New Berkeley City College Facility Project
MITIGATED NEGATIVE DECLARATION/ INITIAL STUDY

Peralta Community College District

March 2015

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MITIGATED NEGATIVE DECLARATION

PROJECT DESCRIPTION

The proposed Project would be the renovation of an existing three-story office building containing about 25,000 gross square and located at 2118 Milvia Street in downtown Berkeley, California. The Project would include a seismic retrofit to bring the building in compliance with California Field Act requirements, building entrance improvements to meet current American with Disability Act requirements, roof replacement, electrical and mechanical systems upgrades and interior improvements. The majority of the use for the proposed Project would be for classroom and library purposes, with a small portion of the building used for faculty offices and support.

Project construction would take about 18 months, starting in September 2016 and ending in March 2017. Construction hours would be from 8:00 am to 6:00 pm Monday through Friday.

PROJECT LOCATION

2118 Milvia Street
Berkeley, California 94704

PROJECT SPONSOR

Peralta Community College District
333 8th Street
Oakland, California 94606

FINDING

The Project will not have a significant effect on the environment based on the Initial Study prepared according to CEQA Guidelines. Mitigations have been incorporated into the Project to reduce the identified potentially significant impacts to a less-than-significant level.

POTENTIALLY SIGNIFICANT IMPACT

The attached Initial Study indicates that the Project could adversely affect the environment. The following potentially significant impacts were identified and are presented below.

MITIGATION MEASURES

In the interest of reducing the potential impact to the point where the net effect for the Project is insignificant, mitigation measures are recommended. A discussion of the potential impacts of interest and the associated mitigation measures is provided below.

AIR QUALITY

Impact: The Project would result in short-term air pollution emissions as a result of construction activities.

Mitigation Measure:

AIR-1 *Implement Enhanced Exhaust Emissions Reduction Measures for Project Construction Equipment.* The construction contractor shall implement the following measures to further reduce construction-related exhaust emissions:

- All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:
  - Engines that meet or exceed USEPA/CARB Tier 3 off-road emission standards **and** be fitted with CARB Level 2 Verified Diesel Emissions Control Strategy (VDECS) devices.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

HAZARDS AND HAZARDOUS MATERIALS

Impact: Based on historical use of the site as a gas station and the historical use of adjacent properties with an auto/fuel service station and an auto gas service station and garage, petroleum products may have been released beneath the Project site and adjacent properties

Mitigation Measure:

HAZ-1 Prior to initiation of the seismic upgrade of the 2118 Milvia Street building, three subslab soil gas samples taken from below the building foundation shall be collected and analyzed to confirm if petroleum hydrocarbons, volatile organic compounds and methane are present and if so confirm if they are present at levels exceeding environmental screening levels. If any of these chemicals of concern exceed the environmental screening levels, additional environmental sampling shall be undertaken and recommendations shall be implemented.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

NOISE

Impact: Rooftop HVAC equipment could adversely affect Project building occupants as well as nearby offices and residences.

Impact: During Project construction there would be a temporary increase in ambient noise levels at the Project site.

Mitigation Measures:

NOISE-1 The roof-top acoustic enclosure surrounding the Project building HVAC equipment shall be designed to ensure noise levels do not interfere with indoor activities and cause annoyance to nearby office and residential uses. Specifications for the enclosure shall be set by a Project building-specific acoustical analysis and incorporated into the Project design to assure the tranquility of nearby office and residential receptors. When the HVAC equipment is fully

operational, the effectiveness of its noise control features shall be verified by noise measurements.

NOISE-2 The following Best Management Practices shall be incorporated into the construction documents to be implemented by the Project contractor:

- Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Provide sound-control devices on equipment no less effective than those provided by the manufacturer.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.
- Designate a noise disturbance coordinator who shall be responsible for responding to complaints about noise during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site. Copies of the project purpose, description and construction schedule shall also be distributed to the nearby residences.
- Limit project construction activity to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, 9:00 a.m. to 8:00 p.m. on weekends and holidays.

TRANSPORTATION AND TRAFFIC

Impact: During Project construction there may be circulation conflicts.

TRAFFIC-1 To minimize disruptions to traffic, transit, bicycle, and pedestrian circulation on adjacent streets during the weekday AM and PM peak periods, the Project contractor shall restrict construction-related truck movements and deliveries to, from, and around the Project site during peak hours (generally 7:00 to 9:00 AM and 4:00 to 6:00 PM) or other times, as determined by the City of Berkeley Traffic Engineering department, and the Engineering Inspectors in the Permit Service Center.

