that included 11 hangars and a two-story terminal/office building. Photographs of the existing facility are provided on Figures 5 through 7 located in Attachment A. The Project would upgrade this facility by constructing two new hangars, a state-of-the-art terminal building, and drought-tolerant landscaping. The property improvements would be done in accordance with the applicable VNY "Q" Conditions (Attachment B)[8], CalGreen Building Standards[9], City of Los Angeles Green Building Code (LAGBC)[10] and the Los Angeles Landscape Ordinance (City of Los Angeles General Plan)[11]. The Project would substantially improve the visual character of the site.

The applicable VNY "Q" Conditions (Attachment B) identify conditions that address the aesthetics of proposed projects including light and glare, nighttime lighting, height of buildings, design of direct frontage on public streets, use of corrugated metals on exterior walls, rooftop equipment, setbacks from roadways, landscaping, and signage.

Based on these conditions, the Project would have no negative impact on the visual character or quality of the site and its surroundings. The Project would result in a positive impact by improving the visual character of the site.

I d) No Impact. The lighting at the Project site would be consistent with the previous land use and in compliance with FAA standards and the applicable VNY "Q" Conditions 44 through 52 (Attachment B). Glass surfaces (walls or windows) would be tinted to decrease reflection and exterior building materials would be of a color and texture to reduce daytime glare. Exterior outdoor lighting would be shielded and directed on site and downward (except as exempted by FAA). Landscaping would be planted wherever possible to block or minimize light exposure to adjacent land uses. The proposed structures and associated parking lot would be fitted with Title 24 California Building Energy Code 2016 compliant lighting fixtures[12]. The Project would not create a new source of substantial light or glare compared to existing conditions; therefore, the Project would have no impact.

[6] City of Los Angeles, *General Plan Conservation Element*. Available at https://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed: August 2017.

[7] City of Los Angeles, *General Plan Transportation Element Map E.* Available at https://planning.lacity.org/cwd/gnlpln/transelt/index.htm. Accessed: August 2017.

[8] Los Angeles World Airports, *"Q" Conditions Van Nuys Airport*, Available at https://www.lawa.org/uploadedFiles/VNY/pdf/PropPark.Appendix.B.Q.Conditions.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
II a) No Impact. The Project is located within VNY. The Project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. As such, the Project has no potential to convert such lands to a non-agricultural use; therefore, there would be no impact.				

[9] California Building Standard Commission, *CalGreen Building Standards.* Available at http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed: August 2017.

[10] City of Los Angeles, *Los Angeles Green Building Code*. Available at http://www.ladbs.org/forms-publications/forms/green-building. Accessed: August 2017.

[11] City of Los Angeles, *Landscape Ordinance No. 170,978*. Available at https://planning.lacity.org/Forms_Procedures/landsc%20guidelines%204-05.pdf. Accessed: August 2017.

[12] California Energy Commission. *Title 24 Building Energy Code 2016.* Available at http://www.energy.ca.gov/title24/. Accessed: August 2017.

II b) **No Impact.** Generally, a conflict with existing zoning for agriculture use would occur if a project would intrude into agricultural areas and create conflicts between agriculture uses and non-agriculture uses. The Project is located completely within VNY and the site is zoned for Light Industrial use. There are no agricultural uses on the Project site or in the vicinity of the Project site. No impacts would occur.

II c) Pursuant to the California Land Conservation Act of 1965, a Williamson Act Contract enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value. The Project site is not under a Williamson Act Contract; therefore, there is no impact with respect to a Williamson Act Contract.

II d) **No Impact.** The Project is located completely within VNY. The Project site is zoned for Light Industrial use. The Project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the Project site. Because no lands on the Project site are zoned for forestland or timberland, the Project has no potential to impact such zoning. No impacts would occur.

II e) **No Impact.** The Project is located completely within VNY. The Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the City of Los Angeles General Plan. Because forest land is not present on the Project site or in the immediate vicinity of the Project site, the Project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use. No impacts would occur.

II f) **No Impact.** The Project is located completely within VNY. The Project site is not being used for agricultural uses and is in an area zoned for Light Industrial use. Therefore, the Project would not result in conversion of Farmland to non-agricultural use and no impacts would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

III a) Less than Significant. The SCAQMD is responsible for preparing and updating an Air Quality Management Plan. The primary purpose of an Air Quality Management Plan is for controlling emissions to maintain all federal and state ambient air standards for the SCAQMD. The SCAQMD has adopted a variety of attainment plans for a variety of non-attainment pollutants, which together comprise the Air Quality Management Plan for the SCAQMD.

A Project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable SCAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast.

The Project would not result in a change in land use from the existing land use, and it is consistent with the zoning and land use classifications (Light Industrial) where it is located.

The operation of the Project would not result in significant increases in air emissions because the Project would not induce additional operations at VNY and would operate within the existing VNY Plan.

The fuel required for the Project would be obtained from a fuel farm located on the Project site. The upgraded fuel farm would have the same capacity as the fuel farm used by the previous tenant at the Project site. The only difference between the previous fuel farm and the current fuel farm is the current fuel farm only contains Jet A fuel, whereas the previous fuel farm also had Aviation Gas (AvGas). Jet A fuel is less volatile than AvGas; therefore, emissions from the tanks would be less than those from the previous tank farm. The tanks at the current fuel farm would most likely be exempt under SCAQMD Rule 219(m)(4).

The construction of the Project would result in temporary increases in air emissions. An Air Quality and Climate Change Impact Assessment Report (AQCCIA)[13], provided in Attachment C and discussed below, was prepared for the Project. The AQCCIA calculated emission estimates associated with the construction activities. The results demonstrate that the construction emissions would be below SCAQMD significance thresholds.

The Project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan and/or Attainment Plans. Therefore, the Project would have a less than significant impact.

[13] Sespe Consulting, Air Quality and Climate Change Impact Analysis, April 2017.

III b) Less than Significant. An AQCCIA report was prepared for the Project and is included as Attachment C. The Project is evaluated in comparison to the SCAQMD's yearly thresholds as discussed in the AQCCIA report.

The Project is located within the South Coast Air Basin (SCAB) under the jurisdiction of the SCAQMD. The SCAB is designated an extreme non-attainment area for ozone (O_3), a serious non-attainment area for particulate matter less than 2.5 microns in size ($PM_{2.5}$). As such, the SCAQMD is mandated by the Federal Clean Air Act to reduce emission of criteria pollutants for which the SCAB is in nonattainment. The SCAQMD's Air Quality Management Plan presents the methods and strategies used by the SCAQMD to reduce criteria pollutant emissions and achieve ambient air quality standards.

The Project is replacing an outdated airport support facility with an upgraded support facility with an overall smaller square footage footprint, it would not induce increased operations at VNY, and it would remain consistent with the approved VNY Plan. Therefore, the operation of the Project would not create a new source of air emissions and analysis of the Project's operational air quality emissions is not necessary.

The fuel required for the Project would be obtained from a fuel farm located on the Project site. The fuel farm would have the same capacity as the fuel farm used by the previous tenant at the Project site. The only difference between the previous fuel farm and the current fuel farm is the current fuel farm only contains Jet A fuel, whereas the previous fuel farm also had AvGas. Jet A fuel is less volatile than AvGas; therefore, emissions from the tanks would be less than those from the previous tank farm. The tanks at the current fuel farm would most likely be exempt under SCAQMD Rule 219(m)(4).

The SCAQMD has mass daily air quality significance thresholds for construction emissions. Table 1 presents the SCAQMD's construction mass daily thresholds[14] used to determine the significance of air quality impacts generated by the Project's short-term construction activities.

Table 1. SCAQMD Mass Daily Thresholds

Pollutant	Construction – Mass Daily Threshold (lbs/day)
NO_x	100
VOC (ROC)	75
PM_{10}	150
$PM_{2.5}$	55
SO_x	150
CO	550
Lead (Pb)	3

As discussed in the AQCCIA report provided in Attachment C, all construction air impacts are below the applicable SCAQMD significance thresholds. Also, the Project would be within compliance with the applicable VNY "Q" Conditions for air quality (provided in Attachment B). The Project would have a less than significant impact.

III c) Less than Significant. Cumulative impacts occur when the impact of one project, added to other past, present, or reasonably foreseeable future projects, could contribute to a significant impact. The SCAQMD uses the State and Federal Clean Air Act as a basis for assessing cumulative impacts, specifically using the Air Quality Management Plan forecasts of attainment of ambient air quality standards in accordance with these regulations. The Project would result in short-term criteria pollutant emissions resulting from the use and transportation of construction equipment and materials. These activities would be temporary (approximately 15 to 16 months) and conducted in compliance with standard construction best management practices (BMPs) (e.g., fugitive dust control). Because the estimated criteria pollutant emissions from construction are below the SCAQMD's significance thresholds, the contribution of the proposed Project would not be considered cumulatively significant.

[14] South Coast Air Quality Management District, *Construction Mass Daily Thresholds*. Available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. Accessed: August 2017.

III d) Less than Significant. The Project is located completely within VNY. The Project site is in an area designated as Light Manufacturing in the City of Los Angeles General Plan and zoned for Light Industrial uses. The Project site is surrounded by commercial and industrial land uses, and there are no sensitive populations residing in the immediate vicinity of the project. The closest residential areas are approximately 0.4 miles to the west and 0.3 miles to the northeast (see Figures 1 and 2, Attachment A). Stagg Street Elementary at 0.65 mile is the closest school, but at over 1000 feet away, it is not impacted. As discussed in the AQCCIA report provided in Attachment C, construction of the Project would not result in a substantial quantity of criteria pollutant emissions that would significantly affect localized or regional air quality; therefore, the potential impact to nearby sensitive receptors to substantial pollutant concentrations is less than significant.

III e) Less than Significant. Construction of the Project would involve activities with the potential to generate emissions that might produce objectionable odors. Potential sources that may emit odors during construction activities include diesel exhaust emissions from trucks and equipment, the use of architectural coatings, and paving operations.

The California Air Resources Board (CARB) has extensive regulations controlling the emissions from diesel on- and off-road vehicles and equipment.[15] Activities associated with the construction of the Project, including diesel exhaust emissions, would comply with these requirements.

SCAQMD Rule 1113 limits the amount of VOCs in architectural coatings sold/used within SCAQMD, which in turn helps minimize odor emissions.

There could potentially be odors associated with the asphaltic concrete, but this activity would be short-term (approximately 1 week), localized, and temporary, and would be conducted in compliance with regulatory requirements.

Due to mandatory compliance with SCAQMD rules and the short-term nature of construction activities with the potential to generate odors (i.e., paving and architectural coatings), impacts would be less than significant.

[15] California Air Resources Board, *Diesel Regulations*. Available at https://www.arb.ca.gov/diesel/mobile.htm. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES Would the project:				
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

IV a) No Impact. The Project is located completely within VNY. The Project is in an area zoned for Light Industrial land use and is replacing an existing airport support facility with updated support facilities. The Project site does not include any water bodies or wetlands and would not result in the construction of any water bodies. The facility would be secured by a fence preventing access to the operational areas. The Project is located 679 feet east of Bull Creek. Bull Creek is encased by a concrete flood control channel and runs through VNY. Bull Creek is not identified in any local or regional conservation plans[16]. There are no sensitive riparian areas or habitats along this stretch of Bull Creek. The Project would not result in any changes to habitat or create impacts on any species identified as a candidate, sensitive, or special status. The Project would have no impact on these resources.

IV b) No Impact. The Project is located completely within VNY. It is in an area zoned for Light Industrial land use and is replacing an existing tenant airport support facility with updated support facilities. The Project site is not located in or near any riparian habitat or other sensitive natural communities identified in local or regional plans or regulations, or by the City of Los Angeles General Plan, California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. The Project is located 679 feet east of Bull Creek, encased by a concrete flood control channel, and runs through VNY. Bull Creek is not identified in any local or regional conservation plans[17]. There are no sensitive riparian areas or habitats along this stretch of Bull Creek. The Project would have no impact on these resources.

IV c) No Impact. The Project is located completely within VNY. It is in an area zoned for light industrial land use and is replacing a tenant airport support facility with updated support facilities. The Project site is not located in or near any federally protected wetlands as defined by Section 404 of the Clean Water Act[18]. The Project would not remove, fill, or result in hydrological interruption of any wetlands. The Project would have no impact on these resources.

IV d) No Impact. The Project is in an area zoned for Light Industrial land use and is replacing a tenant airport support facility

[16] City of Los Angeles, *General Plan Conservation Element*. Available at https://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed: August 2017.

[17] City of Los Angeles, *General Plan Conservation Element*. Available at https://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed: August 2017.

[18] City of Los Angeles, *General Plan Conservation Element*. Available at https://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed: August 2017.

with updated and environmentally superior support facilities. There are no water bodies in or near the Project site, other than Bull Creek which is encased in a concrete flood control channel and runs through VNY. The existing facility that is being replaced is completely fenced, which already restricts the access of wildlife. The Project would not include structures at heights above FAA and other regulatory standards. Therefore, the Project would not result in a change that could impact movement of any native or migratory fish or wildlife.

IV e) No Impact. There are no local policies or ordinances protecting biological resources, such as a tree preservation policy that would apply to the Project. Therefore, the Project would have no impact.

IV f) No Impact. The Project site is not listed within the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. The closest plan exists for the Los Angeles River Revitalization Plan, but tributaries of the Los Angeles River are beyond the scope of the plan[19]. Therefore, the Project would have no impact.

[19] City of Los Angeles, *General Plan Conservation Element*. Available at https://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

There are no historical resources located on the Project site and the closest historical resource is Sherman Way, a historical highway identified in the City of Los Angeles General Plan, Transportation Element, which is over 1 mile away. Therefore, there would be no impact to historical resources.

V a) No Impact: The Project is replacing a tenant airport support facility with updated support facilities. The Project site has already been extensively disturbed by previous construction activities, as well as Phase I and II Environmental Site Assessments (ESAs)[20][21]. Therefore, the Project would have no impact on these resources.

V b) No Impact: The Project is replacing a tenant airport support facility with updated support facilities. The Project site has already been extensively disturbed by previous construction activities and Phase I and II ESAs. Therefore, the Project would have no impact on these resources.

V c) No Impact: In the unlikely event that human remains are discovered, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Based on the above, the Project would have no impact on these resources.

V d) No Impact: The Project is replacing a tenant airport support facility with updated support facilities. The Project site has already been extensively disturbed by previous construction activities as well as Phase I and II ESAs. Therefore, the Project would have no impact on these resources.

[20] Brown and Caldwell, *Phase I Environmental Site Assessment*, September 27, 2016.

[21] Brown and Caldwell, *Summary of Findings from Limited Phase II Environmental Site Assessment*, August 16, 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. 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?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

VI ai) No Impact. The Project site is not located within an Earthquake fault zone and there are no known active or potentially active faults crossing the Project site. According to the Report of Geotechnical Investigation[22] prepared for Century Aero Club Project, located approximately 0.5 miles south of the Project site, the active faults within a 10-mile radius include the Verdugo, Sierra Madre, Northridge, Santa Susana, and Santa Monica-Hollywood-Raymond fault systems. According to the Los Angeles General Plan[23], the Project site is not located within either an Alquist-Priolo Special Study Zone or a Fault Rupture Study Area. Therefore, the potential for surface rupture is considered unlikely and the Project would have no impact. Additionally, the proposed Project has no potential to exacerbate the risk of surface rupture.

VI aii) Less than Significant. The Project is located within an area of California prone to earthquakes. The structures on the Project site would be occupied by individuals during business hours; hence, there is the potential for those individuals to be exposed to strong seismic shaking from local or regional faults. However, the buildings and tanks would be constructed in accordance with the state of California and the Los Angeles Building Codes, which require specific provisions for seismic design to mitigate and minimize the effects of earthquakes and ground shaking on structures. Compliance with these requirements would ensure impacts from strong seismic ground shaking are less than significant. Additionally, the Project has no potential to exacerbate the risk of seismic ground shaking.

VI aiii) No Impact. According to the Los Angeles General Plan[24], the Project site is not located in either a liquefaction area or a potential liquefaction area. Therefore, the Project would have no impact on seismic-related ground failure, including liquefaction.

VI aiv) No Impact. According to the Los Angeles General Plan[25], the Project is not located in an area prone to landslides. The area surrounding the Project is essentially flat terrain (0 to 2 percent grade) with no significant slopes that would be prone to landslides. Therefore, the Project would have no impact related to landslides.

[22] URS Corporation, *Report of Geotechnical Investigation, Century Aero Club Project*, July 20, 2008.

[23] City of Los Angeles, *General Plan Safety Element Exhibit A.* Available at https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf. Accessed: August 2017.

[24] City of Los Angeles, *General Plan Safety Element Exhibit B.* Available at https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf. Accessed: August 2017.

VI b) Less than Significant. The Project would involve shallow excavation, filling, and grading activities that would expose ground surfaces and increase the potential for soil erosion. However, because the Project involves more than 1 acre of ground disturbance, the construction contractor would be required to submit a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) for coverage under the General Construction Storm Water Permit for Discharges of Storm Water Associated with Construction Activities. Compliance with the permit requires the implementation of BMPs that would minimize potential impacts to soil erosion. Therefore, the Project would have a less than significant impact.

VI c) No Impact. As discussed above, the Project site is not located on a geological unit or soil that would become unstable as a result of the Project. The Project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. The Project would have no impact.

VI d) Less than Significant. Based on geotechnical investigations conducted for a similar project located at VNY[26], the airport is underlain by sediments generally consisting of silty sand or sandy silt which is likely to be non-expansive. On December 7, 2016, a soil boring was taken at the Project site as part of a Phase II site investigation[27]. The site boring lithologic description confirmed that Project site is underlain by silty sand, consistent with the other geotechnical investigation in the immediate area. As stated in the 2007 Uniform Building Code (UBC), soil testing would only be required if the site is located within an area likely to have expansive soils. Therefore, additional soil testing is not required to address this issue. (Note: Table 18-1-B of the 1994 UBC has been superseded by Chapter 18A.)

In addition, the Project site has supported hangars and other structures for many years and there has been no evidence of unstable soil conditions. Therefore, the Project would have a less than significant impact.

VI e) No Impact. Septic tanks and/or alternative water supply systems are not proposed as part of the Project. No impacts are anticipated.

[25] City of Los Angeles, *General Plan Safety Element Exhibit C.* Available at https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf. Accessed: August 2017.

[26] URS Corporation, *Report of Geotechnical Investigation, Century Aero Club Project*, July 20, 2008.

[27] Brown and Caldwell, *Summary of Findings from Limited Phase II Environmental Site Assessment*, August 16, 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

VII a) **Less than Significant.** The CEQA Guidelines (Section 15064.7)[28] provide that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance for greenhouse gas emissions. The SCAQMD has released *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (December 2008), which includes a greenhouse gas (GHG) emissions threshold of 10,000 metric tons (MT) of carbon dioxide (CO_2) equivalents (CO_2e) per year to determine the significance of project GHG impacts[29]. This threshold was intended to apply only to stationary source projects where SCAQMD is the lead agency, but is used here because it is the only SCAQMD adopted GHG threshold. SCAQMD recommends that GHG emissions from construction be amortized over 30 years to determine the overall Project impact.

Please note that CO_2e is the quantity of CO_2 that would cause the same level climate change as a given type and quantity of a GHG emission. This variation of effect between gases is also known as global warming potential (GWP).

SCAQMD guidance provides a methodology for estimating GHG Emissions. Per their guidelines, GHG emissions from construction are to be amortized over a 30-year period to determine significance. Because this Project would not result in a change in operational air emissions from those already included in the VNY Plan and the SCAQMD Air Quality Management Plan and Attainment Plans, emissions associated with the operation of the Project were not calculated.

Construction of the Project would result in temporary generation of greenhouse gas emissions primarily due to fuel combustion in heavy construction equipment. Construction activities would be temporary (approximately 15 to 16 months). As described above, GHG emissions from construction are amortized over a 30-year period. GHG emissions were calculated and shown in the AQCCIA report provided in Attachment C.

As discussed in the AQCCIA report, the total Project construction GHG emissions are well below the appropriate SCAQMD significance threshold of 10,000 MT CO_2e per year. See Attachment C for the full discussion and evaluation of GHG emissions.

In addition, the square footage of the buildings on site would decrease from 250,000 sf to 132,844 sf, resulting in a 117,156 sf decrease (47 percent reduction) of indoor area that would require energy use (i.e., decrease in electrical demand for heating/cooling and lighting). The terminal building also would be compliant with the 2016 California Green Building Standards Code (CalGreen)[30] which requires energy efficient building materials and designs. This would result in reduced energy use as compared to older outdated terminal used by the previous tenant.

The number of employees would increase by approximately 130 working on rotating shifts; however, the commuting trips would be replacing existing commuting trips and would not be creating new emissions. The change in shift operations would be in non-peak traffic hours to avoid additional congestion and emission hot spots on the roadways.

The Project operations would not generate a change (increase) in the baseline GHG emissions, either directly or indirectly. The Project construction activities would not exceed SCAQMD thresholds. The Project would have a less than significant impact on GHG emissions.

[28] California Natural Resources Agency, *The California Environmental Quality Act Guidelines, Appendix G.* Available at http://resources.ca.gov/ceqa/guidelines/Appendix_G.html. Accessed: August 2017.