TRAFFIC-2 In order to reduce potential conflicts between construction activities and traffic, bicycles, and pedestrians at the Project site, the contractor shall identify construction traffic management best practices to avoid or minimize conflicts. Management practices could include, but are not limited to, the following:

- Identifying ways to reduce construction worker vehicle-trips through transportation demand management programs and methods to manage construction worker parking demands.

- Identifying best practices for accommodating pedestrians, such as temporary pedestrian wayfinding signage.
- Identifying ways to consolidate truck delivery trips, including a plan to consolidate deliveries from a centralized construction material and equipment storage facility.
- Requiring consultation with the surrounding community, including business and property owners near the Project site, to assist coordination of construction traffic management strategies as they relate to the needs of other users adjacent to the Project site.
- Developing a public information plan to provide adjacent residents and businesses with regularly updated information regarding Project construction activities, peak construction vehicle activities, sidewalk and parking lane closures, and providing a Project contact for such construction-related concerns.

TRAFFIC-3 The Project contractor shall deploy construction staff along Milvia Street and at the Milvia Street / Center Street intersection to direct truck traffic during loading activities.

NEW BERKELEY CITY COLLEGE FACILITY PROJECT
INITIAL STUDY

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PROJECT INFORMATION

Project Title:	New Berkeley City College Facility
Lead Agency Name and Address:	Peralta Community College District 333 East 8th Street Oakland, California 94606
Contact Person and Phone Number:	Atheria Smith Facilities Planning and Development Manager Phone: 510-587-7864 Email: atheriasmith@peralta.edu
Project Location:	2118 Milvia Street Berkeley, California 94704 APN: 057-2022-005-01
Project Sponsor's Name and Address:	Peralta Community College District 333 East 8th Street Oakland, California 94606
General Plan Designation:	Downtown (DT)
Zoning Designation:	Commercial Downtown Mixed Use District Buffer (C-DMU)

Description of Project:

PROJECT DESCRIPTION

PROJECT LOCATION

The Project site is located at 2118 Milvia Street in downtown Berkeley, California. The Project site is located at the northwest corner of the Milvia Street and Center Street intersection. **Figure 1** shows the Project location.

BACKGROUND

Peralta Community College District (District) has identified certain uses that could be housed in an Annex building located near Berkeley City College (BCC) which is located at 2050 Center Street. The District proposes to renovate an existing office building located at 2118 Milvia Street which is about 500 feet northwest of BCC. **Figure 2** shows the Project site and location of BCC.

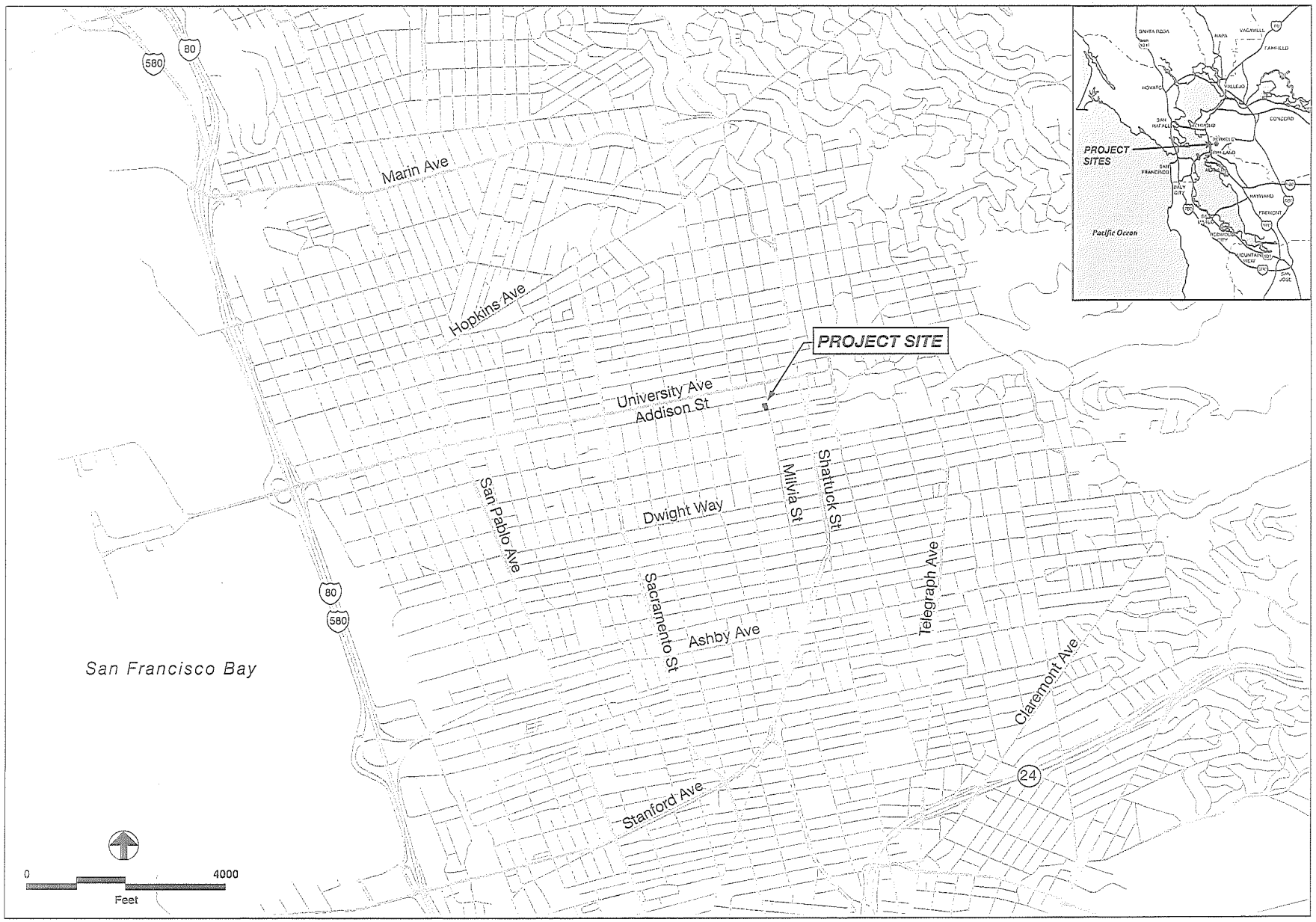
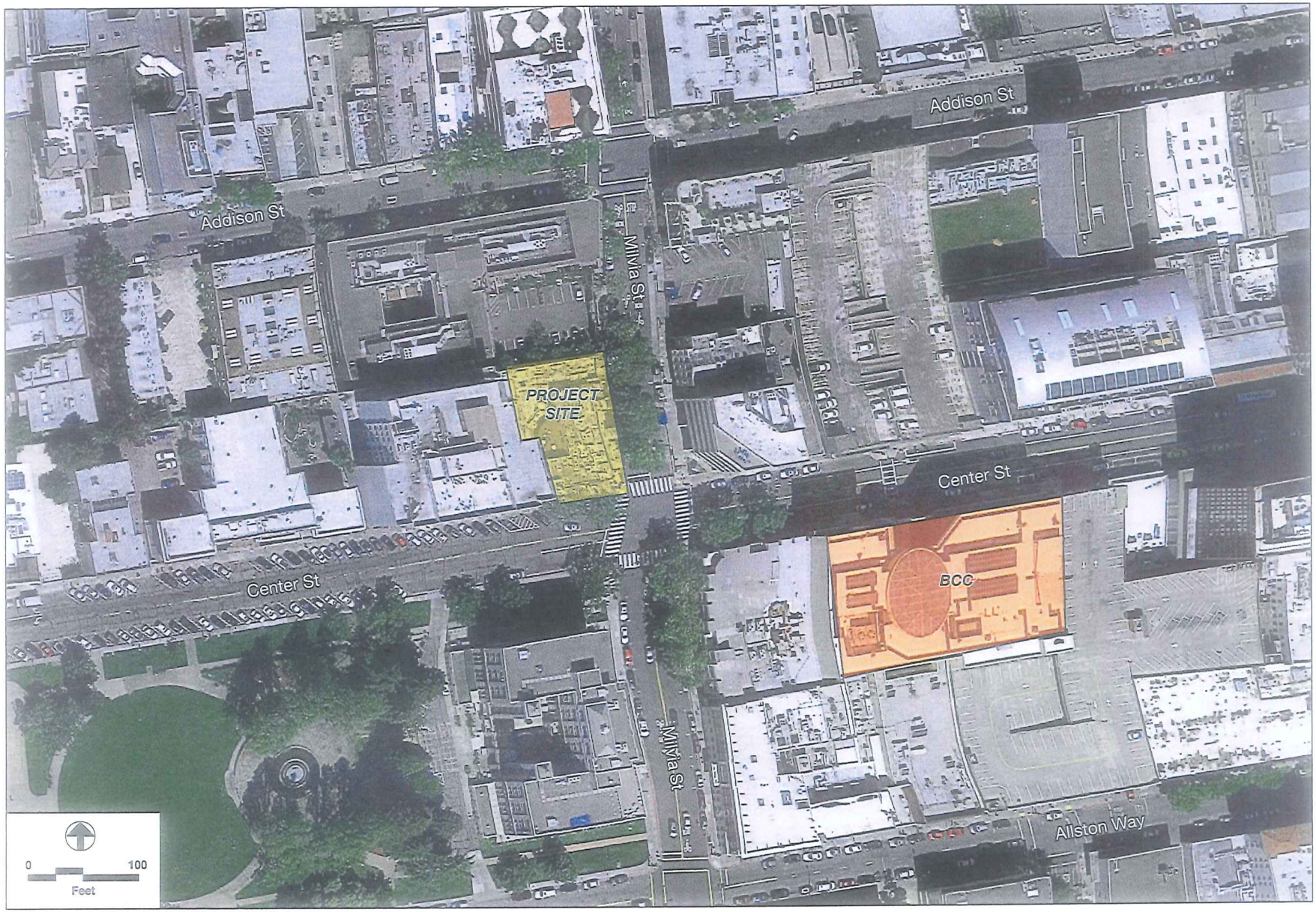