[29] South Coast Air Quality Management District, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, December 2008.

[30] California Building Standard Commission, *CalGreen Building Standards.* Available at http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed: August 2017.

VII b) **Less Than Significant Impact.** Numerous policies, plans, and guidelines have been proposed by federal, state, and local agencies to address the impacts of GHG emissions on global climate change (GCC). These include such documents as the Climate Registry General Reporting Protocol[31], the joint CARB, California Climate Action Registry, and the International Council for Local Environmental Initiatives Local Government Operations Protocol[32], the Association of Environmental Professionals Community-wide GHG Emissions Protocol, and the Airports Council International Airport Carbon Accreditation (ACI ACA) program. These programs propose generally consistent methodologies for estimating GHG emissions.

GHG impacts are treated as exclusively cumulative impacts since there are no non-cumulative GHG emission impacts from a climate change perspective. Therefore, no single project would result in emissions of such a magnitude that it by itself would be significant on a project "make a good-faith effort, based on available information, to calculate, model or estimate…GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[33]

As discussed above in VII a) and in the AQCCIA report provided in Attachment C, the CEQA Guidelines (Section 15064.7) provide that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance for greenhouse gas emissions. The SCAQMD considers GHG impacts significant if emissions exceed 10,000 MT CO_2e per year. Total Project construction GHG emissions are well below the SCAQMD significance threshold.

In addition, because the Project would result in a 47 percent reduction in building square footage, there would be a decrease in energy use or indoor heating/cooling and lighting at the site as compared to the existing facility. The Project would not result in an increase to off-site fuel trucks because there would be no change in the capacity of the fuel farm and the number of aircraft would be reduced by 74 percent (115 to 30). The number of employees would increase but additional employee vehicles would be insignificant as compared to existing GHG emissions. The Project would be consistent with the VNY Plan and would not induce additional operations at the airport. Therefore, GHG emissions associated with aircraft would not change and analysis was not included in this evaluation.

VII c) Because the Project would not result in a significant increase in GHG emissions, it would not be in conflict with the SCAQMD's Air Quality Management Plan. The Project would not represent a cumulatively considerable contribution to GHG emissions that would impact GCC. Therefore, the Project would not conflict other agency plans, policies, or regulations regarding GHG emissions and GCC. The Project would have a less than significant impact.

[31] The Climate Registry, *General Reporting Protocol (Version 2.1)*, January 2016.

[32] California Air Resources Board, et al., *Local Government Operations Protocol (Version 1.1)*. Available at https://www.arb.ca.gov/cc/protocols/localgov/pubs/lgo_protocol_v1_1_2010-05-03.pdf. Accessed: August 2017.

[33] State of California Governor's Office of Planning and Research, *Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through CEQA Review*. Available at https://www.opr.ca.gov/docs/june08-ceqa.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒

VIII a) **No Impact:** The Project would not increase the amount of air traffic using VNY beyond that which has already been considered in the VNY Plan. Therefore, the Project would not increase the quantity of hazardous materials expended at the airport due to net increase in fuel capacity and would not alter existing procedures associated with the routine transport, use, or disposal of hazardous materials. The activities and storage within the proposed use would not represent new usage or storage of hazardous materials. The Project would not result in an increase in the amount of fuel being stored at the fuel farm and the fueling procedures would continue to be in compliance with APSA regulations and the site SPCC Plan[34].

Construction activities would involve the use of hazardous materials such as solvents, cleaning materials, maintenance products, fuels, etc. The construction would be short-term and conducted in accordance with mandatory federal, state, and local hazardous materials and waste regulations including, but not limited to, Resource Conservation and Recovery Act (RCRA) hazardous waste management requirements, California Environmental Protection Agency (EPA)/Department of Toxic Substances (DTSC) hazardous waste management requirements, CalRecycle solid waste management requirements, California EPA Certified Unified Program Agency (CUPA) regulations for the management of hazardous materials, County Hazardous Materials Business Plans, and City of Los Angeles Fire Department. Therefore, the Project would have no impact.

VIII b) **No Impact:** The Project would not increase the amount of air traffic using VNY beyond that which has already been considered in the VNY Plan. Therefore, the Project would not increase the quantity of hazardous materials expended at the airport and would not alter existing procedures associated with the routine transport, use, or disposal of hazardous materials. The activities and storage within the proposed use would not represent new usage or storage of hazardous materials. The Project would not result in an increase in the amount of fuel being stored at the fuel farm and the fueling procedures would continue to be in compliance with APSA regulations and the site SPCC Plan.

Compliance with mandatory regulations such as APSA for the management of fuels and petroleum, RCRA for the management of hazardous waste, California EPA CUPA regulations for the management of hazardous materials, Hazardous Materials Business Plan requirements, and the fire/building code requirements would ensure that the Project would involve the safe usage and storage of hazardous materials. Therefore, the Project does not represent a new significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials. The Project would have no impact.

VIII c) **No Impact**: The Project is not located within 1/4 mile of a school. The Project would have no impact.

VIII d) **No Impact**: The Project is not located on a site which is included on the California DTSC list of hazardous waste and substances sites (Cortese List[35]). A Phase II ESA was conducted by Brown and Caldwell and identified elevated concentrations of Freon 113 and tetrachloroethylene in soil vapor beneath the proposed location of the FBO hangar but no contaminated soil in the areas where construction would take place[36]. A soil management plan is being developed for construction of the hangars to address the soil conditions, and all construction activities will include the necessary precautions to protect the health and safety of workers. The Project would have no impact.

VIII e) **Less than Significant:** The Project is located within VNY and included in the VNY Plan. The Project is a tenant improvement project which would upgrade the outdated airport support facility and would not increase the amount of aircraft traffic, fuel, or hazardous materials at the airport. The Project operations would comply with FAA, VNY, and Occupational Safety and Health Administration health and safety requirements. The Project would not represent an increase in hazards on nearby residents or workers at the site. Therefore, the Project would have a less than significant impact.

VIII f) **No Impact**: The Project is not located in proximity to a private air strip. The Project would have no impact.

VIII g) **Less than Significant:** The Project is located within VNY and included in the VNY Plan. The Project is a tenant improvement project which would upgrade the previous airport support facility and would not increase the amount of aircraft traffic at the airport or off-site vehicle traffic. The Project would not include any activities that would impair emergency response or evacuation.

The Project would be compliant with the applicable VNY "Q" Conditions which address emergency procedures and access including compliance with the Department of Public Works and Los Angeles Fire Department requirements for

[34] Madison Environmental Group, Inc., *Spill Prevention, Control, and Countermeasure (SPCC) Plan*, October 2016.

[35] California Department of Toxic Substances Control, *Cortese List*. Available at http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed: August 2017.

[36] Brown and Caldwell, *Summary of Findings from Limited Phase II Environmental Site Assessment*, August 16, 2017.

	access road and fire lane maintenance. Therefore, the Project would have a less than significant impact.
VIII h)	**No Impact:** As shown on Exhibit D of the Los Angeles General Plan Safety Element, the Project site is not located within a wildfire hazard area[37]. The Project would have no impact.

[37] City of Los Angeles, *General Plan Safety Element Exhibit D.* Available at https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
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)?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
IX a) Less than Significant: Because more than 1 acre of land would be disturbed during the construction phase of the Project, a NOI would be submitted to the SWRCB for required coverage under the General Construction Storm Water Permit for Discharges of Storm Water[38]. The permit requires that the applicant prepares and implements a Stormwater Pollution Prevention Plan (SWPPP) with BMPs to ensure that water quality violations do not occur.				

[38] California State Water Resources Control Board, *General Construction Storm Water Permit for Discharges of Storm Water Associated with Construction Activities.* Available at http://www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml#contruction. Accessed: August 2017.

VNY has prepared a SWPPP which complies with California's General Permit for Storm Water Discharges Associated with Industrial Activities Order No. 2014-0057-DWQ (General Permit)[39]. The tenants of VNY are required to comply with this SWPPP. The Project site is included in the VNY SWPPP and all operations at the site would be required to comply with the General Permit as well as the BMPs identified in the SWPPP. Based on the above, the Project would have a less than significant impact on water quality.

According to the Los Angeles County Department of Public Works, there are three active and two inactive groundwater wells within a 1-mile radius of the VNY[40]. According to the State Groundwater Information Center, the Project area is located within the San Fernando Valley Groundwater Basin (Basin ID 4-012)[41].

IX b) **No Impact:** The Project would not involve groundwater withdrawal and would not result in an increase in the permanent on-site impervious surface areas. Therefore, groundwater supply or recharge would not be impacted. The Project would have no impact.

IX c) Less than Significant: The Project would not increase the amount of impervious surface area nor would the Project alter the course of a stream or river (there are no water bodies on the Project site).

The Project is located within the existing, highly impervious, VNY airport facility. The Project will not increase the overall impervious area within the VNY. Therefore, the watershed condition will not be altered such that increased stormwater runoff will be generated from the Project. In addition, the Project would be conducted in accordance with the site construction and VNY Light Industrial SWPPPs. During construction, proper erosion and sediment control measures would be in place to manage stormwater runoff from the Project. Therefore, the Project would have a less than significant impact.

IX d) Less than Significant: The Project site is a paved area that drains into existing stormwater facilities. There are no water bodies (streams or rivers) on the Project site. The Project would not increase the amount of impervious surface area nor significantly change the drainage at the site. Surface run-on and run-off would be managed by the implementation of BMPs identified in the SWPPPs for construction and industrial activities as discussed above in IX(a). Therefore, the Project would have a less than significant impact.

IX e) Less than Significant: The Project site is a paved area that drains into existing stormwater facilities. There are no water bodies (streams or rivers) on the Project site. The Project would not increase the amount of impervious surface area nor significantly change the drainage at the site. Surface run-on and run-off would be managed by the implementation of BMPs identified in the SWPPPs for construction and industrial activities as discussed above in IX(a). Therefore, the Project would have a less than significant impact.

IX f) No Impact: The Project site is a paved area that drains into existing storm water facilities. There are no water bodies (streams or rivers) on the Project site. The Project would not increase the amount of impervious surface area nor significantly change the drainage at the site. Surface run-on and run-off would be managed by the implementation of BMPs identified in the SWPPPs for construction and industrial activities as discussed above in IX(a). Therefore, the Project would have a less than significant impact.

IX g) No Impact: The Project does not include the construction of housing and would not place housing within a flood plain. The Project would have no impacts.

IX h) No Impact: The Project is not considered to be located within an area of potential flooding. VNY is located within the Federal Emergency Management Agency designated Flood Zone X, which is defined as an area of "minimal flooding." The Project is located outside of a Special Flood Hazard Area and outside of the 100-year flood plain area associated with Bull Creek, 679 feet to the west of the Project site. The Project would have no impacts.

IX i) Less than Significant: The Project site, as is VNY, is located with a potential inundation area as identified on Exhibit G of the City of Los Angeles General Plan Safety Element[42]. The Project site is located approximately 2.5 miles north of the Encino Reservoir and approximately 5 miles south of the Los Angeles Reservoir. Therefore, the Project site may be inundated in the unforeseen occurrence of a dam failure. There are no other dams or levee in the Project area. Due to the distance to these two reservoirs, it is considered unlikely that a dam failure would result in significant flooding on the Project site such that there would not be a significant risk of loss, injury, or death to people or structures on the site. Therefore, there would be a less than significant impact.

IX j) No Impact: The Project is not located near any water bodies large enough to pose a risk due to inundation by a sieche. The Project site is approximately 10 miles for the Pacific Ocean and is separated by the Santa Monica Mountains. Therefore, inundation by a tsunami is not feasible. The terrain in the vicinity of the Project is flat preventing inundation by mudslide. The Project would have no impacts.

[39] California State Water Resources Control Board, *General Storm Water Permit for Storm Water Discharges Associated with Industrial Activities Order No. 2014-0057-DWQ.* Available at

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

X a) No Impact: The Project is located within VNY and in an area zoned for Light Industry. The Project would be replacing an airport support facility with updated structures and would not create new structures that could physically divide the community. The Project would have no Impact.

X b) No Impact: The Project is located within VNY in an area designated as an Aviation Area by the VNY Plan. The Project would be replacing an airport support facility with updated structures and landscaping. The Project would not require a change in land use and would remain consistent with the existing land use at the site and surrounding airport support facilities. The Project would not alter existing land use compatibility with the surrounding communities. The Project would be consistent with the VNY Plan. Due to the similar size and function of the Project with the previous tenant's facility, the Project would not create a significant change in off-site traffic. The Project would be in compliance with the applicable VNY "Q" Conditions (provided in Attachment B).

Because the Project would not involve alterations to the existing land use, the implementation of the Project would not conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the Project. The Project would have no impact.

X c) No Impact: The Project is not located within a habitat conservation plan or natural community conservation plan. It is located within VNY and would be replacing an outdated airport support facility with upgraded structures. The Project would not conflict with any applicable plans. The Project would have no impact.

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0057_dwq_rev_mar2015.pdf. Accessed: August 2017.

[40] Los Angeles County Department of Public Works, *Wells Search Map*. Available at http://dpw.lacounty.gov/general/wells/. Accessed: August 2017.

[41] California Department of Water Resources, *Groundwater Information Center*. Available at http://www.water.ca.gov/groundwater/gwinfo/index.cfm. Accessed: August 2017.

[42] City of Los Angeles, *General Plan Safety Element Exhibit G.* Available at https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

XI a) No Impact: The Project is not located in a Mineral Resource Zone (MRZ) as identified by the California Department of Conservation.[43] Therefore, the Project would not result in the loss of availability of a mineral resource that would be of value to the region and the residents of the State. The Project would have no impact.)

XI b) No Impact: The Project is not located in a MRZ as identified by the California Department of Conservation.[44] Therefore, the Project would not result in the loss of availability of a mineral resource that would be of value to the region and the residents of the State. The Project would have no impact.

[43] California Department of Conservation, *Mineral Resource Mapping*. Available at http://www.conservation.ca.gov/cgs/geologic_resources/mineral_resource_mapping/Pages/Index.aspx. Accessed: August 2017.

[44] California Department of Conservation, *Mineral Resource Mapping*. Available at http://www.conservation.ca.gov/cgs/geologic_resources/mineral_resource_mapping/Pages/Index.aspx. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE Would the project result in:				
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

XII a) **Less than Significant:** The Project would involve the construction and operation of an airport support facility within VNY. The existing airport operates 24 hours a day, 365 days a year, which generates high levels of ambient noise. The Project would be replacing an existing airport support facility that provides similar services. The Project is located within an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport. The closest residence is approximately 0.3 miles away from the site.

Construction: Construction activities would comply with the Los Angeles Noise Ordinance[45], as well as the applicable VNY "Q" Conditions (Attachment B). Compliance with these requirements include restrictions such as limits to the hours of construction (no activities between 9 p.m. and 7 a.m.), truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m., the requirements to muffle and shield intakes and exhausts, shroud and shield impact tools, and the use of electric-powered rather than diesel powered equipment, as feasible. Prior to the issuance of the building permit, the applicant is required to submit a Building Plan to the Department of Building and Safety and to the Department of Airports. The approved plan will identify the specific requirements.

Due to the temporary nature (15 to 16 months) of the construction activities, combined with the fact that only three structures (the FBO and MRO hangars and FBO terminal) are being constructed (approximately 132,844 sf total), there would only be minor traffic-related noise during this phase. Construction-related traffic would be made up of prefabricated building materials, supply delivery, and worker traffic and as required by the applicable VNY "Q" Conditions, truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m. The potential noise related impacts during construction would be less than significant.

Operations: The Project would be replacing an outdated airport support facility and would not induce additional operations at VNY. Therefore, the Project would be consistent with the VNY Plan and would not result in an increase in noise levels.

The airport operates 24 hours a day, 365 days a year, which in itself generates high levels of ambient noise. The Project is located in an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport.

The Project would result in a 74 percent reduction in the number of aircraft being serviced at the facility. This would decrease the amount of noise from the previous facility because there would be significantly fewer aircraft flying in and out of the site. In addition, 83 percent of the aircraft that would be serviced at the Project site would be larger

[45] Los Angeles Police Department, *Los Angeles Municipal Code 41.40 Construction Noise*. Available at http://www.lapdonline.org/special_operations_support_division/content_basic_view/1031. Accessed: August 2017.

business jets. It is reasonable to assume that modern business jets would have a higher percentage of aircraft that have FAA Stage 4 noise certifications than the smaller aircraft that have been serviced at the existing facility. Approximately 83 percent of the aircraft serviced at the existing facility are small to mid-size aircraft.

As discussed in the Project Description, FAA Stage 4 Noise Standards are 10 EPNdB less than the requirements for Stage 3 engines (14 CFR Part 36 – Aircraft Certification Stages).[46] The Project would have a less than significant impact.

XII b) **Less than Significant:** As described above in XII (a, c, d), the Project would be replacing an outdated airport support facility and is located within VNY in an industrial area. The closest residence is over 1/4-mile away. The operations of the Project would not result in a change to the existing level of groundbourne vibrations associated with the airport activities. The construction phase of the Project would be temporary (approximately 15 to 16 months). There would be a less than significant impact associated with vibration and groundborne noise.

XII c) **Less than Significant:** The Project would involve the construction and operation of an airport support facility within VNY. The existing airport operates 24 hours a day, 365 days a year, which generates high levels of ambient noise. The Project would be replacing an existing airport support facility that provides similar services. The Project is located within an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport. The closest residence is approximately 0.3 miles away from the site.

Construction: Construction activities would comply with the Los Angeles Noise Ordinance[47], as well as the applicable VNY "Q" Conditions (Attachment B). Compliance with these requirements include restrictions such as limits to the hours of construction (no activities between 9 p.m. and 7 a.m.), truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m., the requirements to muffle and shield intakes and exhausts, shroud and shield impact tools, and the use of electric-powered rather than diesel powered equipment, as feasible. Prior to the issuance of the building permit, the applicant is required to submit a Building Plan to the Department of Building and Safety and to the Department of Airports. The approved plan will identify the specific requirements.

Due to the temporary nature (15 to 16 months) of the construction activities, combined with the fact that only three structures (the FBO and MRO hangars and FBO terminal) are being constructed (approximately 132,844 sf total), there would only be minor traffic-related noise during this phase. Construction-related traffic would be made up of prefabricated building materials, supply delivery, and worker traffic and, as required by the applicable VNY "Q" Conditions, truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m. The potential noise related impacts during construction would be less than significant.

Operations: The Project would be replacing an outdated airport support facility and would not induce additional operations at VNY. Therefore, the Project would be consistent with the VNY Plan and would not result in an increase in noise levels.

The airport operates 24 hours a day, 365 days a year, which in itself generates high levels of ambient noise. The Project is located in an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport.

The Project would result in a 74 percent reduction in the number of aircraft being serviced at the facility. This would decrease the amount of noise from the previous facility because there would be significantly fewer aircraft flying in and out of the site. In addition, 83 percent of the aircraft that would be serviced at the Project site would be larger business jets. It is reasonable to assume that modern business jets would have a higher percentage of aircraft that have FAA Stage 4 noise certifications than the smaller aircraft that have been serviced at the existing facility. Approximately 83 percent of the aircraft serviced at the existing facility are small to mid-size aircraft.

As discussed in the Project Description, FAA Stage 4 Noise Standards are 10 EPNdB less than the requirements for Stage 3 engines (14 CFR Part 36 – Aircraft Certification Stages).[48] The Project would have a less than significant impact.

[46] Harris Miler Miller & Hanson, Inc., *Overview of Part 36 Aircraft Certification Stages*. Available at https://www.lawa.org/uploadedFiles/lax/noise/presentation/noiseRT_090408_Part%2036%20Aircraft%20Noise%20Certification%20Stages.pdf. Accessed: August 2017.

[47] Los Angeles Police Department, *Los Angeles Municipal Code 41.40 Construction Noise*. Available at http://www.lapdonline.org/special_operations_support_division/content_basic_view/1031. Accessed: August 2017.

[48] Harris Miler Miller & Hanson, Inc., *Overview of Part 36 Aircraft Certification Stages*. Available at https://www.lawa.org/uploadedFiles/lax/noise/presentation/noiseRT_090408_Part%2036%20Aircraft%20Noise%20Certification%20Stages.pdf. Accessed: August 2017.

XII d) **Less than Significant:** The Project would involve the construction and operation of an airport support facility within VNY. The existing airport operates 24 hours a day, 365 days a year, which generates high levels of ambient noise. The Project would be replacing an existing airport support facility that provides similar services. The Project is located within an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport. The closest residence is approximately 0.3 miles away from the site.

Construction: Construction activities would comply with the Los Angeles Noise Ordinance[49], as well as the applicable VNY "Q" Conditions (Attachment B). Compliance with these requirements include restrictions such as limits to the hours of construction (no activities between 9 p.m. and 7 a.m.), truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m., the requirements to muffle and shield intakes and exhausts, shroud and shield impact tools, and the use of electric-powered rather than diesel powered equipment, as feasible. Prior to the issuance of the building permit, the applicant is required to submit a Building Plan to the Department of Building and Safety and to the Department of Airports. The approved plan will identify the specific requirements.