Figure 1
Project Location Map



Source: Google Maps

Figure 2
Project Site and Berkeley City College

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EXISTING CONDITIONS

The Project site is approximately 0.26 acre in size and currently contains about 25,000 square-foot three-story office building. The office building is currently occupied. The building underwent a remodeling in 1995 including some seismic upgrades, although additional seismic strengthening will be necessary to meet California Field Act requirements for community college use. The building façade is white stucco with evenly spaced bays containing large panes of tinted glass which create a strong vertical rhythm on the south, east and north facades (see **Figure 3**). The west façade is a solid wall. The building has one entrance along its Center Street frontage and two entrances along its Milvia Street frontage. Street trees are located along Center Street and Milvia Street. Floors one and two are built out to the property line and the third floor has a smaller floor plate with setbacks at the west and north and includes five decks.

PROPOSED PROJECT

Project Program

The proposed Project would include a seismic retrofit to bring the building in compliance with California Field Act requirements[1] (ADA); building entrance improvements to meet current American with Disabilities Act requirements; roof replacement; electrical systems upgrade; mechanical systems upgrade; and tenant improvements including interior partitions, ceilings and finishing; renovation of restrooms, interior doors and windows. The building would house eight classrooms, library, various student services, faculty offices and support space. The majority of building use would be for classroom and library purposes, with only a small portion of the building used for faculty offices and support space. Total square footage would remain at about 25,000 square feet. The proposed facilities are planned to accommodate existing students and staff.

The Project would be in operation from 8 am to 6 pm Monday through Friday.

Project Construction Schedule and Activities

Project construction would occur over an 18-month period starting in September 2016 and ending in March 2018. Construction hours would be from 8 am to 6 pm Monday through Friday. **Table 1** presents construction activities.

TABLE 1: PROJECT CONSTRUCTION ACTIVITIES

Construction Activity	Construction Workers (peak daily number)	Truck Trips (peak per day)	Duration (months)
Demolition	4	1	3.5
Seismic Retrofit	5	2	4
Building Interior Work	18	4	7.5
Roof Replacement	6	2	2
Punch List/Completion	6	4	1

[1] The Field Act applies to the design, construction and renovation of all K-12 school buildings and Community College buildings. Buildings must meet seismic safety standards mandated by the Field Act.

The Project may require curb lane closures and sidewalk closures to accommodate demolition debris dumpsters and construction trucks hauling away demolition debris and delivery of materials.

Project Approvals

- Division of the State Architect will review and approve for Field Act compliance and disabled access design.
- City of Berkeley – Street and Sidewalk Use Permit for use of streets and/or sidewalks during construction activities.

View of Project Site: Corner of Center Street and Milvia Street

Figure 3
2118 Milvia Street Building

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION:

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the 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.

Sadiq B. Ikharo — 3/23/15

Dr. Sadiq Bello Ikharo
Vice Chancellor

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

CEQA requires a brief explanation to answer all questions listed in the Environmental Checklist. All answers must consider the entire project action including on-site, off-site, indirect, and cumulative project impacts and, as applicable, temporary project construction impacts.

Once the Lead Agency has determined a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. **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?	☐	☐	☐	☒

Existing Conditions

The Project site is the existing 2118 Milvia Street building located at the northwest corner of Milvia and Center Streets. The building is three stories. The building façade is white stucco with evenly spaced bays containing large panes of tinted glass which create a strong vertical rhythm on the south, east and north facades (see **Figure 2**). The west façade is a solid wall. The building has one entrance along its Center Street frontage and two entrances along its Milvia Street frontage. Street trees are located along Center Street and Milvia Street.

Impact Discussion

The proposed Project would not adversely affect scenic vistas or scenic resources, substantially degrade the visual quality of the Project site or surrounding area or increase light and glare. A brief discussion of each environmental issue included under Section 1 is presented below.

a) Would the project have a substantial adverse effect on a scenic vista?

The Project site contains a three-story building, is located in downtown Berkeley and is surrounded by low- to mid-rise buildings. The proposed Project would undertake interior renovations to an existing building and would not affect any scenic vista within the Project vicinity.

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

The Project site is developed with a three-story office building and is not within a designated scenic highway (City of Berkeley).

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

The proposed Project would make minor changes at the building entrances to bring them up to current ADA standards. These changes would not degrade the existing visual character or quality of the building or its surroundings.

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

The proposed Project would not add any exterior lighting. The exterior walls and windows would remain in their current state. The Project would have no affect on light or glare at the site.

Recommended Mitigation Measures

None required.

References

City of Berkeley. *City of Berkeley General Plan, Urban Design and Preservation.* Available on the City of Berkeley website: www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURAL 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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURAL AND FORESTRY RESOURCES (cont.)				
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?	☐	☐	☐	☒

Existing Conditions

The Project site contains a three-story office building located in downtown Berkeley.

Impact Discussion

There would be no impacts to agricultural and forestry resources due to the proposed Project. A brief discussion of each environmental issue included under Section 2 is presented below.

a) Would the project 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?

The Project site is developed with a three story office building. The site is not used for any agricultural purposes and would therefore not result in the conversion of any agricultural land.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is zoned C-DMU Buffer which allows a mix of uses such as retail, hotels, offices and government and institutional uses (City of Berkeley).

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The Project site does not contain any forest land. The site is zoned C-DMU Buffer.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The Project site contains no forest land.

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

The Project would not result in the conversion of any farmland or forest land for other uses. See Subsections 2a through 2d above.

Recommended Mitigation Measures

None required.

References

City of Berkeley. Municipal Code and Zoning Ordinance. Available at the City of Berkeley website: www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3. 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 nonattainment 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?	☐	☐	☒	☐

Existing Conditions

According to the Bay Area Air Quality Management District (BAAQMD), the City of Berkeley is in the Northern Alameda/Western Contra Costa climatological sub-region of the Bay Area. The westerly marine air flow through the Golden Gate is predominant in this sub-region. Compared with inland areas of Alameda, temperatures here have a narrower range and the solar radiation intensity is less because of increased fog and cloud cover. In most parts of this sub-region, including Berkeley, the air pollution potential is low due to its steady wind flow with little influx of pollutants from upwind sources (i.e., winds are just coming off San Francisco Bay). However, the occasional occurrence of light winds, mainly during the night and early morning, and the confining terrain of the East Bay hills occasionally promotes elevated air pollutant levels.

Berkeley's downtown, where the Project site is located, is occupied largely by commercial and civic land uses, but residential and educational land uses are also commonly present. Due to its compact street grid with many high traffic volume roadways, the area's most substantial local sources of air pollutants are motor vehicles. But there are several notable commercial stationary sources of air pollutants nearby that operate under BAAQMD permits: two emergency standby diesel generators, two motor vehicle fueling stations, a print shop and a dry cleaner (see **Table 6** for details of their locations and emissions).

The BAAQMD maintains a number of air quality monitoring stations, which continually measure the ambient concentrations of major air pollutants throughout the Bay Area. The closest such monitoring station to the Project site is at 1100 21st Street in West Oakland, about four miles to the south. On the basis of such monitoring data, the Bay Area is currently designated "nonattainment" for state and national (1-hour and 8-hour) ozone standards, for the state PM_{10} standards, for state and national (annual average and 24-hour) $PM_{2.5}$ standards, and "attainment" or "unclassifiable" with respect to ambient air quality standards for other pollutants. On the basis of such monitoring data, the Bay Area is currently designated "nonattainment" for state and national (1-hour and 8-hour) ozone standards, for the state PM_{10} standards (i.e., PM_{10} is particulate matter less than ten microns in diameter), for state and national (annual average and 24-hour) $PM_{2.5}$ standards (i.e., $PM_{2.5}$ is particulate matter less than 2.5 microns in diameter), and "attainment" or "unclassifiable" with respect to ambience air quality standards for other pollutants.

In the Bay Area, the majority of the estimated carcinogenic/chronic health risk attributable to air pollutants comes from relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM). The BAAQMD has identified DPM as being responsible for about 80 percent of the cumulative cancer risk from all airborne TAC exposures.