Due to the temporary nature (15 to 16 months) of the construction activities, combined with the fact that only three structures (the FBO and MRO hangars and FBO terminal) are being constructed (approximately 132,844 sf total), there would only be minor traffic-related noise during this phase. Construction-related traffic would be made up of prefabricated building materials, supply delivery, and worker traffic and, as required by the applicable VNY "Q" Conditions, truck deliveries and trash pickup is prohibited between the hours of 7 p.m. and 7 a.m. The potential noise related impacts during construction would be less than significant.

Operations: The Project would be replacing an outdated airport support facility and would not induce additional operations at VNY. Therefore, the Project would be consistent with the VNY Plan and would not result in an increase in noise levels.

The airport operates 24 hours a day, 365 days a year, which in itself generates high levels of ambient noise. The Project is located in an area zoned for light industry which is highly developed. The noise generated from the Project would be consistent with the other business located within and around the airport.

The Project would result in a 74 percent reduction in the number of aircraft being serviced at the facility. This would decrease the amount of noise from the previous facility because there would be significantly fewer aircraft flying in and out of the site. In addition, 83 percent of the aircraft that would be serviced at the Project site would be larger business jets. It is reasonable to assume that modern business jets would have a higher percentage of aircraft that have FAA Stage 4 noise certifications than the smaller aircraft that have been serviced at the existing facility. Approximately 83 percent of the aircraft serviced at the existing facility are small to mid-size aircraft.

As discussed in the Project Description, FAA Stage 4 Noise Standards are 10 EPNdB less than the requirements for Stage 3 engines (14 CFR Part 36 – Aircraft Certification Stages).[50] The Project would have a less than significant impact.

XII e) **Less than Significant:** The Project site is located within VNY and subject to the Airport Plan. As described above in XII (a, c, d), the Project would not induce additional operations at VNY and would, therefore, not increase noise levels from the baseline levels. The construction of the Project would be temporary (approximately 15 to 16 months) and the closest residence is over 1/4-mile away. The Project would have a less than significant impact.

XII f) **No Impact:** The Project is located within a public use airport and is not located within the vicinity of a private airstrip. The Project would have no impact.

[49] Los Angeles Police Department, *Los Angeles Municipal Code 41.40 Construction Noise*. Available at http://www.lapdonline.org/special_operations_support_division/content_basic_view/1031. Accessed: August 2017.

[50] Harris Miler Miller & Hanson, Inc., *Overview of Part 36 Aircraft Certification Stages*. Available at https://www.lawa.org/uploadedFiles/lax/noise/presentation/noiseRT_090408_Part%2036%20Aircraft%20Noise%20Certification%20Stages.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING Would the 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

XIII a) **No Impact:** The Project would not induce substantial population growth in the area either directly or indirectly because there is no residential component of the Project, nor would it result in extensions to roads or infrastructure. Therefore, there would be no impact.

XIII b) **No Impact:** The Project would not displace existing housing or existing residents necessitating the construction of replacement housing. There would be no impact.

XIII c) **No Impact**: The Project would not displace existing housing or existing residents necessitating the construction of replacement housing. There would be no impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) 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, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

XIV a) The Project would not result substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, or hinder acceptable service ratios, response times or other performance objectives for any of the public services including fire and police protection, schools, parks or other facilities because the Project would not change the existing airport operation. Therefore, there would be no impacts.

Fire Protection: **No Impact.** The Project is located within VNY and fire services are provided by Fire Station 114. The Project would not induce additional operations at the airport that could require a change in anticipated emergency services. The Project structures would result in a decrease of the overall square footage of commercial floor area and equivalent amount of fuel storage compared to the existing condition. The buildings would have fire alarms, fire extinguishers, fire sprinklers and/or foam fire suppression systems. Water USTs would be built along the south side of the FBO hangar to provide sufficient water pressure for the fire suppression systems. There would be no impact on fire protection services.

Police Protection: **Less than Significant.** The Project is located within VNY and police services are provided by the Los Angeles Airport Police Division. The Project would not induce additional operations at VNY that could require a change in anticipated emergency services. The Project would be replacing an outdated airport support facility with new upgraded structures and services. There would be an increase in the number of employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). Because there would be additional employees at the site, there could be a less than significant impact on police protection.

Schools: **No Impact.** The Project would be replacing an existing airport support facility with new upgraded structures and services. The Project would not include any new residential developments or the conversion of any existing residential zoning, nor would the Project result in the displacement of individuals that would cause population shifts nor changes is school capacity demands. There would be an increase of 130 employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). Therefore, this would not create new demands on schools; i.e., there would be no impact.

Parks: **No Impact.** The Project would be replacing an outdated airport support facility with new upgraded structures and services. There would be an increase of 130 employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). Therefore, this would not create new demands on parks; i.e., there would be no impact.

Other Public Facilities: **No Impact.** The Project would not induce additional operations at the airport that could require a change in anticipated public services. The Project would be replacing an outdated airport support facility with new upgraded structures and services. There would be an increase of 130 employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). Therefore, this would not create new demands on other public facilities. There would be no impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

XV a) **No Impact:** The Project is located within VNY and would be replacing an outdated airport support facility with new upgraded structures and services. The Project would not include any new residential developments. There would be an increase of 130 employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). This, would not create new demands on neighborhood and regional parks. The Project would not result in an increase demand for recreational facilities such that substantial deterioration of the facility would occur. There would be no impact.

XV b) **No Impact:** The Project is located within VNY and would be replacing an outdated airport support facility with new upgraded structures and services. The Project would not include any new residential developments or recreational facilities. There would be an increase of 130 employees working at the facility to operate the MRO hangar. These employees would be working in rotating shifts (approximately 85 per shift). Therefore, this would not create new demands on recreational facilities. The Project would not include recreational facilities nor would it require the construction of recreational facilities which might have an adverse physical effect on the environment. There would be no impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC Would the project:				
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
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?	☐	☐	☐	☒

XVI a) **Less than Significant:** The Project is located within VNY and would be replacing an outdated airport support facility with new upgraded structures and services.

Jet would employ 20 to 30 full time people to operate and/or manage the FBO terminal and FBO hangar. Employees would work on rotating shifts to staff the FBO terminal 24 hours a day. Gulfstream Aerospace Corporation (GAC) would require approximately 130 additional employees working on rotating shifts to operate the MRO hangar. MRO operations would consist of two shifts, morning and afternoon, with approximately 85 employees on each shift. The shift changes for both Jet and GAC employees would be scheduled in non-peak traffic hours. This is consistent with the applicable VNY "Q" Conditions No. 27 (Attachment B) which encourages the reduction of vehicle trips during the most congested periods and spread them throughout the day by introducing staggered work hours.

The number of employees to operate and/or manage the terminal and FBO hangar (20 to 30) would not change from the previous tenant's terminal and hangar operations. The operation of the MRO hangar would result in an increase in the number of employees at the facility. The 74 percent reduction in the number of aircraft (decreased from 115 to 30 aircraft) would result in a decrease in the number of customers accessing the facility.

New vehicles would not be added to the circulation system.

Section L.1.C of the City of Los Angeles CEQA Threshold Guide[51] provides a screening method for determining potential impacts to traffic and the circulation system. The criteria states:

> "Would the proposed project generate and/or cause a diversion or shift of 500 or more daily trips or 43 or more p.m. peak hour vehicle trips on the street system? ... A no response to the preceding question indicates that there would be no significant intersection capacity impact from the proposed project."

[51] City of Los Angeles, *L.A. CEQA Thresholds Guide*. Available at http://www.environmentla.org/programs/Thresholds/Complete%20Threshold%20Guide%202006.pdf. Accessed: August 2017.

As discussed above, the Project would not generate 500 or more daily trips or 43 or more p.m. peak hour trips on the street system because the shift changes would be scheduled during non-peak traffic hours.

The Project would not result in a change in the required fuel capacity at the fuel farm; therefore, there would not be an increase in off-site fuel delivery trucks.

The construction phase of the Project would be small scale and short term, approximately 15 to 16 months. Construction vehicle trips would consist of delivery trucks, and construction worker commuting trips. The Project would be compliant with the applicable VNY "Q" Conditions for transportation (provided in Attachment B) which require that truck deliveries and trash pickup be prohibited between the hours of 7 p.m. and 7 a.m. as well as other traffic related conditions. There may be a temporary change in the type and number of off-site vehicles during the construction phase but the increase in vehicles would be below the screening criteria discussed above. Therefore, construction traffic would not result in a significant impact to the circulation system.

The Project would be consistent with the City of Los Angeles CEQA transportation guidelines. The Project would have less than significant impacts to the circulation system or congestion on the highways and freeways in the area.

XVI b) **Less than Significant:** The Project is located within VNY and would be replacing an outdated airport support facility with new upgraded structures and services.

Jet would employ 20 to 30 full time people to operate and/or manage the FBO terminal and FBO hangar. Employees would work on rotating shifts to staff the FBO terminal 24 hours a day. GAC would require approximately 130 additional employees working on rotating shifts to operate the MRO hangar. MRO operations would consist of two shifts, morning and afternoon, with approximately 85 employees on each shift. The shift changes for both Jet and GAC employees would be scheduled in non-peak traffic hours. This is consistent with the applicable VNY "Q" Conditions No. 27 (Attachment B) which encourages the reduction of vehicle trips during the most congested periods and spread them throughout the day by introducing staggered work hours.

The number of employees to operate and/or manage the terminal and FBO hangar (20 to 30) would not change from the previous tenant's terminal and hangar operations. The operation of the MRO hangar would result in an increase in the number of employees at the facility. The 74 percent reduction in the number of aircraft (decreased from 115 to 30 aircraft) would result in a decrease in the number of customers accessing the facility.

New vehicles would not be added to the circulation system.

Section L.1.C of the City of Los Angeles CEQA Threshold Guide[52] provides a screening method for determining potential impacts to traffic and the circulation system. The criteria states:

> "Would the proposed project generate and/or cause a diversion or shift of 500 or more daily trips or 43 or more p.m. peak hour vehicle trips on the street system? ... A no response to the preceding question indicates that there would be no significant intersection capacity impact from the proposed project."

As discussed above, the Project would not generate 500 or more daily trips or 43 or more p.m. peak hour trips on the street system because the shift changes would be scheduled during non-peak traffic hours.

The Project would not result in a change in the required fuel capacity at the fuel farm; therefore, there would not be an increase in off-site fuel delivery trucks.

The construction phase of the Project would be small scale and short term, approximately 15 to 16 months. Construction vehicle trips would consist of delivery trucks, and construction worker commuting trips. The Project would be compliant with the applicable VNY "Q" Conditions for transportation (provided in Attachment B) which require that truck deliveries and trash pickup be prohibited between the hours of 7 p.m. and 7 a.m. as well as other traffic related conditions. There may be a temporary change in the type and number of off-site vehicles during the construction phase but the increase in vehicles would be below the screening criteria discussed above. Therefore, construction traffic would not result in a significant impact to the circulation system.

The Project would be consistent with the City of Los Angeles CEQA transportation guidelines. The Project would have less than significant impacts to the circulation system or congestion on the highways and freeways in the area.

[52] City of Los Angeles, *L.A. CEQA Thresholds Guide*. Available at http://www.environmentla.org/programs/Thresholds/Complete%20Threshold%20Guide%202006.pdf. Accessed: August 2017.

XVI c) **Less than Significant:** The Project is located within an existing operating airport and would not induce additional operations beyond what is allowed by the VNY Plan. There would be a less than significant impact.

XVI d) **No Impact**: The Project is located within VNY. The Project does not involve any road improvements or design features that could substantially increase hazards on public roads. Therefore, there would be no impact.

XVI e) **No Impact**: Activities associated with the Project would not impede existing emergency response plans for the Project site and/or other land uses in the Project vicinity. The Project would not involve a significant increase in off-site traffic or the number of employees driving to the site that could create additional traffic and interfere with emergency response plans. Therefore, there would be no impacts.

XVI f) **No Impact**: Activities associated with the Project would not impede existing emergency response plans for the Project site and/or other land uses in the Project vicinity. As discussed above in XVI a), the Project would not involve a significant increase in off-site traffic or the number of employees driving to the site that could create additional traffic that would interfere with emergency response plans. Therefore, there would be no impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☐	☐	☒
b) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
c) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

XVII a) No Impact: The Project would not impact any tribal land or land of interest to tribes because the Project is not located within or adjacent to any tribal lands. The closest reservation to the Project is the San Manuel Reservation, located approximately 70 miles away to the east.[53] The Project would not disturb any lands that have not been previously disturbed; therefore, the potential of coming across a cultural resource located in the subsoil is slight.

In the unlikely event that human remains are discovered, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California NAHC must be contacted and the NAHC must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

The Project would have no impact on tribal cultural resources.

XVII b) No Impact: The Project site is not listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). The Project would have no impact on listed or eligible for listing historical resources.

XVII c) No Impact: The Lead Agency, LAWA, has notified tribal representatives regarding this project. If any cultural resources are found at the Project site, LAWA shall consider the significance of the resource to a California Native American tribe such that the Project would have no impact on tribal cultural resources.

[53] U.S. Census Bureau, *California Tribal Lands Map AIR1100040_3*. Available at https://www3.epa.gov/region9/air/maps/pdfs/air1100040_3.pdf. Accessed: August 2017.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. UTILITIES AND SERVICE SYSTEMS Would the project				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVIII a) **No Impact:** The Project would not treat wastewater; therefore, this is not applicable to the Project. There would be no impact.

XVIII b) **No Impact:** The Project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of facilities. There would be no impact.

XVIII c) **No Impact:** The Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. The Project would be compliant with site construction SWPPP and the VNY SWPPP. There would be no impact.

XVIII d) **No Impact:** The Project would not require new or expanded entitlements to obtain water. There would be no impact.

XVIII e) **No Impact:** The Project would not impact the ability of the wastewater treatment provider to meet its demand.

XVIII f) **No Impact:** The Project would be served by the same off-site Class 1/Class 2 municipal solid waste landfill that is currently providing service to the existing facility. The landfill is operated by Republic Services and is located at 129 Telegraph Road, Santa Fe Springs, CA. The landfill would have sufficient capacity. There would be no impact.

XVIII g) **No Impact:** The Project would comply with federal, state and local statutes and regulations regarding solid waste, including the LAGBC, which is based on CalGreen. There would be no impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

XIX a) **Less Than Significant Impact:** Based on the discussion above in Items I through XVII, no resource area has potentially significant impacts nor less than significant impacts with mitigation incorporated. The Project is located within VNY and would be replacing an outdated airport support facility with new upgraded structures and services and conforming current operations to meet these new facilities. There is no present habitat for fish, wildlife, or plant (rare or endangered) that depends on the VNY facility nor the Project site. None of the Project changes would alter the existing VNY airport such that the habitat or population structure of fish, wildlife or plants would be changed.

XIX b) **Less Than Significant Impact:** The Project is replacing an existing tenant airport support facility with similar but updated and environmentally superior support facilities and services. The Project would be consistent with the VNY Plan and would not require additional changes within the VNY or surrounding area in order to be constructed or operated. The Project would not increase offsite traffic above the City of Los Angeles CEQA Threshold Gide screening criteria. The Project would not result in a cumulatively considerable impact to air quality. The Project's construction period would be short term and it is not anticipated to overlap with any known projects in the area. Accordingly there are no known cumulative impacts that would occur in the vicinity of the Project. Therefore, this would be a less than significant impact.

XIX c) **Less Than Significant Impact:** Based on the discussion above in Items I through XVII, no resource area has potentially significant impacts nor less than significant impacts with mitigation incorporated. The Project is located within VNY and would be replacing an outdated airport support facility with similar but new upgraded structures and services and conforming current operations to meet these new facilities. Any impacts identified are minor and/or temporary and could be considered to directly or indirectly have substantial adverse effects on human beings.

Note: Authority cited: Sections 21083 and 21083.05, 21083.09 Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21073, 21074 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21080.3.1, 21080.3.2,21082.3, 21084.2, 21084.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino,*(1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors,* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

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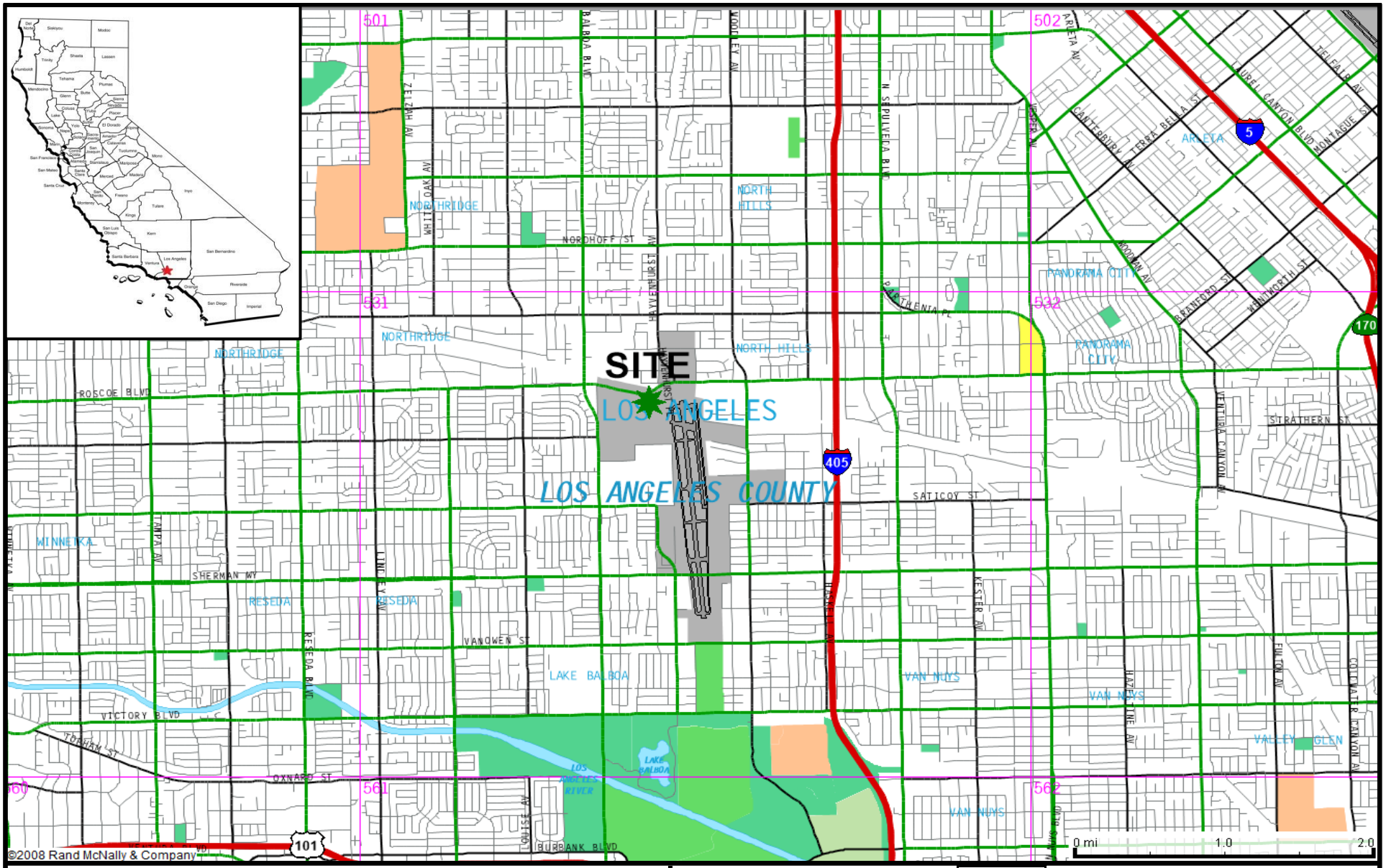
ATTACHMENT A

Figures



Source: 2008 Rand McNally & Company

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SESPE CONSULTING, INC.

FIGURE 1	PROJECT SITE LOCATION Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	6/26/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Jet Aviation

N

SESPE CONSULTING, INC.

FIGURE 2	PROPOSED PROJECT LAYOUT Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Jet Aviation

N

SESPE CONSULTING, INC.

FIGURE 3	PROJECT PERSPECTIVE VIEW Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Google Earth 2017

Proposed Project Boundaries

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SESPE CONSULTING, INC.

FIGURE 4	EXISTING FACILITY Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	7/31/17
SCALE:	as shown	DRAWN BY:	GPS

1

2

Source: Brown & Caldwell Phase 1 ESA 2017

PHOTOS

SESPE CONSULTING, INC.