Air Quality Analysis Methodology and Significance Criteria

The air quality analyses addressing the Initial Study air quality checklist items above were performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (BAAQMD, May 2012).[2] The criteria air pollutants evaluated are: carbon monoxide (CO), reactive organic compounds (ROG) and nitrogen dioxide (NO_2) (both being precursors to ozone formation), particulate matter equal to or less than ten micrometers (inhalable particulates or PM_{10}), particulate matter equal to or less than 2.5 micrometers (fine particulates or $PM_{2.5}$). Health risks associated with project-specific and cumulative exposures to DPM are also evaluated.

According to the *CEQA Air Quality Guidelines*, any project would have a significant potential for causing/contributing to a local air quality standard violation or making a cumulatively considerable contribution to a regional air quality problem if its criteria pollutant emissions would exceed any the thresholds during construction or operation as presented in **Table 2**.

[2] The Air District's June 2010 adopted thresholds of significance were challenged in a lawsuit. Although the BAAQMD's adoption of significance thresholds for air quality analysis has been subject to judicial actions, the PCCD has determined that BAAQMD's Revised Draft Options and Justification Report (October 2009) provide substantial evidence to support the BAAQMD recommended thresholds. Therefore, the PCCD has determined the BAAQMD recommended thresholds are appropriate for use in this analysis.

TABLE 2: CEQA AIR QUALITY SIGNIFICANCE THRESHOLDS FOR CRITERIA AIR POLLUTANT EMISSIONS

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO_x)	54	54	10
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10
$PM_{10}/PM_{2.5}$ (Fugitive Dust)	BMPs[a]	N/A	N/A

Notes: BMPs = Best Management Practices
N/A = Not Applicable

[a] If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

Source: Bay Area Air Quality Management District, *2011 May (Revised), California Environmental Quality Act Air Quality Guidelines.*

Also, there would be significant operational CO impacts if CO emissions from Project motor vehicle traffic or from cumulative traffic congestion would exceed the ambient air quality standards of 9.0 ppm (8-hour average) or 20.0 ppm (1-hour average).

Finally, the *CEQA Air Quality Guidelines* establish a relevant zone of influence for an assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or project operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than ten in one million, or a non-cancer hazard index greater than 1.0.
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m3) for annual average $PM_{2.5}$ concentrations.

Cumulative impacts from TACs emitted from freeways, state highways or high volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day), and from all BAAQMD-permitted stationary sources sources within the zone to sensitive receptors within the zone that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average $PM_{2.5}$ concentrations greater than 0.8 $\mu g/m^3$.

Impact Discussion

Temporary Project construction air pollutant emissions and long-term Project operational air pollutant emissions would be below BAAQMD thresholds. However, the modeled maximum annual $PM_{2.5}$

concentration from Project construction activities would exceed the Project-level CEQA threshold. With implementation of **Mitigation Measure AIR-1**, the maximum annual $PM_{2.5}$ concentration increment from Project construction would be brought below that CEQA threshold. A brief discussion of each environmental issue included under Section 3 is presented below.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The Bay Area Air Quality Management District (BAAQMD) adopted its 2010 *Bay Area Clean Air Plan* (CAP) in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter and air toxics (TACs) in a single, integrated plan; and establish emission control measures to be adopted or implemented. The primary goals of the 2010 Bay Area CAP are to:

- Attain/maintain air quality standards;
- Reduce population exposure to air pollutants and protect public health in the Bay Area.

Compliance with BAAQMD-approved CEQA thresholds of significance are the conditions for determining that a project would be consistent with all adopted control measures and would not interfere with the attainment of CAP goals. The proposed Project would renovate an existing building to provide classrooms and library space for existing BCC students and a small amount of space for existing faculty and support staff. Thus, it does not have any potential to substantially affect housing, employment, and/or population projections within the Bay Area Air Basin. As the analysis below demonstrates, the Project would not have significant and unavoidable air quality impacts because it meets all BAAQMD CEQA thresholds with implementation of **Mitigation Measure AIR-1**.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Project Construction-Related Impacts

The Project would seismically upgrade and renovate an existing 25,000 square-foot. office building at 2118 Milvia Street. The proposed building renovation would maintain building square footage at about 25,000 square feet. Construction activities are expected to commence in September 2016 and be completed by March 2018. Project construction would generate temporary emissions of criteria pollutants in equipment exhaust and fugitive dust from equipment and material movement. The *CEQA Air Quality Guidelines* recommend quantification of construction-related exhaust emissions and comparison of those emissions to the CEQA significance thresholds. Thus, the CalEEMod (California Emissions Estimator Model, Version 2013.2.2) was used to quantify construction-related emissions of criteria pollutants. See **Appendix A** for emissions estimates and model assumptions.