FIGURE 5	EXISTING SITE PHOTOS 1 Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	7/31/17
SCALE:	N/A	DRAWN BY:	GPS

1

2

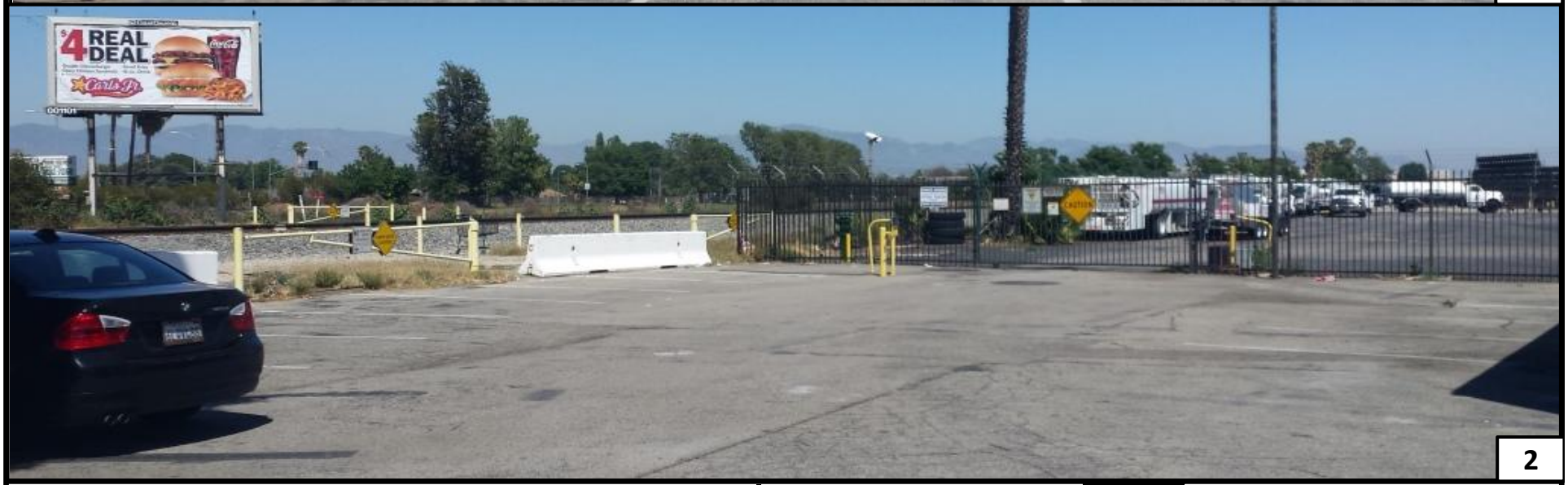
Source: Brown & Caldwell Phase 1 ESA 2017

PHOTOS

SESPE CONSULTING, INC.

FIGURE 6	EXISTING SITE PHOTOS 2 Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	7/31/17
SCALE:	N/A	DRAWN BY:	GPS

1



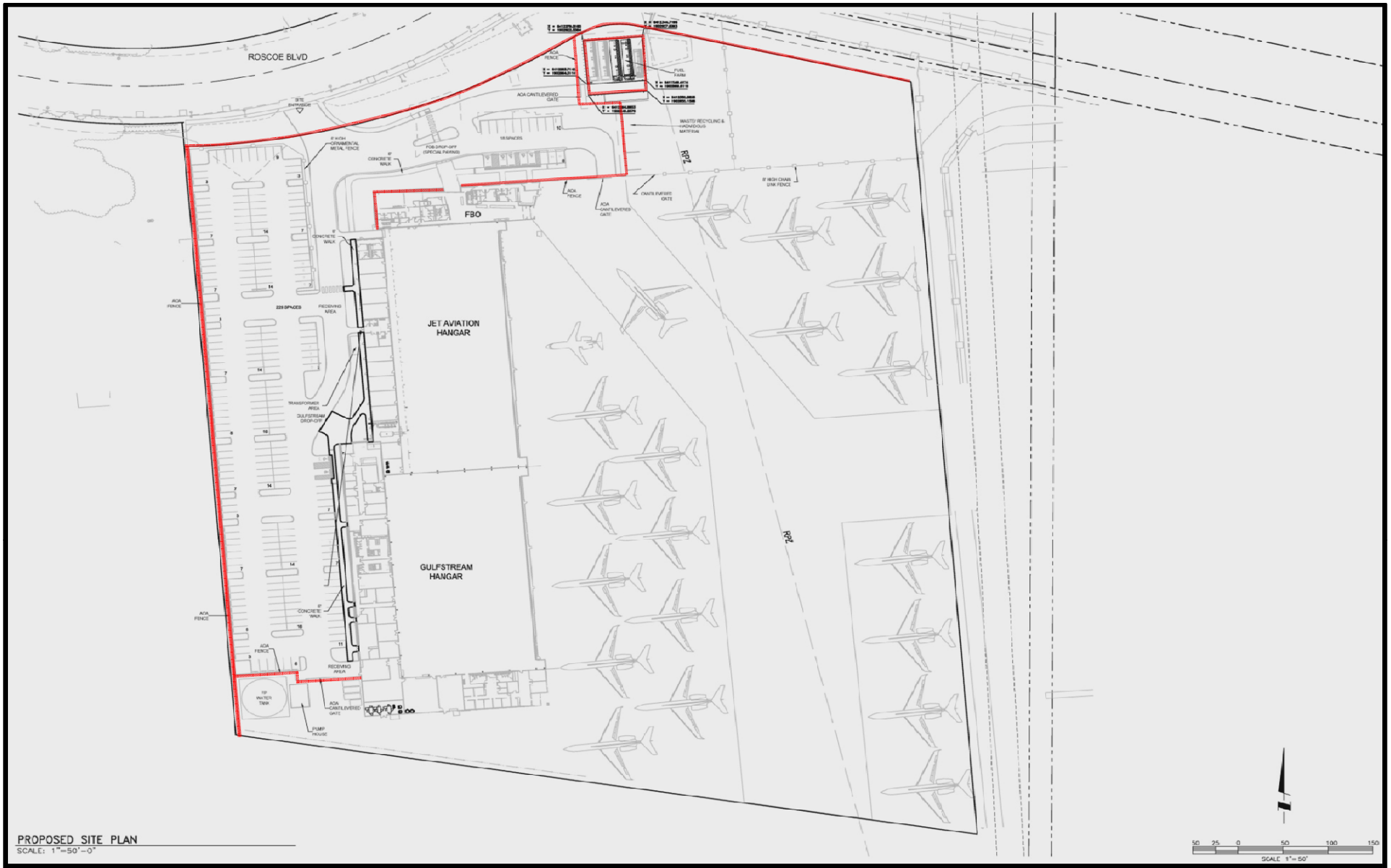
2

Source: Brown & Caldwell Phase 1 ESA 2017

PHOTOS

SESPE CONSULTING, INC.

FIGURE 7	EXISTING SITE PHOTOS 3 Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	7/31/17
SCALE:	N/A	DRAWN BY:	GPS



Source: Jet Aviation

AOA Fencing

N

SESPE CONSULTING, INC.

FIGURE 8	SITE PLAN Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

ATTACHMENT B

VNY “Q” Conditions

"Q" Conditions - Van Nuys Airport

Section 2. Pursuant to Section 12.32G.3 of the Los Angeles Municipal Code and any future amendment thereto, the following limitations are hereby imposed upon the use of the land within Van Nuys Airport which are subject to the Permanent (Q) Qualified classification. In times of national emergency or war, any or all of Van Nuys Airport may be used by the United States armed forces.

Plot Plan Approval

1. No building permit shall be issued for any structure exceeding 10,000 sq.ft. in floor area, unless a complete and detailed plot plan indicating the exterior boundaries of the property, the location of all buildings, driveways, service roads, maintenance areas, access ways, parkway areas, taxiways, enclosing fixtures, landscaping, etc. has been reviewed and approved by the Director of Planning. The Director's approval may include conditions pursuant to Section 12.24.F of the Zone Code to protect the public health, safety and welfare of the surrounding property and/or neighborhood; to ensure that the structure is compatible with the surrounding properties or neighborhood or to lessen or prevent any detrimental effects upon the surrounding properties or neighborhood or to secure appropriate development in harmony with the objectives of the General Plan. The report shall incorporate any conditions recommended by the Department of Transportation. In preparing the conditions, the Director of Planning or the Director's designee shall also consider the comments received from the Van Nuys Airport Citizens Advisory Council.

   The above requirement for a plot plan approval shall not apply to:

   A. The rebuilding or replacement of a structure damaged as a result of fire, earthquake, or other natural disaster provided that the replacement structure is essentially the same to the previous structure with no increase in height, floor area and entryway size and the development is not prohibited by any provision of the Los Angeles Municipal Code.

   B. Routine maintenance and upgrade of Los Angeles World Airport facilities.

   C. Construction of a maintenance yard for Van Nuys Airport.

   D. Air operations support facilities for public safety agencies.

   An application for a plot plan approval shall be made on the Planning Department's master application form and shall be accompanied by two site plan maps, two floor plan maps, two maps showing building elevations and a description of the project. The application fee shall be the same as the fee for miscellaneous plan approvals in Sec. 19.01.I of the Zone Code.

   Prior to the review and decision by the Director of Planning, the Department of Transportation shall review all applications for a plot plan approval and recommend to the Director of Planning one or more of the environmental conditions that will reduce the traffic impacts of the project to a level of insignificance. Alternatively, the Department of Transportation may recommend to the Director of Planning that the project pay a percentage of the total cost of undertaking the mitigations of transportation impacts specified in the environmental conditions. Concurrent with the review and recommendations by the Department of Transportation, the plot plan application shall also be submitted to the Bureau of Engineering and the Van Nuys Airport Citizen Advisory Council to allow the Council to review and comment on the application. The Citizen Advisory Council must submit its comments to the Director of Planning no later than 60 days after the date the application for a plot plan approval is deemed complete.

   In order for a plot plan to be approved, the Director of Planning shall make the following findings:

A. The plot plan is consistent with the applicable land use designation of the Van Nuys Airport Master Plan in Conditions 2-11 and the policies in the Master Plan Text, and

B. The plot plan is consistent with the development standards in Conditions 12-19, and

C. The plot plan is consistent with the noise control standards in Conditions 20-21, and

D. The plot plan is consistent with the environmental mitigation requirements in Conditions 22-103, and

E. The plot plan is subject to such conditions as the Director and/or the Area Commission appeal find necessary to protect the best interests of the surrounding residential community and has been reviewed by the Department of Transportation and by the Van Nuys Airport Citizen Advisory Council.

Projects for which a variance has been granted shall be exempt from findings B and C for the provision affected by the variance. The action may be appealed to the Area Planning Commission pursuant to the procedures in Section 11.5.7.C.6 of the Zone Code. All appeals must be filed within 15 days after the action of the Planning Commission. The fee for an appeal shall be as specified in Section 19.01B of the Zone Code.

Conditions for the Numbered Areas on the Map for This Section:

2. Area 1 - Runway/Taxiway Area. Uses are limited to runways, taxiways, open areas in between the runways and taxiways together with navigation aids. Assemblage of people, structures or aircraft storage is prohibited. Obstructions, including trees over 15 feet, fences or walls over eight feet, poles and non-frangible lights and billboards, are prohibited.

3. Area 2 - Approach Area and Runway Protection Zone on the Airport. These areas adjacent to the Aircraft movement areas protect ascending and descending aircraft from obstructions and provide for safe aircraft movement. Approach Areas are restricted to recreational, agricultural, and associated commercial activities including unenclosed storage uses that do not create hazards for landing or taking-off aircraft. These areas are restricted to non-intensive uses that allow a maximum concentration of 10 persons per acre. Low profile landscaping, sod or hardscape surfaces limited to one-story structures are allowed. The storage, handling, or use of more than 100 gallons of flammable liquids per acre, toxic materials or explosives is prohibited. Also prohibited are any use which would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following take-off or toward an aircraft engaged in a final approach toward landing at an airport. The erection or growth or objects which rise above an approach surface is prohibited unless supported by evidence that it does not create a safety hazard and is approved by the FAA. Uses which would attract large concentrations of birds, emit smoke, or which may otherwise affect safe air navigation are prohibited. Electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation is not allowed. All development must comply with the height restriction standards and procedures set forth in FAR Part 77.

4. Area 3 - Aviation Area. Uses are limited to hangers, aircraft tie down parking, aircraft ramp and maneuvering areas, aircraft maintenance and fueling facilities, flight training schools, military aviation functions, air tour, air taxi and other primary general aviation uses. Non-aviation uses are prohibited. Maximum concentration of people is limited to 60 persons per acre. Obstructions, including trees over 15 feet, fences or walls over eight feet, poles, non-frangible lights and billboards, are prohibited.

5. Area 4 - Special Aviation Area. Uses are limited to airport special events, non-jet aircraft basing and operations for city agency or disaster relief functions and a hush house. Obstructions, including trees

over 15 feet, fences and walls over eight feet, poles, non-frangible lights and billboards, are prohibited.

6. Area 5 - Aviation Area - Propeller Aircraft. Uses are limited to hangars, aircraft tie down parking, aircraft ramp and maneuvering areas, aircraft maintenance and fueling facilities and accessory uses for the exclusive use of propeller aircraft of less than 12,500 lbs gross take-off weight and military aircraft older than 1950 shall be permitted. Non-aviation uses are prohibited. Maximum concentration of people is limited to 60 persons per acre. Obstructions, including trees over 15 feet, fences or walls over eight feet, poles, non-frangible lights and billboards, are prohibited.

7. Area 6- Public Facility Area. Uses are limited to public uses which serve the airport and the surrounding community such as fire stations and schools for aviation-related instruction.

8. Area 7- Park/Observation Area. This area is limited to public viewing of airfield activity and public parking.

9. Area 8 - Aviation Related Area. Uses are limited to aircraft support or aircraft dependent functions, including Flyaway facilities with parking, aircraft engine maintenance, manufacturing or engine retrofitting, aircraft related accounting offices, aircraft cooperative management, aircraft classroom instruction, exhibits, research and development, aircraft parts recycling, wholesale industrial uses that primarily target aircraft users and other aviation related uses. Uses are limited to hangars, aircraft tie down parking, aircraft ramp and maneuvering areas, aircraft maintenance and fueling facilities and accessory uses for the exclusive use of propeller aircraft of less than 12,500 lbs gross take-off weight shall be permitted. A maximum concentration of people of no more than 100 persons per acre is permitted. Any use that would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations toward an aircraft or cause sunlight to reflect towards an aircraft or generate smoke or standing water that would attract birds or that would generate electrical interference is prohibited. Non-aviation uses are prohibited.

10. Area 9 - Airport Commercial. This category provides for activities located on airport sites that do not have direct airfield access. Permitted uses include but are not limited to: Flyaway facilities including a remote LAX terminal, hotels, car rental agencies, restaurants, offices and neighborhood retail. Aircraft tie down, hangers or other primary aviation uses are prohibited. Any use that would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations toward an aircraft or cause sunlight to reflect towards an aircraft or generate smoke or generate electrical interference is prohibited. Shopping centers are prohibited.

    A maximum concentration of people of no more than 100 persons per acre is permitted. Higher densities may be permitted for development if the Planning Commission finds, after receiving a report and recommendation from the Director of Planning, that such uses are compatible with adjoining land uses and do not impair public safety.

11. Area 10 - Airport Light Industrial. Permitted uses are limited to industrial uses that derive income from aircraft owners, tenants and visitors. Aircraft tie down, hangers or other primary aviation uses are prohibited. Any use that would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations toward an aircraft or cause sunlight to reflect towards an aircraft or generate smoke or that would generate electrical interference is prohibited.

    For development a concentration of people of less than 100 persons per acre is permitted. Higher densities may be permitted for new developments if the Planning Commission finds, after receiving a report and recommendation from the Director of Planning, that such uses are compatible with adjoining land uses and do not impair public safety.

Development Standards

12. For airport development that requires plot plan approval and has direct frontage on a public street, the subject frontage of such a designated street shall either conform or be brought into conformance in terms of: roadway widths, including curbs, gutters and parkways as shown on the Los Angeles City Standard Street Cross Sections.

13. The total floor area contained in all the main buildings on a lot shall not exceed the buildable area of the lot.

14. The use of corrugated metal is prohibited on all exterior walls visible from the street, except in the use for security windows or doors. Colors for all exterior walls shall be limited to earth tones or muted colors.

15. All rooftop mechanical equipment shall be fully enclosed. Prior to issuance of building permits, the project developer shall show on plans submitted for plan check, the location of mechanical rooftop equipment and the proposed height, location, size and material composition of mechanical screening that complies with City of Los Angeles Building & Safety Department standards.

16. Unless otherwise required by the FAA, fencing materials used shall consist of only beige slump stone block or black wrought iron.

17. All projects shall include a 10-foot front yard building setback and 5-foot side yard setbacks. All portions of the front and side yard setbacks not used for necessary driveways and walkways shall be landscaped. A minimum of one 24 inch boxed tree shall be provided for every 50 feet of frontage in the required front yard setback. Los Angeles World Airports shall approve a landscape plan prepared by a licensed landscape architect.

18. A minimum of one 24-inch box tree (minimum trunk diameter of 2 inches and a height of 8 feet at the time of planting) shall be planted for every 4 new surface automobile parking spaces required for public parking. The trees shall be species that discourage birds and shall be dispersed within the parking area so as to shade the surface parking and shall be protected by a minimum 6-inch high curb. Los Angeles World Airports shall approve an automatic irrigation plan.

19. Off-site signs (billboards), pole signs and projecting signs are prohibited. All other signs must be approved by Los Angeles World Airports based on sign standards approved by the Board of Airport Commissioners.

Environmental Conditions

Air Quality

20. Suspend use of all construction equipment operations during second stage smog alerts. Information regarding a predicted second stage smog alert shall be obtained by the Department of Airports and posted by Department staff on the project site at least twelve hours prior to the construction work day. A record shall be maintained by the Department and Developer regarding number of second stage smog incidents.

21. Wherever possible, employ use of alternative power sources to diesel for construction equipment. These may include electricity, methanol, natural gas, propane, or butane-powered equipment. The project developer for individual development sites shall confer with the Department of Airports Engineering Bureau prior to use of all construction equipment and describe in writing types and estimated quantities of alternative power sources that will be employed during all phases of construction.

22. Construction haul trucks will not be routed past schools. Prior to issuance of building permits, the developer of individual sites shall submit to the Department of Building and Safety on an approved form, a construction haul route that shows the street system that will be used to transport construction materials to and from the site. A copy of the approved form shall be submitted to the Los Angeles Unified School District Environmental Review Office at least 48 hours prior to the start of construction.

23. Construction vehicles will not park or stage on streets that border school sites. Prior to issuance of building permits, the developer of individual sites shall submit to the Department of Building and Safety on an approved form, a construction staging plan that shows the street network that will be used to park or stage construction vehicles and construction employee vehicles. A copy of the approved form shall be submitted to the Los Angeles Unified School District Environmental Review Office at least 48 hours prior to the start of construction.

24. Creation of preferential parking for high occupancy vehicles, as well as other forms of parking management that encourage higher vehicle occupancies will be developed when deemed reasonable by the Los Angeles Department of Airports and Los Angeles Department of Transportation. Prior to issuance of building permits, the developer of individual sites shall obtain written approval from the Los Angeles Department of Transportation for a detailed parking management plan that describes and shows the location of preferential parking for high occupancy vehicles. This measure may be waived by the Department of Transportation based on a determination that this measure is not needed for the specific development.

25. Provision of amenities that would encourage transit, pedestrian or bicycle access to the proposed Project shall be incorporated when appropriate. Such amenities would include bus shelters, visible signage identifying transit routes and stops, bike racks/shower facilities, bicycle lanes, attractive pedestrian pathways and sidewalks, shuttle service to nearby activity centers or park and ride lots, free information on transit services, free or subsidized transit passes, and guaranteed ride home programs. Prior to issuance of building permits, the developer of individual sites shall obtain written approval from the Los Angeles Department of Transportation for an approval parking demand management plan that shows transit, pedestrian or bicycle access to the proposed Project. Such amenities would include bus shelters, visible signage identifying transit routes and stops, bike racks/shower facilities, bicycle lanes, attractive pedestrian pathways and sidewalks, shuttle service to nearby activity centers or park and ride lots, free information on transit services, free or subsidized transit passes, and guaranteed ride home programs, unless the Department of Transportation determines that some or all of these amenities are not required for an individual development.

26. Encourage and facilitate the reduction of the number of trips that an individual makes from home or work by introducing compressed workweeks, telecommuting, and the combining of non-work trips. Such measure if deemed appropriate by the Department of Transportation and the Business Owner/Operator shall be incorporated as an addendum to an approved parking demand management plan.

27. Encourage the reduction of trips during the most congested periods and spread them throughout the day by introducing alternative, flexible, or staggered work hours, as well as vehicle and truck restrictions. Such measure if deemed appropriate by the Department of Transportation and the Owner/Operator shall be incorporated as an addendum to an approved parking demand management plan.

28. Maximize use of non fossil fuel powered equipment to support airport ground operations. The Department of Airports shall develop guidelines or a policy regarding use of non fossil fuel to support airport ground operations and when proper, include this policy as a part of aviation tenant lease negotiations and approval.

29. The Department of Airports shall consult with the South Coast Air Quality Management District regarding the feasibility of a City Council Ordinance that would impose air quality fees against aircraft that exceed specified air emissions standards. Such fees would be designated for tenant air quality performance improvement measures in accordance with Regulation 2202, Air Quality Management Plan criteria. The Department of Airports shall confer with SCAQMD within one year following Master Plan final adoption. If such a measure is approved, the Department of Airports shall incorporate the air quality fees in all future aviation lease agreements.

30. The Department of Airports shall work with the Los Angeles Fire Department to identify alternative materials for aircraft cleanup in lieu of degreasing agents presently used. The Department of Airports shall confer with the Fire Department and select alternative materials (if feasible), based on the availability, cost and safety of such materials. If alternative materials are selected for use, the Department of Airports shall include this requirement as a condition in future aviation lease agreements.

31. The Department of Airports shall consider adoption of time of day ground run up restrictions and maintenance mode restrictions that limit these uses to the midday hours and early evening hours. The Department shall establish a schedule for conducting an evaluation of these restrictions. If adopted, such restrictions shall be incorporated into aviation tenant leasehold agreements and routinely monitored by the Department of Airports.

32. The Department of Airports shall fund the selection and cost of providing a certified aircraft consultant to train aircraft owners and operators in the safe and efficient use of aircraft measures that reduce aircraft emissions including increased engine speed, reduced engine during idle and taxi, reduced idle operations by control of departure times and where feasible, reduced operating time of aircraft auxiliary power supply systems through use of a ground-based power supply. Such measures shall be conducted on a voluntary basis in conjunction with the VNY Airport Tenants Association.

Noise

33. Site developers shall submit a construction plan to the City in sufficient detail to determine the duration of construction activities and the specific types of equipment to be used and the approximate site use location. Locations for compressors and pumps should be specifically identified. The construction plan shall be reviewed by the Department of Airports and approved by the Department of Building and Safety. A required number of copies of the signed construction plan approvals shall be submitted to the Department of Airports, prior to commencement of construction activities.

34. The proposed project shall comply with applicable City noise regulations specified in the City Noise Ordinance, Community Plans and draft Framework Plan, unless another provision is made in the proposed VNY Master Plan or EIR. Prior to issuance of building certificates of occupancy for any new development or any new leasehold, the Department of Airports shall submit to Department of Planning a description of programs, policies, guidelines or actions that will be taken by the Department, airport tenants and other affected parties to comply with City noise regulations.

35. During construction, the project contractors shall muffle and shield intakes and exhausts, shroud and shield impact tools, and use electric-powered rather than diesel powered construction equipment, as feasible. Prior to issuance of building permits, the developer of individual construction sites shall submit to the Department of Building and Safety and the Department of Airports a construction plan that identifies how contractors shall muffle and shield intakes and exhausts, shroud and shield impact tools, and use electric powered rather than diesel powered construction equipment, as feasible.

36. Temporary walls and noise barriers shall be placed around the airport development sites and/or locations of construction noise activity to block and deflect the noise from adjacent residential properties. Prior to issuance of building permits, the developer of individual development sites shall

show on building permit plans the location of temporary walls and noise barriers that shall be placed around individual development sites. Such plans shall be reviewed by the Department of Airports and approved by the Department of Building and Safety.

37. A pile-drilling technique (as opposed to pile-driving) shall be used to minimize construction noise. Plan check drawings shall specify construction equipment and techniques that will be used.

38. At certain stages of project construction, it may be feasible to use portable noise curtains or panels to contain noise from power tools such as impact wrenches. During project construction, the Department of Building and Safety or the Department of Airports may determine that such measures are feasible and require developer compliance.

39. Truck deliveries and trash pickup shall be prohibited between the hours of 7:00 p.m. and 7:00 a.m. Prior to use of site facilities and business operations being conducted on individual sites, the project developer shall incorporate in tenant agreements, and shall post the specified hours for trash collection and prohibited hours. Such notices shall be posted on the exterior enclosure of all trash receptacles.

40. Parking garage ramp surfaces shall be of the type to minimize the potential for tire squeal. Prior to issuance of building permits, the project developer shall show on plans submitted for plan check purposes, the location of garage ramp surfaces, material composition, and construction specifications.

41. Windows and walls on office and industrial buildings shall have a sound transmission class rating (STC) sufficient to eliminate the transmission of any loud or amplified sounds exceeding 45 DB. Prior to issuance of building permits, the project developer shall submit sufficient information to show that windows and walls will be constructed of materials that eliminate loud or amplified sound transmissions.

42. A minimum 8-foot height wall shall be constructed along appropriate project property lines, or other noise attenuation measures as required by the Department of Airports should be implemented to reduce sound penetration in adjacent residential zones. Prior to issuance of building permits, the project developer shall specify on plans wall(s) location, proposed height, material composition and other specifications.

43. All state and local standards for exterior and interior noise exposure shall be met for the proposed project. Prior to issuance of building permits, site developers shall submit evidence to the satisfaction of the City, that all project land uses will meet applicable exterior and interior noise standards (unless otherwise superseded by state or federal guidelines). If determined necessary by the City, the applicant may be required to prepare a detailed acoustical assessment indicating mitigation measures necessary to achieve acceptable exterior and interior noise levels on-site, to the satisfaction of the City. Such measures could include: acoustically rated glazing, sound insulation in exterior walls, adding mass to the exterior walls, sealing seams and joints in exterior walls, and fixed windows designed with double paned or laminated glass. Fixed and double glazed windows can achieve the following noise level reductions compared to an open window; Fixed 1/8 inch single pane, 10 dB reduction, fixed 1/4 inch single pane, 15 dB reduction, fixed 3/8 inch single pane, 20 dB reduction, double glazing 1/8 each, 20 dB reduction, double glazing 1/4 inch each, 25 dB reduction.

Light and Glare

44. In accordance with standards established by the FAA, project glass surfaces (walls or windows) shall be tinted to decrease reflection, especially on western exposures. Project windows should also be tinted to reduce the emission of ambient light prior to issuance of building permits, the project developer shall submit drawings, material samples and other requested items that show color of tint, window glazing and other specifications.

45. Exterior nighttime lighting shall be shielded and directed on-site and downward (except as exempted by LADOA or the FAA). Prior to issuance of building permits, the project developer shall show on plans, the location of exterior nighttime lighting and the direction and illumination.

46. Foliage and landscaping shall be planted wherever possible to limit exposure of project lighting on adjacent land uses. Prior to issuance of building permits, the project developer shall show on plans, the general location of proposed landscaping, in lieu of lighting.

47. Exterior building materials shall be of a color, and texture to reduce daytime glare. Prior to issuance of building permits, the project developer shall submit to the City Planning Department, Department of Building and Safety and Department of Airports, building paint samples, exterior building texture samples and other building materials that could impact the degree of glare and reflection.

48. Outdoor lighting shall be reduced or softened after peak hours. Prior to issuance of building permits, the project developer shall show on building plans, written notes or details regarding type of lights to be used after peak hours.

49. All outdoor lighting plans and fixtures proposed for all developments shall be reviewed by the Department of Airports, and detem1ined to be in compliance with Department standards. Prior to issuance of building permits, the project developer shall submit necessary plans and information to the Department of Airports to allow a determination of compliance with Department standards.

50. Use of exterior flashing and neon lights shall be prohibited. Red, white, green or amber lighting that is directed toward aircraft shall be prohibited. Prior to issuance of building permits the project developer shall show the type, quantity, color, size and other specifications for all exterior lights.

51. Outdoor parking and garage parking plans shall be designed to show an adequate amount of nighttime safety lighting. Prior to issuance of building permits the project developer shall show the type, quantity, color, size and other specifications for all exterior lights.

52. Buildings, landscaping and other site structures shall be developed and used in a manner that does not interfere with use of runway, taxiway and approach system lighting. Prior to Board of Airports Commissioners approval of a lease, project developer shall submit necessary information and provide written assurances that the proposed uses will not interfere with use of runway, taxiway and approach system lighting.

Land Use

53. Aircraft engine-run up uses shall be restricted to areas shown on the Master Plan Map. Prior *to* Board of Airports Commissioners approval of a lease, project developer shall submit necessary information and provide written assurances that any proposed aircraft uses will comply with restrictions shown on the Master Plan Map.

54. The Department of Airports shall notify residents and businesses that are located within 1,000 feet of the construction zone at least 48 hours prior to any construction intended to occur on the 70.5 vacant acres. Prior to construction, the project developer shall submit to the satisfaction of the Department of Airports, a proposed notice and a valid listing of households and businesses located within 1,000 feet of the airport.

55. Landscaping, fencing, walls and signs shall be in accordance with uniform standards adopted no later than one year of the effective date of the adoption of this ordinance. Van Nuys Airport Master Plan. A copy of the standards shall be forwarded to the City Planning Department.

56. Sound insulation shall be incorporated in all new non-aviation building designs. Prior to issuance

building permits, the project developer shall show on plans the specifications for sound absorption materials that will be incorporated in buildings.

57. Building heights and floor area amounts shall not exceed 3 stories/45 feet or .30 FAR on vacant areas discussed in this EIR Prior to issuance building permits for individual developer sites, project developer shall submit to the Planning Department and Department of Building and Safety plans that specify the height and number of floors of buildings and information regarding FAR.

58. The Department of Airports shall develop written procedures to notify tenants regarding bird nesting, hatching or roosting on airport sites. The written procedures shall establish a method for tenant removal of materials, soils, landscaping, water, liquids or other materials and substances that attract birds in the vicinity of an airport. Such procedures or guidelines shall be developed within one year of the effective date of the Master Plan.

59. The Department of Airports shall prepare a mitigation monitoring program in compliance with CEQA Section 21081.6. The mitigation monitoring program shall provide a detailed discussion of the party or parties responsible for implementation of specific measures, the phase of the project during which the measure should be monitored, pre-construction periods, construction periods and post occupancy periods. A copy of the proposed mitigation monitoring program shall be submitted to the LA City Council for approval with the Proposed final Master Plan and final EIR.

Transportation

Category 1 - TDM Programs

60. Compliance with Ordinance No. 168,700 (Transportation Demand Management and Trip Reduction Measures). This ordinance focuses on incorporating TDM facilities into the design of new buildings to promote alternative modes of transportation (see Appendix D). It should be followed in the design and construction of the project site and buildings. At the preliminary Plan check stages, the developer of individual sites shall confer with the Department of Transportation and the Department of Airports regarding building design features that should be included for Building Department plan check purposes.

61. Compliance with SCAQMD Rule 2202. The South Coast Air Quality Management District (SCAQMD) has adopted a rule designed to reduce the air pollution impacts of commute trips. This rule, unlike the rules it replaces, does not mandate trip reduction programs but allows individual employers to select from a variety of options. However, most employers have continued to select ridesharing programs as the most cost-effective method of reducing air quality impacts. If site employers implement these trip reduction measures, 15 percent or more of the peak hour traffic generation from the industrial/technology park component of the project could be eliminated. If these measures are determined necessary by DOT and SCAQMD the project developer shall describe the implementation steps in writing prior to issuance of a building certificate of occupancy.

Category 2 - Transit Improvements

62. Bus Transit Improvements. This project should work with the appropriate transit districts (i.e., LADOT and MT A) to improve transit service to the site. Further, the sidewalks through the sites should be designed to provide attractive pedestrian routes to and from transit stops. Developers of individual sites shall confer with LADOT and MT A prior to issuance of building permits to determine if transit improvements are required. The developer of individual sites will not be required to fund or provide transit improvements for areas that the LADOA, MT A and/or LADOT determine are not impacted by project development or use.

Categories 3, 4 and 5 - Signal System Improvements, Street Widening and Re-striping, and Parking

Restrictions

63. Specific traffic intersection or roadway improvements or installations shall be reviewed by DOT prior to issuance of building permits for individual development sites. The developer of individual sites shall be required to pay for only those improvements or installations that are directly affected by long-term use of the specific development site. The Department of Airports may agree at the request of the DOT to collect traffic improvement fees or other costs associated with this measure and may also agree to fund the cost of some of the improvements that may be affected by the overall airport operations. Within one year of the final Master Plan adoption, the Department of Transportation and the Department of Airports shall confer regarding the approximate cost of specific improvements and installations and shall determine what airport development sites if any should be required to pay for all or a part of those improvements and installations.

- Intersection 3. Balboa Boulevard and Plummer Street - Restrict parking and re-stripe Plummer Street to provide a right-turn-only lane in the eastbound and westbound directions. Prior to issuance of building permits for a specific development site, the project developer shall confer with the Department of Airports and Department of Transportation to determine intersections that may be impacted by a specific development. The developer of individual sites will not be required to fund or provide improvements that the LADOA and/or LADOT determine are not impacted by project development or use.

- Intersection 10. Balboa Boulevard and Nordhoff Street - Fund the installation of the ATSAC system at this intersection.

- Intersection 12. Woodley Avenue and Nordhoff Street - Fund the installation of the ATSAC system at this intersection.

- Intersection 19. Balboa Boulevard and Parthenia Street - Restrict parking and re-stripe Parthenia Street to provide a third through lane in the eastbound and westbound directions during peak-hour travel periods.

- Intersection 21. Woodley Avenue and Parthenia Street - Restrict parking and re-stripe Parthenia Street to provide a right-turn- only lane in the eastbound and westbound directions.

- Intersection 26. Balboa Boulevard and Roscoe Boulevard – Re-stripe Roscoe Boulevard to provide dual left-turn lanes in the eastbound and westbound directions. Signal modifications will be required and some localized flaring of Roscoe Boulevard within the existing right-of-way may also be required. Fund the installation of the A TSAC system at this location.

- Intersection 28. Woodley Avenue and Roscoe Boulevard- Fund the installation of the ATSAC system at this location.

- Intersection 32. San Diego Freeway Northbound Ramps and Roscoe Boulevard-Fund the installation of the A TSAC system at this location.

- Intersection 36. Balboa Boulevard and Strathem Street- Install a two-phase signal at this location.

- Intersection 37. Woodley Avenue and Strathern Street- Restripe Strathern Street to provide an exclusive right-turn-only lane.

- Intersection 41. Balboa Boulevard and Saticoy Street- Restripe Saticoy Street at the intersection to provide a right-turn-only lane in the westbound direction. Some pavement reconstruction on the north side of the east leg may be necessary.

- Intersection 42. Woodley Avenue and Saticoy Street- Restrict parking and restripe Woodley Avenue to provide a northbound right-turn-only lane.

- Intersection 44. Sepulveda Boulevard and Saticoy Street- Restrict parking and restripe Saticoy Street to provide an eastbound right-turn-only lane.

- Intersection 45. Haskell Avenue and San Diego Freeway Southbound Ramps- Flare into the median island and restripe the off- ramp to provide a third westbound approach lane.

- Intersection 48. Balboa Boulevard and Sherman Way- Fund the installation of the A TSAC system at this location.

- Intersection 49. Hayvenhurst Avenue and Sherman Way-Fund the installation' of the ATSAC system at this location.

- Intersection 50. Woodley Avenue and Sherman Way-Restrict parking and restripe Sherman Way to provide eastbound and westbound right-turn-only lanes.

- Intersection 51. Haskell A venue and Sherman Way- Restripe Haskell A venue, restrict parking and modify the signal equipment to provide dual southbound left-turn-only lanes.

- Intersection 54. White Oak Avenue and Vanowen Street- Restrict parking and restripe White Oak Avenue to provide a southbound right-turn-only lane.

- Intersection 56. Balboa Boulevard and Vanowen Street- Restrict parking and restripe Vanowen Street to provide a westbound right-turn-only lane.

- Intersection 59. Haskell Avenue and Vanowen Street-Restrict parking, restripe Haskell Avenue and modify the signal equipment to provide dual northbound and southbound left-turn-only lanes.

- Intersection 63. Balboa Boulevard and Victory Boulevard- Restripe Balboa Boulevard to provide a northbound right-turn-only lane.

- Intersection 71. Balboa Boulevard and Burbank Boulevard- Restripe Balboa Boulevard and modify the signal equipment to install dual left-turn-only lanes in the northbound and southbound directions.

Public Services

Fire

64. The proposed Master Plan's developments will comply with the Fire Protection and Fire Prevention Plan and the Safety Plan elements of the Los Angeles General Plan's guidelines. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans.

65. The design of the underground storage facilities shall include a continuous monitoring system for the purpose of detecting the release of any hazardous or combustible substances, in accordance with monitoring requirements in Chapter 5, Article 7, Division 31, Section 39, of the Los Angeles Fire Code

(LAFC). Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans that show and describe the type and location of continuous monitoring system that will be installed for all underground storage facilities.

66. Develop a Traffic Congestion Management Plan (TCMP) for the development sites and implement the TCMP in stages that coincide with the development of the five subject parcels. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals that relate to a TCMP.

67. Ensure the strategic location of timely access points to all portions of VNY for off-site Fire Department apparatus and personnel. Prior to construction, all access points shall be approved by the LAFD.

68. Provide adequate off-site public and on-site private fire hydrants with sufficient capacity. The number and locations of fire protection and safety improvements shall be approved by the LAFD upon review of the plot plans for each individual site.

69. All first story portions of any structure shall be within 300 feet of an approved fire hydrant. The facility shall be designed to meet all applicable fire safety codes for aboveground storage of hazardous materials including the FAA and LAFD codes. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans.

70. All contamination encountered shall be handled, remediated and disposed of in accordance with all applicable Federal, State, and local regulations. Prior to issuance of building permits, the developer of individual sites shall submit to the satisfaction of the Fire Department authorization letters, letters of release, permits or other documentation that verifies compliance with federal, state and local regulations.

71. All proposed aboveground fuel facility plans shall include provisions for a 2,000-gallon clarifier to prevent spilled fuel and other hazardous materials from entering the storm of sanitary sewer systems. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans that show provisions for a 2,000-gallon clarifier to prevent spilled fuel and other hazardous materials from entering the storm of sanitary sewer systems.

72. If the clarifier is designed to discharge into the storm drain system, a National Pollution Discharge Elimination System (NPDES) permit shall be obtained from the RWQCB prior to operation of the clarifier. Prior to issuance of building permits, the developer of individual sites shall submit to the satisfaction of the Fire Department a NPDES permit issued by RWQCB unless determined by LAFD to not apply to a specific project.

73. If the clarifier is designed to discharge into the sanitary sewer, the City of Los Angeles, Department of Public Works shall be contacted regarding potential discharge or permit requirements prior to the operation of the clarifier. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals that indicate the Department of Public Works has been contacted regarding potential discharge or permit requirements prior to the operation of the clarifier.

74. Conform to the standard street dimensions shown on the Department of Public Works Standard Plan D-22549 and utilize standard cut-comers on all turns. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Department of Public Works approvals for plans that show conformance with standard street dimensions shown on the Department of Public Works Standard Plan D-22549 and utilize standard cut-comers on all turns.

75. The width of private roadways for general access use and fire lanes shall not be less than 20 feet clear to the sky. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Department of Public Works and Fire Department approvals for building plans.

76. All access roads, including fire lanes, shall be maintained in an unobstructed manner. The entrance to all required fire lanes or required private driveways shall be posted with a sign no less than three square feet in area" in accordance with Section 57.09.05 of the Los Angeles Municipal Code. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Department of Public Works and Fire Department approvals for plans that show access roads, including fire lanes, shall be maintained in an unobstructed manner.

77. Fire Lane width shall not be less than 20 feet or less than 28 feet where fire hydrants are installed or the lane must accommodate aerial ladder apparatus. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Department of Public Works and Fire Department approvals for building plans that show Fire Lane width shall not be less than 20 feet or less than 28 feet where fire hydrants are installed or the lane must accommodate aerial ladder apparatus.

78. No building or portion of the building shall be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane without approval from LAFD prior to construction. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Department of Public Works and Fire Department approvals for building plans that show site buildings more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane, unless approved otherwise by LAFD.

79. Sprinkler systems shall be installed in all structures in accordance with Los Angeles Municipal Code 57.09.07. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans that show compliance with Los Angeles Municipal Code 57.09.07.

80. Consider providing effective fire protection systems in new hangars which will effectively protect the areas beneath the wings and fuselage portions of large aircraft. This can be accomplished by incorporating foam- water deluge sprinkler systems with foam producing and oscillating nozzles. Prior to issuance of building permits, the developer of individual sites shall confer with the Fire Department regarding fire protection systems that can be used in hangars.

81. Develop a Business Plan in accordance with the Hazardous Materials Release Response Plans and I Inventory Law of 1985 for each applicable site. Prior to issuance of a Certificate of Occupancy, the developer of individual sites shall obtain necessary Fire Department approvals for a Business Plan in accordance with the Hazardous Materials Release Response Plans and Inventory Law of 1985.

82. Design on-site landscaping with fire resistant plants and materials. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Fire Department approvals for building plans.

Police

83. The Los Angeles Police Department's Crime Prevention Section shall be consulted regarding crime prevention features appropriate to the design of the individual structures involved in the project. Prior to issuance of building permits, the developer of individual sites shall obtain necessary Police Department approvals regarding crime prevention features appropriate to the design of the individual structures.

84. Upon completion of the individual properties, a diagram of the structure, including site access, unit/building numbers, and any additional information that might facilitate police response, shall be submitted to the Area Commanding Officer. Prior to issuance of a Certificate of Occupancy, the developer of individual sites shall submit to the satisfaction of the Area Commanding Officer, a diagram of the structure, including site access, unit/building numbers, and any additional information

that might facilitate police response.

85. Secured tenant parking areas shall be controlled by a electronic card-key (or similar approved) gate. Prior to issuance of a Certificate of Occupancy, the developer of individual sites shall obtain necessary approvals for secured tenant parking areas from the VNY Administrative Offices for such use.

86. Entryways, elevations, lobbies, and parking areas shall be illuminated and designed with minimum dead space to eliminate areas for potential concealment. Prior to issuance of building permits, the developer of individual sites shall obtain necessary LAWA approvals regarding illumination and design of entryways, elevations, lobbies, and parking.

ATTACHMENT C

Air Quality and Climate Change Impact Assessment Report

SESPE
CONSULTING, INC.
374 Poli Street, Suite 200 • Ventura, CA 93001
Office (805) 275-1515 • Fax (805) 667-8104

April 28, 2017

Attn: Raymond Ocasio
Jet Aviation
Van Nuys Airport
16644 Roscoe Boulevard
Van Nuys, CA 91406

Re: Jet Aviation Tenant Improvement Project – Aircraft Support Facility
Air Quality & Climate Change Impact Memo

Dear Mr. Ocasio,

This memorandum has been prepared to quantify and determine the significance of air quality and climate change impacts associated with the construction of Jet Aviation's (Jet) proposed project to upgrade an existing tenant aircraft support facility (Project). The Project would result in a full service, state-of-the-art Fixed Based Operation (FBO) at the Van Nuys Airport (VNY). The FBO would provide the full complement of services permitted by a FBO at VNY, including but not limited to a FBO Hangar, Maintenance, Repair and Overall (MRO) Hangar, a FBO terminal, and fueling station.

This air quality assessment follows the methodologies and guidance presented in the South Coast Air Quality Management District's (SCQAMD) *Air Quality Analysis Handbook* and *Air Quality Management Plan*. Criteria pollutant and greenhouse gas (GHG) emissions resulting from the construction of the proposed Project are quantified and compared to the appropriate significance thresholds. This assessment also qualitatively addresses fugitive dust and odor impacts. This memo has been prepared for use in California Environmental Quality Act (CEQA) documentation for the Project.

PROJECT DESCRIPTION:

The Project is located within the VNY at 16644 Roscoe Boulevard, Van Nuys, California 91406 (Figure 1, Attachment A). Jet has a 30 year lease with Los Angeles World Airports (LAWA) for the Project site. The Project site is designated as Aviation Areas in the Van Nuys Airport Plan (an Element of the City of Los Angeles General Plan). Figure 2 (Attachment A) shows the existing setting/site vicinity map and location of the property within the VNY and adjacent community. Figures 3 and 4 (Attachment A) display the Project layout and perspective view of the completed structures.

The Project would include the construction and operation of FBO and MRO hangars, FBO terminal, upgraded ramp, office space within or attached to the hangars or terminal building, car parking, and landscaping. When completed, the Project would support newer, quieter, longer-range business aircraft than the previous tenant's facility provided. However, the Project would not induce increased operations at the VNY as the number of aircraft would remain consistent with the approved Van Nuys Airport Plan (an element of the Los Angeles City General Plan). Therefore, the Project would not cause operational emissions at the VNY airport to increase. As such, only emissions impacts from Project construction are addressed in this analysis.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) SIGNIFICANCE DETERMINATION:

The California State CEQA Guidelines, CCR Section 15000 (CEQA Guidelines) include a set of criteria that should be evaluated for all applicable projects. These criteria are found in the Environmental Checklist in Appendix G of the CEQA Guidelines. Within the Environmental Checklist, Section 3 outlines criteria for air quality analysis and Section 7 outlines criteria for greenhouse gas emissions analysis. These specific criteria form the basis of the significance thresholds utilized to determine impacts within this memo.

III – <u>Air Quality</u>:

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

Less than Significant: The proposed Project is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of South Coast Air Quality Management District (SCAQMD). SCAQMD regulates air quality within Orange County and the urban areas of Los Angeles, Riverside, and San Bernardino County. The SCAB is designated as an extreme non-attainment area for ozone (O3) and a serious nonattainment area for particulate matter less than 2.5 microns in size ($PM_{2.5}$). As such, the SCAQMD is mandated by the Federal Clean Air Act to reduce emissions of nonattainment pollutants in the SCAB. The SCAQMD's *Air Quality Management Plan* presents the methods and strategies used by the SCAQMD to reduce criteria pollutant emissions and achieve ambient air quality standards.

Implementation of the proposed Project would include the construction of the FBO and MRO hangars, FBO terminal, upgraded ramp, office space within or attached to the hangars or terminal building, car parking and landscaping. The Project would also include construction of two (2) new ASTs. Construction of these structures would result in temporary criteria pollutant emissions. However, as shown in Table 2 and Table 3 below, criteria pollutant emissions from construction of the proposed Project would not exceed applicable thresholds indentified in the 2016 SCAQMD *Air Quality Management Plan*. Additionally, the Project would not result in an increase in population in the area and it is consistent with both the City and County of Los Angeles General Plan designations and zoning. Therefore the Project is consistent with the 2016 SCAQMD *Air Quality Management Plan* and would have a less than significant impact.

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

Less than Significant: As previously discussed, the SCAB is designated an extreme non-attainment area for ozone (O3) and a serious non-attainment area for particulate matter less than 2.5 microns in size ($PM_{2.5}$).

The Project is replacing an outdated airport support facility with a modern support facility. The Project would not induce increased operations at the VNY as the type and number of aircraft would remain consistent with the approved Van Nuys Airport Plan (an element of the Los Angeles City General Plan). As such, the operation of the Project is not expected to create a new source of air emissions and therefore analysis of the Project's operational air quality emissions is not necessary.

<u>Regional Construction Impacts</u>: The SCAQMD provides mass daily air quality significance thresholds for construction emissions. Table 1 below presents the SCAQMD's construction mass daily thresholds, which is used to determine the significance of air quality impacts generated by the Project's short-term construction activities.

Table 1 – SCAQMD Mass Daily Thresholds (lbs/day)

Pollutant	Construction Thresholds
NO_x	100
VOC (ROC)	75
PM_{10}	150
$PM_{2.5}$	55
SO_x	150
CO	550
Lead (Pb)	3

Construction of the Project would result in temporary air quality impacts from construction equipment combustion and fugitive dust emissions. Construction activities were estimated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 (CalEEMod) screening model. CalEEMod includes the following:

- Demolition, grading, and site preparation activities (fugitive PM);
- Emissions from fuel combustion in onsite construction equipment;
- Vehicle emissions from workers/material delivery vehicles travelling to and from the site;
- Volatile emissions resulting from application of architectural coatings and pavement.

Construction emissions were calculated using the SCAQMD's California Emissions Estimator Model (CalEEMod) Version 2013.2.2. CalEEMod is a model for estimating air emissions associated with a development project. It is assumed that construction activities would occur over a 16 month period, with work occurring 5 days per week, beginning in 2018.

Table 2 below presents the Project's regional criteria pollutant emissions from construction, as calculated in CalEEMod, and compares them to the applicable significance thresholds from Table 1. The construction emissions shown represent the maximum daily emissions of entire construction process.

Table 2 – Regional Criteria Pollutant Emissions Impacts from Construction

Pollutant	Peak Day Emissions (lbs/day)	Threshold (lbs/day)	Significant?
NO_x	56.7	100	**No**
VOC (ROC)	49.9	75	**No**
PM_{10}	20.8	150	**No**
$PM_{2.5}$	12.4	55	**No**
SO_x	0.1	150	**No**
CO	33.2	550	**No**

As shown above in Table 2, all peak day construction air emission impacts are below the applicable SCAQMD significance thresholds. Therefore, all other construction days are below the applicable significance thresholds. See Attachment B for the full CalEEMod output file.

Localized Construction Impacts: The SCAQMD utilizes a Localized Significance Threshold (LST) screening methodology to determine potential localized criteria pollutant impacts resulting from Project emissions occurring onsite. Specifically, the SCAQMD's LST methodology presents a method by which Project construction emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ on a pounds per day basis are compared to

thresholds derived from screening air dispersion models prepared by the SCAQMD. In order to determine the appropriate LST thresholds the following information about the Project must be known.

- **Project size.** The Project is 14.79 acres large. This is larger than the largest LST option of 5 acres. However, it is conservative to utilize the 5 acre thresholds because the thresholds become larger as the project size increases.
- **Distance to the nearest receptor.** The LST methods have different standards for residential and commercial/industrial receptors. The closest residential receptor is located approximately 360 meters (0.3 miles) to the northeast. The closest commercial/industrial receptors are located approximately 55 meters (0.03 miles) to the north. See Figure 2 (Attachment A) for the nearby receptor locations.
- **The source receptor (SR) area.** The Project is located in the Van Nuys area of Los Angeles, which is in SR Area 2 – Northwest Costal Los Angeles.

From this information, the SCAQMD's LST tables are referenced to determine the appropriate significance thresholds in pounds per day for each pollutant. Per SCAQMD guidance, the PM_{10} and $PM_{2.5}$ thresholds are based on the distances to nearby residences as individuals could remain in these locations for 24 hours, and these standards are meant to be applied over this duration. The CO and NO_x LST standards are based on shorter averaging times, so they are applied to industrial or commercial receptors since it is reasonable to assume that a worker would be present in these locations for shorter durations.

Table 3 below presents the construction emissions estimated in CalEEMod and compares them to the LST significance thresholds obtained based on the process outlined above. The construction emissions represent the peak day throughout the entire construction process.

Table 3 – Localized Criteria Pollutant Emissions Impacts from Construction

Pollutant	Peak Day Emissions (lbs/day)	LST Threshold (lbs/day)[1]	Significant?
NO_x	56.7	212	**No**
CO	33.2	1,985	**No**
PM_{10}	20.8	84	**No**
$PM_{2.5}$	12.4	29	**No**

1 – Per SCAQMD guidance, NO_x and CO thresholds based on closest commercial/industrial receptors (≥ 50 meters) and the PM_{10} and $PM_{2.5}$ thresholds based on the closest residential receptors (≥ 200 meters).

As shown above in Table 3, all peak day construction air emission impacts are below the applicable SCAQMD LST significance thresholds. Therefore, all other construction days are also below the applicable significance thresholds. See Attachment B for the full CalEEMod output file.

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)?

Less than Significant: Cumulative impacts occur when a project's impacts combine with other current or reasonably foreseeable future projects to generate potentially significant impacts. In the *Air Quality Management Plan,* the SCAQMD outlines the plan for achieving and maintaining attainment status for

all pollutants in the SCAB. Additionally, the SCAQMD has selected the significance thresholds identified in Tables 1, 2 and 3 to ensure that new developments, when considered cumulatively with existing and future activities, will not jeopardize progress towards the goals in the *Air Quality Management Plan*. This Project is consistent with the *Air Quality Management Plan,* as it produces less than significant regional and localized criteria pollutant emissions, and the emissions it does produce (i.e. from construction) are temporary in nature. For these reasons, this Project will result in less than significant cumulative impacts.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant: The Project site is located in an area designated as Light Manufacturing in the City of Los Angeles General Plan and zoned for Light Industrial uses. The project site is surrounded by commercial and industrial land uses, and there are no sensitive populations residing in the immediate vicinity of the project. The closest residential areas are approximately 0.4 miles to the west and 0.3 miles to the northeast (Figure 2, Attachment A). Furthermore, Project emissions are short-term (approximately 16 months) and less than the SCAQMD's criteria pollutant thresholds as shown in Table 2 and Table 3. For these reasons, Project toxic air contaminant (TAC) emissions are expected to result in less than significant health risk impacts to nearby receptors.

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

Less than Significant: Construction of the proposed Project would involve some activities with the potential to generate emissions that might produce objectionable odors. Potential sources that may emit odors during construction activities include diesel exhaust emissions from trucks and equipment, the use of architectural coatings, and paving operations.

SCAQMD Rule 1113 limits the amount of volatile organic compounds (VOC) in architectural coatings sold/used within the district, minimizing odor emissions. The odors associated with the asphaltic concrete would be short-term (approximately one week) and located away from areas where the public is likely to be found for extended periods of time (i.e. residences). Due to mandatory compliance with SCAQMD rules, the short-term nature of odor generating construction activities, and the distance to the nearest residential neighborhoods (0.3 miles), impacts would be less than significant.

VII – <u>Greenhouse Gas Emissions</u>:

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

Less than Significant: The CEQA Guidelines (Section 15064.7) provide that, when available, the significance criteria established by an air quality management district may be relied upon to make determinations of significance for greenhouse gas emissions. To this end, the SCAQMD has released *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (December 2008), which includes a greenhouse gas (GHG) emissions threshold of 10,000 metric tons (MT) of CO2 equivalents (CO2e) per year to determine the significance of a project's GHG emissions.

Per the SCAQMD's GHG guidelines, GHG emissions from construction are to be amortized over a 30-year period and added to operational emissions to determine significance. Because this Project would not result in a change in operational emissions, significance of this Project's GHG impact is based on construction emissions alone.

Please note that "CO2 equivalents" (CO2e) is the quantity of CO2 that would cause the same level climate change as a given type and quantity of a GHG emission. This variation of effect between gases is also known as global warming potential (GWP). For example, one unit of methane emissions has the same GWP as 21 units of carbon dioxide. Therefore, one (1) metric ton of methane is equivalent to 21 metric tons of CO2e. Emissions of multiple types of GHGs are represented collectively in units of CO2e.

Table 4 below presents the Project's GHG emissions, in units of metric tons CO2e per year (MT/year), and compares them to the applicable threshold. Note that, while the SCAQMD's GHG Guidelines suggest that construction emissions be amortized over 30-years prior to comparing them to the threshold, this assessment compares all construction emissions to the threshold without amortization to ensure a conservative assessment. See Attachment B for the full CalEEMod output file.

Table 4 – Project Construction GHG Emissions (CO2e)

Project Construction GHG Emissions (MT/year)	SCAQMD GHG Significance Threshold (MT/year)	Significant?
681.9	10,000	No

As shown in Table 4, the Project results in less than significant GHG emissions impacts.

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

Less than Significant: As described above, the Project's GHG emissions are short-term (approximately 16 months) and less than the applicable SCAQMD GHG threshold as shown in Table 4. For these reasons, the Project would result in a less than significant impact on any plans, policies, or regulations aimed at reducing GHG emissions.

Please call Graham Stephens or me at (805) 275-1515 if you have any questions or if you need additional information.

Respectfully submitted,

Garrett Zuleger, P.E.
Project Manager I
Sespe Consulting, Inc.

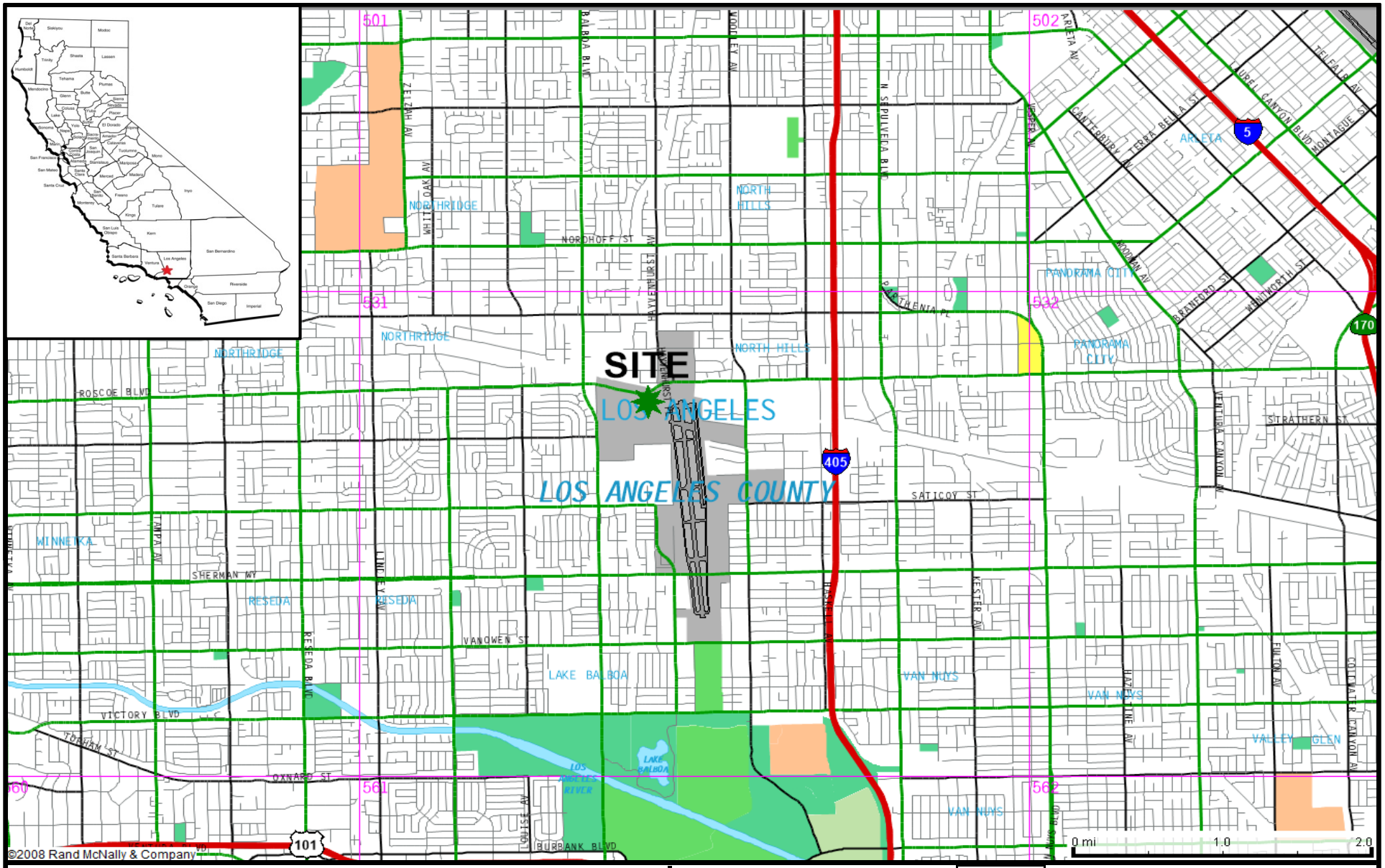
Attachments:

A. Figures
   - Figure 1: Regional Location Map
   - Figure 2: Existing Setting & Project Site
   - Figure 3: Proposed Project Layout
   - Figure 4: Project Perspective Layout

B. CalEEMod Output Files
   - Summer Results
   - Annual Results

ATTACHMENT A

FIGURES



Source: 2008 Rand McNally & Company

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SESPE CONSULTING, INC.

FIGURE 1	REGIONAL LOCATION MAP Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Google Earth 2016

Proposed Project Boundaries

Van Nuys Airport Boundaries

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SESPE CONSULTING, INC.

FIGURE 2	EXISTING SETTING & PROJECT SITE Jet Aviation Tenant Improvement 16644 Roscoe Boulevard Van Nuys, California 91406		
PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Jet Aviation

N

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FIGURE 3

PROPOSED PROJECT LAYOUT
Jet Aviation Tenant Improvement
16644 Roscoe Boulevard
Van Nuys, California 91406

PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

Source: Jet Aviation

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SESPE CONSULTING, INC.

FIGURE 4

PROJECT PERSPECTIVE VIEW
Jet Aviation Tenant Improvement
16644 Roscoe Boulevard
Van Nuys, California 91406

PROJECT #:	BR03.16.01	DATE:	4/13/17
SCALE:	as shown	DRAWN BY:	GPS

ATTACHMENT B

CALEEMOD OUTPUT FILES

Van Nuys Airport

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	32.20	1000sqft	0.74	32,200.00	0
General Light Industry	85.45	1000sqft	1.96	85,450.00	0
Parking Lot	240.00	Space	2.16	96,000.00	0
Health Club	21.00	1000sqft	0.48	21,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Demo = 2 months (61 days)

Off-road Equipment -

Off-road Equipment - Forklifts = 6 units
Welders = 4 units

Off-road Equipment - Excavator = 3 units
Graders + Dozers = 2 units

Off-road Equipment - Add Equip. = Tiller (trencher) + Bobcat (skid steer)

Demolition -

Grading - No Grading Required

Architectural Coating - Interior = 138,650 sq. ft.

Vehicle Trips -

Area Coating - Interior = 138,650 sq. ft.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Van Nuys Airport - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	207,975.00	138,650.00
tblAreaCoating	Area_Nonresidential_Interior	207975	138650
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	61.00
tblGrading	AcresOfGrading	20.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

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/day										lb/day					
2018	5.2388	56.6560	33.1952	0.0612	18.2675	2.6964	20.8462	9.9840	2.4807	12.3565	0.0000	5,966.1182	5,966.1182	1.7418	0.0000	5,991.6254
2019	49.8945	34.9831	31.9153	0.0607	1.3052	1.9580	3.2632	0.3517	1.8524	2.2040	0.0000	5,879.7753	5,879.7753	0.9865	0.0000	5,904.4375
Maximum	**49.8945**	**56.6560**	**33.1952**	**0.0612**	**18.2675**	**2.6964**	**20.8462**	**9.9840**	**2.4807**	**12.3565**	**0.0000**	**5,966.1182**	**5,966.1182**	**1.7418**	**0.0000**	**5,991.6254**

Mitigated 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/day										lb/day					
2018	5.2388	56.6560	33.1952	0.0612	18.2675	2.6964	20.8462	9.9840	2.4807	12.3565	0.0000	5,966.1182	5,966.1182	1.7418	0.0000	5,991.6254
2019	49.8945	34.9831	31.9153	0.0607	1.3052	1.9580	3.2632	0.3517	1.8524	2.2040	0.0000	5,879.7753	5,879.7753	0.9865	0.0000	5,904.4375
Maximum	**49.8945**	**56.6560**	**33.1952**	**0.0612**	**18.2675**	**2.6964**	**20.8462**	**9.9840**	**2.4807**	**12.3565**	**0.0000**	**5,966.1182**	**5,966.1182**	**1.7418**	**0.0000**	**5,991.6254**

	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	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**

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	lb/day										lb/day					
Area	3.0544	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884
Energy	0.0671	0.6097	0.5122	3.6600e-003		0.0463	0.0463		0.0463	0.0463		731.6500	731.6500	0.0140	0.0134	735.9978
Mobile	3.3543	15.5974	44.9603	0.1455	11.1866	0.1451	11.3317	2.9940	0.1361	3.1301		14,778.3790	14,778.3790	0.8057		14,798.5222
Total	**6.4757**	**16.2075**	**45.5114**	**0.1492**	**11.1866**	**0.1916**	**11.3782**	**2.9940**	**0.1825**	**3.1766**		**15,510.1118**	**15,510.1118**	**0.8200**	**0.0134**	**15,534.6084**

Mitigated 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	lb/day										lb/day					
Area	3.0544	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884
Energy	0.0671	0.6097	0.5122	3.6600e-003		0.0463	0.0463		0.0463	0.0463		731.6500	731.6500	0.0140	0.0134	735.9978
Mobile	3.3543	15.5974	44.9603	0.1455	11.1866	0.1451	11.3317	2.9940	0.1361	3.1301		14,778.3790	14,778.3790	0.8057		14,798.5222
Total	**6.4757**	**16.2075**	**45.5114**	**0.1492**	**11.1866**	**0.1916**	**11.3782**	**2.9940**	**0.1825**	**3.1766**		**15,510.1118**	**15,510.1118**	**0.8200**	**0.0134**	**15,534.6084**

	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	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	1/1/2018	3/26/2018	5	61	
2	Site Preparation	Site Preparation	3/27/2018	4/9/2018	5	10	
3	Grading	Grading	4/10/2018	5/7/2018	5	20	
4	Building Construction	Building Construction	5/8/2018	3/25/2019	5	230	
5	Paving	Paving	3/26/2019	4/22/2019	5	20	
6	Architectural Coating	Architectural Coating	4/23/2019	5/20/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,650; Non-Residential Outdoor: 69,325; Striped Parking Area: 5,760 (Architectural Coating – sqft)

OffRoad Equipment

Van Nuys Airport - Los Angeles-South Coast County, Summer

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
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Skid Steer Loaders	1	8.00	65	0.37
Paving	Trenchers	1	8.00	78	0.50
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	1,009.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	25.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	95.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	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	lb/day										lb/day					
Fugitive Dust					3.5811	0.0000	3.5811	0.5422	0.0000	0.5422			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**3.5811**	**1.9386**	**5.5196**	**0.5422**	**1.8048**	**2.3470**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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/day										lb/day					
Hauling	0.1642	5.3438	1.1057	0.0134	0.2892	0.0203	0.3095	0.0793	0.0195	0.0987		1,448.3526	1,448.3526	0.0997		1,450.8453
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	0.0829	0.0625	0.8101	1.8900e-003	0.1677	1.4900e-003	0.1692	0.0445	1.3800e-003	0.0458		188.0535	188.0535	7.0500e-003		188.2298
Total	**0.2471**	**5.4063**	**1.9158**	**0.0153**	**0.4569**	**0.0218**	**0.4787**	**0.1237**	**0.0208**	**0.1446**		**1,636.4061**	**1,636.4061**	**0.1068**		**1,639.0751**

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/day										lb/day					
Fugitive Dust					3.5811	0.0000	3.5811	0.5422	0.0000	0.5422			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**3.5811**	**1.9386**	**5.5196**	**0.5422**	**1.8048**	**2.3470**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

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/day										lb/day					
Hauling	0.1642	5.3438	1.1057	0.0134	0.2892	0.0203	0.3095	0.0793	0.0195	0.0987		1,448.3526	1,448.3526	0.0997		1,450.8453
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	0.0829	0.0625	0.8101	1.8900e-003	0.1677	1.4900e-003	0.1692	0.0445	1.3800e-003	0.0458		188.0535	188.0535	7.0500e-003		188.2298
Total	**0.2471**	**5.4063**	**1.9158**	**0.0153**	**0.4569**	**0.0218**	**0.4787**	**0.1237**	**0.0208**	**0.1446**		**1,636.4061**	**1,636.4061**	**0.1068**		**1,639.0751**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 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/day										lb/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	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.0995**	**0.0751**	**0.9721**	**2.2700e-003**	**0.2012**	**1.7900e-003**	**0.2030**	**0.0534**	**1.6500e-003**	**0.0550**		**225.6642**	**225.6642**	**8.4600e-003**		**225.8758**

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

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/day										lb/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	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.0995**	**0.0751**	**0.9721**	**2.2700e-003**	**0.2012**	**1.7900e-003**	**0.2030**	**0.0534**	**1.6500e-003**	**0.0550**		**225.6642**	**225.6642**	**8.4600e-003**		**225.8758**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	5.0373	56.5518	29.4195	0.0552		2.6939	2.6939		2.4784	2.4784		5,557.3004	5,557.3004	1.7301		5,600.5520
Total	**5.0373**	**56.5518**	**29.4195**	**0.0552**	**12.0442**	**2.6939**	**14.7381**	**6.6205**	**2.4784**	**9.0988**		**5,557.3004**	**5,557.3004**	**1.7301**		**5,600.5520**

3.4 Grading - 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/day										lb/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	0.1381	0.1042	1.3502	3.1500e-003	0.2794	2.4900e-003	0.2819	0.0741	2.3000e-003	0.0764		313.4225	313.4225	0.0118		313.7163
Total	**0.1381**	**0.1042**	**1.3502**	**3.1500e-003**	**0.2794**	**2.4900e-003**	**0.2819**	**0.0741**	**2.3000e-003**	**0.0764**		**313.4225**	**313.4225**	**0.0118**		**313.7163**

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/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	5.0373	56.5518	29.4195	0.0552		2.6939	2.6939		2.4784	2.4784	0.0000	5,557.3004	5,557.3004	1.7301		5,600.5520
Total	**5.0373**	**56.5518**	**29.4195**	**0.0552**	**12.0442**	**2.6939**	**14.7381**	**6.6205**	**2.4784**	**9.0988**	**0.0000**	**5,557.3004**	**5,557.3004**	**1.7301**		**5,600.5520**

3.4 Grading - 2018

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/day										lb/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	0.1381	0.1042	1.3502	3.1500e-003	0.2794	2.4900e-003	0.2819	0.0741	2.3000e-003	0.0764		313.4225	313.4225	0.0118		313.7163
Total	**0.1381**	**0.1042**	**1.3502**	**3.1500e-003**	**0.2794**	**2.4900e-003**	**0.2819**	**0.0741**	**2.3000e-003**	**0.0764**		**313.4225**	**313.4225**	**0.0118**		**313.7163**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	4.5392	33.1594	26.7912	0.0392		2.2175	2.2175		2.0974	2.0974		3,704.7311	3,704.7311	0.9051		3,727.3595
Total	**4.5392**	**33.1594**	**26.7912**	**0.0392**		**2.2175**	**2.2175**		**2.0974**	**2.0974**		**3,704.7311**	**3,704.7311**	**0.9051**		**3,727.3595**

3.5 Building Construction - 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/day										lb/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	0.1748	4.6573	1.2734	0.0101	0.2433	0.0328	0.2761	0.0700	0.0314	0.1014		1,070.3818	1,070.3818	0.0705		1,072.1438
Worker	0.5249	0.3961	5.1307	0.0120	1.0619	9.4700e-003	1.0713	0.2816	8.7300e-003	0.2903		1,191.0053	1,191.0053	0.0447		1,192.1221
Total	**0.6997**	**5.0534**	**6.4041**	**0.0220**	**1.3052**	**0.0423**	**1.3474**	**0.3517**	**0.0401**	**0.3918**		**2,261.3871**	**2,261.3871**	**0.1152**		**2,264.2659**

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/day										lb/day					
Off-Road	4.5392	33.1594	26.7912	0.0392		2.2175	2.2175		2.0974	2.0974	0.0000	3,704.7311	3,704.7311	0.9051		3,727.3595
Total	**4.5392**	**33.1594**	**26.7912**	**0.0392**		**2.2175**	**2.2175**		**2.0974**	**2.0974**	**0.0000**	**3,704.7311**	**3,704.7311**	**0.9051**		**3,727.3595**

3.5 Building Construction - 2018

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/day										lb/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	0.1748	4.6573	1.2734	0.0101	0.2433	0.0328	0.2761	0.0700	0.0314	0.1014		1,070.3818	1,070.3818	0.0705		1,072.1438
Worker	0.5249	0.3961	5.1307	0.0120	1.0619	9.4700e-003	1.0713	0.2816	8.7300e-003	0.2903		1,191.0053	1,191.0053	0.0447		1,192.1221
Total	**0.6997**	**5.0534**	**6.4041**	**0.0220**	**1.3052**	**0.0423**	**1.3474**	**0.3517**	**0.0401**	**0.3918**		**2,261.3871**	**2,261.3871**	**0.1152**		**2,264.2659**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	3.9965	30.2365	26.1679	0.0392		1.9208	1.9208		1.8171	1.8171		3,667.9746	3,667.9746	0.8790		3,689.9498
Total	**3.9965**	**30.2365**	**26.1679**	**0.0392**		**1.9208**	**1.9208**		**1.8171**	**1.8171**		**3,667.9746**	**3,667.9746**	**0.8790**		**3,689.9498**

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/day										lb/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	0.1579	4.3977	1.1669	9.9300e-003	0.2433	0.0280	0.2713	0.0700	0.0268	0.0969		1,059.4956	1,059.4956	0.0679		1,061.1929
Worker	0.4746	0.3488	4.5806	0.0116	1.0619	9.1600e-003	1.0710	0.2816	8.4400e-003	0.2901		1,152.3052	1,152.3052	0.0396		1,153.2947
Total	**0.6325**	**4.7465**	**5.7475**	**0.0215**	**1.3052**	**0.0372**	**1.3423**	**0.3517**	**0.0353**	**0.3869**		**2,211.8008**	**2,211.8008**	**0.1075**		**2,214.4877**

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/day										lb/day					
Off-Road	3.9965	30.2365	26.1679	0.0392		1.9208	1.9208		1.8171	1.8171	0.0000	3,667.9746	3,667.9746	0.8790		3,689.9498
Total	**3.9965**	**30.2365**	**26.1679**	**0.0392**		**1.9208**	**1.9208**		**1.8171**	**1.8171**	**0.0000**	**3,667.9746**	**3,667.9746**	**0.8790**		**3,689.9498**

3.5 Building Construction - 2019

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/day										lb/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	0.1579	4.3977	1.1669	9.9300e-003	0.2433	0.0280	0.2713	0.0700	0.0268	0.0969		1,059.4956	1,059.4956	0.0679		1,061.1929
Worker	0.4746	0.3488	4.5806	0.0116	1.0619	9.1600e-003	1.0710	0.2816	8.4400e-003	0.2901		1,152.3052	1,152.3052	0.0396		1,153.2947
Total	**0.6325**	**4.7465**	**5.7475**	**0.0215**	**1.3052**	**0.0372**	**1.3423**	**0.3517**	**0.0353**	**0.3869**		**2,211.8008**	**2,211.8008**	**0.1075**		**2,214.4877**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	1.9733	20.2879	18.6941	0.0282		1.1724	1.1724		1.0786	1.0786		2,795.4687	2,795.4687	0.8845		2,817.5801
Paving	0.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2563**	**20.2879**	**18.6941**	**0.0282**		**1.1724**	**1.1724**		**1.0786**	**1.0786**		**2,795.4687**	**2,795.4687**	**0.8845**		**2,817.5801**

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/day										lb/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	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.0999**	**0.0734**	**0.9643**	**2.4400e-003**	**0.2236**	**1.9300e-003**	**0.2255**	**0.0593**	**1.7800e-003**	**0.0611**		**242.5906**	**242.5906**	**8.3300e-003**		**242.7989**

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/day										lb/day					
Off-Road	1.9733	20.2879	18.6941	0.0282		1.1724	1.1724		1.0786	1.0786	0.0000	2,795.4687	2,795.4687	0.8845		2,817.5801
Paving	0.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2563**	**20.2879**	**18.6941**	**0.0282**		**1.1724**	**1.1724**		**1.0786**	**1.0786**	**0.0000**	**2,795.4687**	**2,795.4687**	**0.8845**		**2,817.5801**

3.6 Paving - 2019

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/day										lb/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	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.0999**	**0.0734**	**0.9643**	**2.4400e-003**	**0.2236**	**1.9300e-003**	**0.2255**	**0.0593**	**1.7800e-003**	**0.0611**		**242.5906**	**242.5906**	**8.3300e-003**		**242.7989**

3.7 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	lb/day										lb/day					
Archit. Coating	49.5331					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	**49.7995**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

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/day										lb/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	0.0949	0.0698	0.9161	2.3200e-003	0.2124	1.8300e-003	0.2142	0.0563	1.6900e-003	0.0580		230.4611	230.4611	7.9200e-003		230.6590
Total	**0.0949**	**0.0698**	**0.9161**	**2.3200e-003**	**0.2124**	**1.8300e-003**	**0.2142**	**0.0563**	**1.6900e-003**	**0.0580**		**230.4611**	**230.4611**	**7.9200e-003**		**230.6590**

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/day										lb/day					
Archit. Coating	49.5331					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	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**49.7995**	**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**

3.7 Architectural Coating - 2019

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/day										lb/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	0.0949	0.0698	0.9161	2.3200e-003	0.2124	1.8300e-003	0.2142	0.0563	1.6900e-003	0.0580		230.4611	230.4611	7.9200e-003		230.6590
Total	**0.0949**	**0.0698**	**0.9161**	**2.3200e-003**	**0.2124**	**1.8300e-003**	**0.2142**	**0.0563**	**1.6900e-003**	**0.0580**		**230.4611**	**230.4611**	**7.9200e-003**		**230.6590**

4.0 Operational Detail - Mobile

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	lb/day										lb/day					
Mitigated	3.3543	15.5974	44.9603	0.1455	11.1866	0.1451	11.3317	2.9940	0.1361	3.1301		14,778.3790	14,778.3790	0.8057		14,798.5222
Unmitigated	3.3543	15.5974	44.9603	0.1455	11.1866	0.1451	11.3317	2.9940	0.1361	3.1301		14,778.3790	14,778.3790	0.8057		14,798.5222

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	595.59	112.79	58.11	1,991,986	1,991,986
General Office Building	355.17	79.21	33.81	869,266	869,266
Health Club	691.53	438.27	561.33	1,361,862	1,361,862
Parking Lot	0.00	0.00	0.00		
Total	1,642.28	630.28	653.25	4,223,115	4,223,115

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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 Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
General Light Industry	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Health Club	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

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	lb/day										lb/day					
NaturalGas Mitigated	0.0671	0.6097	0.5122	3.6600e-003		0.0463	0.0463		0.0463	0.0463		731.6500	731.6500	0.0140	0.0134	735.9978
NaturalGas Unmitigated	0.0671	0.6097	0.5122	3.6600e-003		0.0463	0.0463		0.0463	0.0463		731.6500	731.6500	0.0140	0.0134	735.9978

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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/day					
General Light Industry	4251.43	0.0459	0.4168	0.3501	2.5000e-003		0.0317	0.0317		0.0317	0.0317		500.1683	500.1683	9.5900e-003	9.1700e-003	503.1405
General Office Building	922.773	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003		108.5615	108.5615	2.0800e-003	1.9900e-003	109.2066
Health Club	1044.82	0.0113	0.1024	0.0860	6.1000e-004		7.7800e-003	7.7800e-003		7.7800e-003	7.7800e-003		122.9202	122.9202	2.3600e-003	2.2500e-003	123.6507
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
Total		**0.0671**	**0.6097**	**0.5122**	**3.6500e-003**		**0.0463**	**0.0463**		**0.0463**	**0.0463**		**731.6500**	**731.6500**	**0.0140**	**0.0134**	**735.9978**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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/day					
General Light Industry	4.25143	0.0459	0.4168	0.3501	2.5000e-003		0.0317	0.0317		0.0317	0.0317		500.1683	500.1683	9.5900e-003	9.1700e-003	503.1405
General Office Building	0.922773	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003		108.5615	108.5615	2.0800e-003	1.9900e-003	109.2066
Health Club	1.04482	0.0113	0.1024	0.0860	6.1000e-004		7.7800e-003	7.7800e-003		7.7800e-003	7.7800e-003		122.9202	122.9202	2.3600e-003	2.2500e-003	123.6507
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
Total		**0.0671**	**0.6097**	**0.5122**	**3.6500e-003**		**0.0463**	**0.0463**		**0.0463**	**0.0463**		**731.6500**	**731.6500**	**0.0140**	**0.0134**	**735.9978**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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/day										lb/day					
Mitigated	3.0544	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884
Unmitigated	3.0544	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884

6.2 Area by SubCategory

Unmitigated

	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/day					
Architectural Coating	0.2714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7793					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6600e-003	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884
Total	**3.0543**	**3.6000e-004**	**0.0389**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0829**	**0.0829**	**2.2000e-004**		**0.0884**

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/day					
Architectural Coating	0.2714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7793					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6600e-003	3.6000e-004	0.0389	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0829	0.0829	2.2000e-004		0.0884
Total	**3.0543**	**3.6000e-004**	**0.0389**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0829**	**0.0829**	**2.2000e-004**		**0.0884**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Equipment Type	Number

11.0 Vegetation

Van Nuys Airport

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	32.20	1000sqft	0.74	32,200.00	0
General Light Industry	85.45	1000sqft	1.96	85,450.00	0
Parking Lot	240.00	Space	2.16	96,000.00	0
Health Club	21.00	1000sqft	0.48	21,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Demo = 2 months (61 days)

Off-road Equipment -

Off-road Equipment - Forklifts = 6 units
Welders = 4 units

Off-road Equipment - Excavator = 3 units
Graders + Dozers = 2 units

Off-road Equipment - Add Equip. = Tiller (trencher) + Bobcat (skid steer)

Demolition -

Grading - No Grading Required

Architectural Coating - Interior = 138,650 sq. ft.

Vehicle Trips -

Area Coating - Interior = 138,650 sq. ft.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Van Nuys Airport - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	207,975.00	138,650.00
tblAreaCoating	Area_Nonresidential_Interior	207975	138650
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	61.00
tblGrading	AcresOfGrading	20.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

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	tons/yr										MT/yr					
2018	0.6418	5.4090	3.9649	7.5800e-003	0.4462	0.2918	0.7380	0.1665	0.2741	0.4405	0.0000	678.6054	678.6054	0.1325	0.0000	681.9167
2019	0.6615	1.2765	1.1743	2.1600e-003	0.0427	0.0718	0.1145	0.0115	0.0677	0.0792	0.0000	190.3754	190.3754	0.0352	0.0000	191.2563
Maximum	**0.6615**	**5.4090**	**3.9649**	**7.5800e-003**	**0.4462**	**0.2918**	**0.7380**	**0.1665**	**0.2741**	**0.4405**	**0.0000**	**678.6054**	**678.6054**	**0.1325**	**0.0000**	**681.9167**

Mitigated 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	tons/yr										MT/yr					
2018	0.6418	5.4089	3.9649	7.5800e-003	0.4462	0.2918	0.7380	0.1665	0.2741	0.4405	0.0000	678.6048	678.6048	0.1325	0.0000	681.9161
2019	0.6615	1.2765	1.1743	2.1600e-003	0.0427	0.0718	0.1145	0.0115	0.0677	0.0792	0.0000	190.3752	190.3752	0.0352	0.0000	191.2562
Maximum	**0.6615**	**5.4089**	**3.9649**	**7.5800e-003**	**0.4462**	**0.2918**	**0.7380**	**0.1665**	**0.2741**	**0.4405**	**0.0000**	**678.6048**	**678.6048**	**0.1325**	**0.0000**	**681.9161**

	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	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	1-1-2018	3-31-2018	1.5453	1.5453
2	4-1-2018	6-30-2018	1.6265	1.6265
3	7-1-2018	9-30-2018	1.4277	1.4277
4	10-1-2018	12-31-2018	1.4315	1.4315
5	1-1-2019	3-31-2019	1.2401	1.2401
6	4-1-2019	6-30-2019	0.6965	0.6965
		Highest	1.6265	1.6265

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	0.5572	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100
Energy	0.0122	0.1113	0.0935	6.7000e-004		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	1,077.6216	1,077.6216	0.0249	6.8900e-003	1,080.2989
Mobile	0.4729	2.4101	6.3764	0.0205	1.6029	0.0213	1.6241	0.4297	0.0199	0.4496	0.0000	1,892.5541	1,892.5541	0.1065	0.0000	1,895.2157
Waste						0.0000	0.0000		0.0000	0.0000	51.8865	0.0000	51.8865	3.0664	0.0000	128.5467
Water						0.0000	0.0000		0.0000	0.0000	8.4787	220.2327	228.7114	0.8761	0.0216	257.0609
Total	**1.0424**	**2.5214**	**6.4747**	**0.0212**	**1.6029**	**0.0298**	**1.6326**	**0.4297**	**0.0284**	**0.4581**	**60.3652**	**3,190.4177**	**3,250.7830**	**4.0739**	**0.0285**	**3,361.1323**

2.2 Overall Operational

Mitigated 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	0.5572	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100
Energy	0.0122	0.1113	0.0935	6.7000e-004		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	1,077.6216	1,077.6216	0.0249	6.8900e-003	1,080.2989
Mobile	0.4729	2.4101	6.3764	0.0205	1.6029	0.0213	1.6241	0.4297	0.0199	0.4496	0.0000	1,892.5541	1,892.5541	0.1065	0.0000	1,895.2157
Waste						0.0000	0.0000		0.0000	0.0000	51.8865	0.0000	51.8865	3.0664	0.0000	128.5467
Water						0.0000	0.0000		0.0000	0.0000	8.4787	220.2327	228.7114	0.8761	0.0216	257.0609
Total	**1.0424**	**2.5214**	**6.4747**	**0.0212**	**1.6029**	**0.0298**	**1.6326**	**0.4297**	**0.0284**	**0.4581**	**60.3652**	**3,190.4177**	**3,250.7830**	**4.0739**	**0.0285**	**3,361.1323**

	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	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	1/1/2018	3/26/2018	5	61	
2	Site Preparation	Site Preparation	3/27/2018	4/9/2018	5	10	
3	Grading	Grading	4/10/2018	5/7/2018	5	20	
4	Building Construction	Building Construction	5/8/2018	3/25/2019	5	230	
5	Paving	Paving	3/26/2019	4/22/2019	5	20	
6	Architectural Coating	Architectural Coating	4/23/2019	5/20/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,650; Non-Residential Outdoor: 69,325; Striped Parking Area: 5,760 (Architectural Coating – sqft)

OffRoad Equipment

Van Nuys Airport - Los Angeles-South Coast County, Annual

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
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Skid Steer Loaders	1	8.00	65	0.37
Paving	Trenchers	1	8.00	78	0.50
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	1,009.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	25.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	95.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	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	tons/yr										MT/yr					
Fugitive Dust					0.1092	0.0000	0.1092	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1134	1.1688	0.6803	1.1800e-003		0.0591	0.0591		0.0551	0.0551	0.0000	107.1284	107.1284	0.0295	0.0000	107.8663
Total	**0.1134**	**1.1688**	**0.6803**	**1.1800e-003**	**0.1092**	**0.0591**	**0.1684**	**0.0165**	**0.0551**	**0.0716**	**0.0000**	**107.1284**	**107.1284**	**0.0295**	**0.0000**	**107.8663**

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	tons/yr										MT/yr					
Hauling	5.0600e-003	0.1685	0.0348	4.1000e-004	8.6700e-003	6.3000e-004	9.2900e-003	2.3800e-003	6.0000e-004	2.9800e-003	0.0000	39.7930	39.7930	2.8100e-003	0.0000	39.8632
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	2.5400e-003	2.1700e-003	0.0233	6.0000e-005	5.0100e-003	5.0000e-005	5.0600e-003	1.3300e-003	4.0000e-005	1.3700e-003	0.0000	4.9812	4.9812	1.9000e-004	0.0000	4.9859
Total	**7.6000e-003**	**0.1707**	**0.0581**	**4.7000e-004**	**0.0137**	**6.8000e-004**	**0.0144**	**3.7100e-003**	**6.4000e-004**	**4.3500e-003**	**0.0000**	**44.7743**	**44.7743**	**3.0000e-003**	**0.0000**	**44.8491**

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					
Fugitive Dust					0.1092	0.0000	0.1092	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1134	1.1688	0.6803	1.1800e-003		0.0591	0.0591		0.0551	0.0551	0.0000	107.1283	107.1283	0.0295	0.0000	107.8662
Total	**0.1134**	**1.1688**	**0.6803**	**1.1800e-003**	**0.1092**	**0.0591**	**0.1684**	**0.0165**	**0.0551**	**0.0716**	**0.0000**	**107.1283**	**107.1283**	**0.0295**	**0.0000**	**107.8662**

3.2 Demolition - 2018

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	tons/yr										MT/yr					
Hauling	5.0600e-003	0.1685	0.0348	4.1000e-004	8.6700e-003	6.3000e-004	9.2900e-003	2.3800e-003	6.0000e-004	2.9800e-003	0.0000	39.7930	39.7930	2.8100e-003	0.0000	39.8632
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	2.5400e-003	2.1700e-003	0.0233	6.0000e-005	5.0100e-003	5.0000e-005	5.0600e-003	1.3300e-003	4.0000e-005	1.3700e-003	0.0000	4.9812	4.9812	1.9000e-004	0.0000	4.9859
Total	**7.6000e-003**	**0.1707**	**0.0581**	**4.7000e-004**	**0.0137**	**6.8000e-004**	**0.0144**	**3.7100e-003**	**6.4000e-004**	**4.3500e-003**	**0.0000**	**44.7743**	**44.7743**	**3.0000e-003**	**0.0000**	**44.8491**

3.3 Site Preparation - 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	tons/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	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3800**	**17.3800**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 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	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	5.0000e-004	4.3000e-004	4.5900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9799	0.9799	4.0000e-005	0.0000	0.9808
Total	**5.0000e-004**	**4.3000e-004**	**4.5900e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9799**	**0.9799**	**4.0000e-005**	**0.0000**	**0.9808**

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					
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	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3799**	**17.3799**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 2018

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	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	5.0000e-004	4.3000e-004	4.5900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9799	0.9799	4.0000e-005	0.0000	0.9808
Total	**5.0000e-004**	**4.3000e-004**	**4.5900e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9799**	**0.9799**	**4.0000e-005**	**0.0000**	**0.9808**

3.4 Grading - 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	tons/yr										MT/yr					
Fugitive Dust					0.1204	0.0000	0.1204	0.0662	0.0000	0.0662	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0504	0.5655	0.2942	5.5000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	50.4150	50.4150	0.0157	0.0000	50.8074
Total	**0.0504**	**0.5655**	**0.2942**	**5.5000e-004**	**0.1204**	**0.0269**	**0.1474**	**0.0662**	**0.0248**	**0.0910**	**0.0000**	**50.4150**	**50.4150**	**0.0157**	**0.0000**	**50.8074**

3.4 Grading - 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	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	1.3900e-003	1.1900e-003	0.0128	3.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.7220	2.7220	1.0000e-004	0.0000	2.7246
Total	**1.3900e-003**	**1.1900e-003**	**0.0128**	**3.0000e-005**	**2.7400e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.7220**	**2.7220**	**1.0000e-004**	**0.0000**	**2.7246**

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					
Fugitive Dust					0.1204	0.0000	0.1204	0.0662	0.0000	0.0662	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0504	0.5655	0.2942	5.5000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	50.4149	50.4149	0.0157	0.0000	50.8073
Total	**0.0504**	**0.5655**	**0.2942**	**5.5000e-004**	**0.1204**	**0.0269**	**0.1474**	**0.0662**	**0.0248**	**0.0910**	**0.0000**	**50.4149**	**50.4149**	**0.0157**	**0.0000**	**50.8073**

3.4 Grading - 2018

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	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	1.3900e-003	1.1900e-003	0.0128	3.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.7220	2.7220	1.0000e-004	0.0000	2.7246
Total	**1.3900e-003**	**1.1900e-003**	**0.0128**	**3.0000e-005**	**2.7400e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.7220**	**2.7220**	**1.0000e-004**	**0.0000**	**2.7246**

3.5 Building Construction - 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	tons/yr										MT/yr					
Off-Road	0.3858	2.8186	2.2773	3.3300e-003		0.1885	0.1885		0.1783	0.1783	0.0000	285.6744	285.6744	0.0698	0.0000	287.4193
Total	**0.3858**	**2.8186**	**2.2773**	**3.3300e-003**		**0.1885**	**0.1885**		**0.1783**	**0.1783**	**0.0000**	**285.6744**	**285.6744**	**0.0698**	**0.0000**	**287.4193**

3.5 Building Construction - 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	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	0.0151	0.4045	0.1137	8.4000e-004	0.0203	2.8100e-003	0.0232	5.8700e-003	2.6900e-003	8.5600e-003	0.0000	81.6113	81.6113	5.6000e-003	0.0000	81.7512
Worker	0.0448	0.0383	0.4117	9.7000e-004	0.0885	8.0000e-004	0.0893	0.0235	7.4000e-004	0.0242	0.0000	87.9202	87.9202	3.3100e-003	0.0000	88.0028
Total	**0.0599**	**0.4428**	**0.5254**	**1.8100e-003**	**0.1088**	**3.6100e-003**	**0.1124**	**0.0294**	**3.4300e-003**	**0.0328**	**0.0000**	**169.5314**	**169.5314**	**8.9100e-003**	**0.0000**	**169.7540**

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	0.3858	2.8185	2.2773	3.3300e-003		0.1885	0.1885		0.1783	0.1783	0.0000	285.6741	285.6741	0.0698	0.0000	287.4190
Total	**0.3858**	**2.8185**	**2.2773**	**3.3300e-003**		**0.1885**	**0.1885**		**0.1783**	**0.1783**	**0.0000**	**285.6741**	**285.6741**	**0.0698**	**0.0000**	**287.4190**

3.5 Building Construction - 2018

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	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	0.0151	0.4045	0.1137	8.4000e-004	0.0203	2.8100e-003	0.0232	5.8700e-003	2.6900e-003	8.5600e-003	0.0000	81.6113	81.6113	5.6000e-003	0.0000	81.7512
Worker	0.0448	0.0383	0.4117	9.7000e-004	0.0885	8.0000e-004	0.0893	0.0235	7.4000e-004	0.0242	0.0000	87.9202	87.9202	3.3100e-003	0.0000	88.0028
Total	**0.0599**	**0.4428**	**0.5254**	**1.8100e-003**	**0.1088**	**3.6100e-003**	**0.1124**	**0.0294**	**3.4300e-003**	**0.0328**	**0.0000**	**169.5314**	**169.5314**	**8.9100e-003**	**0.0000**	**169.7540**

3.5 Building Construction - 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	tons/yr										MT/yr					
Off-Road	0.1199	0.9071	0.7850	1.1700e-003		0.0576	0.0576		0.0545	0.0545	0.0000	99.8259	99.8259	0.0239	0.0000	100.4240
Total	**0.1199**	**0.9071**	**0.7850**	**1.1700e-003**		**0.0576**	**0.0576**		**0.0545**	**0.0545**	**0.0000**	**99.8259**	**99.8259**	**0.0239**	**0.0000**	**100.4240**

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	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	4.8300e-003	0.1347	0.0368	2.9000e-004	7.1800e-003	8.5000e-004	8.0300e-003	2.0700e-003	8.1000e-004	2.8800e-003	0.0000	28.5074	28.5074	1.9000e-003	0.0000	28.5549
Worker	0.0143	0.0119	0.1294	3.3000e-004	0.0312	2.7000e-004	0.0315	8.2900e-003	2.5000e-004	8.5500e-003	0.0000	30.0207	30.0207	1.0300e-003	0.0000	30.0465
Total	**0.0191**	**0.1466**	**0.1662**	**6.2000e-004**	**0.0384**	**1.1200e-003**	**0.0395**	**0.0104**	**1.0600e-003**	**0.0114**	**0.0000**	**58.5280**	**58.5280**	**2.9300e-003**	**0.0000**	**58.6014**

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	0.1199	0.9071	0.7850	1.1700e-003		0.0576	0.0576		0.0545	0.0545	0.0000	99.8258	99.8258	0.0239	0.0000	100.4239
Total	**0.1199**	**0.9071**	**0.7850**	**1.1700e-003**		**0.0576**	**0.0576**		**0.0545**	**0.0545**	**0.0000**	**99.8258**	**99.8258**	**0.0239**	**0.0000**	**100.4239**

3.5 Building Construction - 2019

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	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	4.8300e-003	0.1347	0.0368	2.9000e-004	7.1800e-003	8.5000e-004	8.0300e-003	2.0700e-003	8.1000e-004	2.8800e-003	0.0000	28.5074	28.5074	1.9000e-003	0.0000	28.5549
Worker	0.0143	0.0119	0.1294	3.3000e-004	0.0312	2.7000e-004	0.0315	8.2900e-003	2.5000e-004	8.5500e-003	0.0000	30.0207	30.0207	1.0300e-003	0.0000	30.0465
Total	**0.0191**	**0.1466**	**0.1662**	**6.2000e-004**	**0.0384**	**1.1200e-003**	**0.0395**	**0.0104**	**1.0600e-003**	**0.0114**	**0.0000**	**58.5280**	**58.5280**	**2.9300e-003**	**0.0000**	**58.6014**

3.6 Paving - 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	tons/yr										MT/yr					
Off-Road	0.0197	0.2029	0.1869	2.8000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	25.3601	25.3601	8.0200e-003	0.0000	25.5607
Paving	2.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0226**	**0.2029**	**0.1869**	**2.8000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**25.3601**	**25.3601**	**8.0200e-003**	**0.0000**	**25.5607**

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	1.0000e-003	8.3000e-004	9.0800e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1067	2.1067	7.0000e-005	0.0000	2.1085
Total	**1.0000e-003**	**8.3000e-004**	**9.0800e-003**	**2.0000e-005**	**2.1900e-003**	**2.0000e-005**	**2.2100e-003**	**5.8000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**2.1067**	**2.1067**	**7.0000e-005**	**0.0000**	**2.1085**

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	0.0197	0.2029	0.1869	2.8000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	25.3600	25.3600	8.0200e-003	0.0000	25.5606
Paving	2.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0226**	**0.2029**	**0.1869**	**2.8000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**25.3600**	**25.3600**	**8.0200e-003**	**0.0000**	**25.5606**

3.6 Paving - 2019

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	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	1.0000e-003	8.3000e-004	9.0800e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1067	2.1067	7.0000e-005	0.0000	2.1085
Total	**1.0000e-003**	**8.3000e-004**	**9.0800e-003**	**2.0000e-005**	**2.1900e-003**	**2.0000e-005**	**2.2100e-003**	**5.8000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**2.1067**	**2.1067**	**7.0000e-005**	**0.0000**	**2.1085**

3.7 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	tons/yr										MT/yr					
Archit. Coating	0.4953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**0.4980**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

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	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	9.5000e-004	7.9000e-004	8.6300e-003	2.0000e-005	2.0800e-003	2.0000e-005	2.1000e-003	5.5000e-004	2.0000e-005	5.7000e-004	0.0000	2.0014	2.0014	7.0000e-005	0.0000	2.0031
Total	**9.5000e-004**	**7.9000e-004**	**8.6300e-003**	**2.0000e-005**	**2.0800e-003**	**2.0000e-005**	**2.1000e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.0014**	**2.0014**	**7.0000e-005**	**0.0000**	**2.0031**

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					
Archit. Coating	0.4953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**0.4980**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

3.7 Architectural Coating - 2019

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	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	9.5000e-004	7.9000e-004	8.6300e-003	2.0000e-005	2.0800e-003	2.0000e-005	2.1000e-003	5.5000e-004	2.0000e-005	5.7000e-004	0.0000	2.0014	2.0014	7.0000e-005	0.0000	2.0031
Total	**9.5000e-004**	**7.9000e-004**	**8.6300e-003**	**2.0000e-005**	**2.0800e-003**	**2.0000e-005**	**2.1000e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.0014**	**2.0014**	**7.0000e-005**	**0.0000**	**2.0031**

4.0 Operational Detail - Mobile

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	tons/yr										MT/yr					
Mitigated	0.4729	2.4101	6.3764	0.0205	1.6029	0.0213	1.6241	0.4297	0.0199	0.4496	0.0000	1,892.5541	1,892.5541	0.1065	0.0000	1,895.2157
Unmitigated	0.4729	2.4101	6.3764	0.0205	1.6029	0.0213	1.6241	0.4297	0.0199	0.4496	0.0000	1,892.5541	1,892.5541	0.1065	0.0000	1,895.2157

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	595.59	112.79	58.11	1,991,986	1,991,986
General Office Building	355.17	79.21	33.81	869,266	869,266
Health Club	691.53	438.27	561.33	1,361,862	1,361,862
Parking Lot	0.00	0.00	0.00		
Total	1,642.28	630.28	653.25	4,223,115	4,223,115

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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 Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
General Light Industry	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Health Club	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	956.4887	956.4887	0.0226	4.6700e-003	958.4463
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	956.4887	956.4887	0.0226	4.6700e-003	958.4463
NaturalGas Mitigated	0.0122	0.1113	0.0935	6.7000e-004		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	121.1329	121.1329	2.3200e-003	2.2200e-003	121.8527
NaturalGas Unmitigated	0.0122	0.1113	0.0935	6.7000e-004		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	121.1329	121.1329	2.3200e-003	2.2200e-003	121.8527

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	tons/yr										MT/yr					
General Light Industry	1.55177e+006	8.3700e-003	0.0761	0.0639	4.6000e-004		5.7800e-003	5.7800e-003		5.7800e-003	5.7800e-003	0.0000	82.8085	82.8085	1.5900e-003	1.5200e-003	83.3006
General Office Building	336812	1.8200e-003	0.0165	0.0139	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	17.9736	17.9736	3.4000e-004	3.3000e-004	18.0804
Health Club	381360	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3508	20.3508	3.9000e-004	3.7000e-004	20.4718
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
Total		**0.0123**	**0.1113**	**0.0935**	**6.7000e-004**		**8.4500e-003**	**8.4500e-003**		**8.4500e-003**	**8.4500e-003**	**0.0000**	**121.1329**	**121.1329**	**2.3200e-003**	**2.2200e-003**	**121.8527**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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	tons/yr										MT/yr					
General Light Industry	1.55177e+006	8.3700e-003	0.0761	0.0639	4.6000e-004		5.7800e-003	5.7800e-003		5.7800e-003	5.7800e-003	0.0000	82.8085	82.8085	1.5900e-003	1.5200e-003	83.3006
General Office Building	336812	1.8200e-003	0.0165	0.0139	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	17.9736	17.9736	3.4000e-004	3.3000e-004	18.0804
Health Club	381360	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3508	20.3508	3.9000e-004	3.7000e-004	20.4718
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
Total		**0.0123**	**0.1113**	**0.0935**	**6.7000e-004**		**8.4500e-003**	**8.4500e-003**		**8.4500e-003**	**8.4500e-003**	**0.0000**	**121.1329**	**121.1329**	**2.3200e-003**	**2.2200e-003**	**121.8527**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	966439	538.2696	0.0127	2.6300e-003	539.3713
General Office Building	428904	238.8830	5.6400e-003	1.1700e-003	239.3719
Health Club	237510	132.2839	3.1200e-003	6.5000e-004	132.5547
Parking Lot	84480	47.0521	1.1100e-003	2.3000e-004	47.1484
Total		**956.4887**	**0.0226**	**4.6800e-003**	**958.4463**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	966439	538.2696	0.0127	2.6300e-003	539.3713
General Office Building	428904	238.8830	5.6400e-003	1.1700e-003	239.3719
Health Club	237510	132.2839	3.1200e-003	6.5000e-004	132.5547
Parking Lot	84480	47.0521	1.1100e-003	2.3000e-004	47.1484
Total		**956.4887**	**0.0226**	**4.6800e-003**	**958.4463**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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					
Mitigated	0.5572	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100
Unmitigated	0.5572	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100

6.2 Area by SubCategory

Unmitigated

	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	tons/yr										MT/yr					
Architectural Coating	0.0495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100
Total	**0.5572**	**4.0000e-005**	**4.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.4000e-003**	**9.4000e-003**	**3.0000e-005**	**0.0000**	**0.0100**

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	tons/yr										MT/yr					
Architectural Coating	0.0495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4000e-003	9.4000e-003	3.0000e-005	0.0000	0.0100
Total	**0.5572**	**4.0000e-005**	**4.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.4000e-003**	**9.4000e-003**	**3.0000e-005**	**0.0000**	**0.0100**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	228.7114	0.8761	0.0216	257.0609
Unmitigated	228.7114	0.8761	0.0216	257.0609

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	19.7603 / 0	149.5747	0.6473	0.0159	170.4959
General Office Building	5.72303 / 3.50766	65.0250	0.1880	4.7100e-003	71.1287
Health Club	1.24201 / 0.76123	14.1117	0.0408	1.0200e-003	15.4363
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**228.7114**	**0.8760**	**0.0216**	**257.0609**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	19.7603 / 0	149.5747	0.6473	0.0159	170.4959
General Office Building	5.72303 / 3.50766	65.0250	0.1880	4.7100e-003	71.1287
Health Club	1.24201 / 0.76123	14.1117	0.0408	1.0200e-003	15.4363
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**228.7114**	**0.8760**	**0.0216**	**257.0609**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	51.8865	3.0664	0.0000	128.5467
Unmitigated	51.8865	3.0664	0.0000	128.5467

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	105.96	21.5089	1.2711	0.0000	53.2874
General Office Building	29.95	6.0796	0.3593	0.0000	15.0619
Health Club	119.7	24.2980	1.4360	0.0000	60.1973
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**51.8865**	**3.0664**	**0.0000**	**128.5467**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	105.96	21.5089	1.2711	0.0000	53.2874
General Office Building	29.95	6.0796	0.3593	0.0000	15.0619
Health Club	119.7	24.2980	1.4360	0.0000	60.1973
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**51.8865**	**3.0664**	**0.0000**	**128.5467**

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

Equipment Type	Number

11.0 Vegetation