Table 3 provides the estimated short-term Project construction equipment, truck and worker vehicle commute emissions. The maximum daily construction period emissions over each calendar year were compared to the CEQA significance thresholds. All construction-related emissions would be below the thresholds.

TABLE 3: PROJECT CONSTRUCTION CRITERIA POLLUTANT EMISSIONS
(pounds per day)

Construction Period	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Year 2016	0.8	7.7	0.5	0.4
Year 2017	4.2	9.2	0.6	0.6
Year 2018	0.6	6.1	0.3	0.3
Significance Thresholds	54	54	82	54
Significant Impact?	No	No	No	No

The *CEQA Air Quality Guidelines* require a number of construction Best Management Practices (BMPs) to control fugitive dust, and the use of paints and coatings compliant with BAAQMD volatile organic compounds (VOC) control regulations. Thus, the following measures must be implemented by the Project construction contractor:

BAAQMD Required Dust Control Measures: The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- A publically visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

BAAQMD Regulation 8, Rule 3 for Architectural Coatings: Emissions of volatile organic compounds (VOC) due to the use of architectural coatings are regulated by the limits contained in Regulation 8: Organic Compounds, Rule 3: Architectural Coatings (Rule 8-3). Rule 8-3 was revised to include more stringent VOC limit requirements. The revised VOC architectural coating limits, which went into effect on January 1, 2011, was projected to result in a 32 percent reduction of VOC emissions in the Bay Area associated with architectural coating applications.

- The construction contractor shall use paints and solvents with a VOC content of 100 grams per liter or less for interior and 150 grams per liter or less for exterior surfaces.

Project Operational Impacts

Air Pollutant Emissions. The CalEEMod was also used to estimate emissions that would be associated with Project operation (i.e., space and water heating, maintenance equipment etc.) expected to commence in the year 2018 after Project construction is complete. See **Appendix A** for model output and assumptions.

Estimated operational daily and annual emissions that would be produced by the Project are presented in Tables 4 and 5 and compared to the CEQA thresholds of significance. As indicated, the estimated Project operational emissions would be below the thresholds and would be less than significant.

TABLE 4: NET NEW PROJECT DAILY OPERATIONAL CRITERIA POLLUTANT EMISSIONS (pounds per day)

Emission Category	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Area	0.6	< 0.1	< 0.1	< 0.1
Energy	< 0.1	0.2	< 0.1	< 0.1
Mobile	2.7	7.6	0.1	0.1
Total Project	**3.3**	**7.9**	**0.1**	**0.1**
Significance Thresholds	54	54	82	54
Significant Impact?	No	No	No	No

TABLE 5: NET NEW PROJECT ANNUAL OPERATIONAL CRITERIA POLLUTANT EMISSIONS (tons per year)

Emission Category	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Area	0.1	< 0.1	< 0.1	< 0.1
Energy	< 0.1	< 0.1	< 0.1	< 0.1
Mobile	0.4	1.1	< 0.1	< 0.1
Total Project	**0.5**	**1.1**	**< 0.1**	**< 0.1**
Significance Thresholds	10	10	15	10
Significant Impact?	No	No	No	No

Carbon Monoxide Concentrations. The BAAQMD has identified the following screening criteria for determining whether a project's motor vehicle CO emissions would likely cause ambient air quality standards to be exceeded:

- The Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.
- The Project traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per day.
- The Project traffic would increase traffic volumes at affected intersections to more than 24,000 vehicles per day where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

As the Project would provide classroom and library space to support existing BCC students with a small amount of space assigned to existing faculty and support staff in an existing office building, with no change in building square footage, it would not add any traffic to local streets and would have a less-

than-significant effect on traffic flow locally and regionally. Thus, the Project's operational ambient CO impacts would be less than significant.

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

As discussed in **Subsection 3b** above, Project-related emissions would be below the BAAQMD significance thresholds. Therefore, the Project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone or particulate matter. Thus, cumulative emission impacts would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Ambient TAC concentrations produced by project and other significant local TAC sources within 1,000 feet of a project site are considerd "substantial" if they exceed the CEQA health risk thresholds at senstive receptors within this zone. Land uses around the Project site include residential land uses, the closest of which is the ARTech Apartments at 2002 Addison Street about 125 feet from the Project Site boundary.

Project Construction-Related TAC Impacts

Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by California Office of Environmental Health Hazard Assessment (OEHHA) and the BAAQMD in *Recommended Methods for Screening and Modeling Local Risks and Hazards*, incremental cancer risks were estimated by applying established toxicity factors to modeled Project-related TAC concentrations. The maximum cancer risk from Project construction DPM for the closest residential receptor would be 1.5 per million. Thus, the cancer risk due to Project construction activities would be below the BAAQMD threshold of ten per million and less than significant.

Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of the Project's incremental TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant. The non-cancer reference exposure level for DPM as determined by OEHHA is 5 $\mu g/m^3$. The non-cancer HI from Project construction would be 0.2, well below the BAAQMD threshold and less than significant.

The modeled maximum annual $PM_{2.5}$ concentration from Project construction would be 0.79 $\mu g/m^3$, which exceeds the Project-level CEQA significance threshold for $PM_{2.5}$. But with implementation of **Mitigation Measure AIR-1**, the Project's maximum annual $PM_{2.5}$ concentration increment would be reduced to 0.18 $\mu g/m,^3$ which is below the BAAQMD threshold of 0.3 $\mu g/m^3$ and less than significant with mitigation.

Project Operational TAC Impacts

The Project would not add any motor vehicle traffic to any local street. Thus, the incremental cancer risk, non-cancer hazard and $PM_{2.5}$ from Project operations would be zero and less than significant.

Cumulative TAC Impacts

The *CEQA Air Quality Guidelines* method for determining cumulative TAC health risk requires the tallying of risk from project sources and all permitted stationary sources and major roadways within 1,000 feet of a project site and adding them for comparison with the cumulative health risk thresholds.

A database of permitted stationary emissions sources and their health risks is available online from the BAAQMD through the *Stationary Source Risk & Hazard Analysis Tool* (May, 2012). Similar screening tools are available from the BAAQMD for determining health risks near major surface streets in each of the Bay Area's nine counties.

Table 6 shows the health impacts from the Project source (i.e., it DPM emissions from construction) and from stationary and roadway sources that meet the BAAQMD conditions for their inclusion in the cumulative impact analysis. The cumulative risk and hazard from all sources at the closest sensitive receptor to the Project site (i.e., the ARTech Apartments at 2002 Addison Street) would be below all BAAQMD cumulative significance thresholds. Thus, cumulative TAC impacts would be less than significant.

e) Would the project create objectionable odors affecting a substantial number of people?

The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a project. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. With respect to the proposed Project, diesel-fueled construction equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Post construction odors from the Project building would be minimal. Therefore, odor impacts associated with construction and operation of the Project would be less than significant.

Recommended Mitigation Measures

AIR-1 *Implement Enhanced Exhaust Emissions Reduction Measures for Project Construction Equipment.* The construction contractor shall implement the following measures to further reduce construction-related exhaust emissions:

- All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:
  - Engines that meet or exceed USEPA/CARB Tier 3 off-road emission standards **and** be fitted with CARB Level 2 Verified Diesel Emissions Control Strategy (VDECS) devices.

TABLE 6: CUMULATIVE TAC IMPACTS ON EXISTING SENSITVE RECEPTORS IN THE PROJECT SITE ZONE OF INFLUENCE (within 1,000 feet)

Source #	Facility Type	Address	Cancer Risk	Hazard Index	PM2.5 Concentration
From Permitted Stationary TAC Sources*					
17864	Peralta Community College District (generator)	2050 Center Street	0.82	< 0.01	< 0.01
19070	Equity Office (generator)	1995 University Avenue	13.57	< 0.01	< 0.01
18477	Berkeley Printing	1995 University Avenue	0.0	0.0	0.0
G10524	University Valero (fueling station)	1894 University Avenue	12.22	0.02	----
15035	Exxon Mobil Oil	1894 University Avenue	0.59	0.00	0.00
8855	Flamingo Cleaners	1935 Martin Luther King Jr. Way	0.0	0.0	0.0
From Local Streets with ADT Greater than 10,000 per Day**					
University Avenue			1.02	< 0.03	0.038
Shattuck Avenue			0.45	< 0.03	0.016
Martin Luther King Jr. Way			0.49	< 0.03	0.017
Project Emission Source***					
	Project Construction (impact modeled at ARTech Apartments, 2002 Addison Street)		0.34	0.04	0.18
Total Cumulative Impacts			**29.5**	**0.06**	**0.25**
Significance Thresholds			100	10	0.8
Significant Impact?			No	No	No

* The BAAQMD stationary source cancer risk, hazard index, and $PM_{2.5}$ concentration table entries represent maximum TAC impacts at locations close to each of the sources. The BAAQMD also provides distance adjustment factors to estimate risks, hazards and concentrations at more distant locations. The stationary sources are all located at least several hundred from the closest residential receptor to the project site (the ARTech Apartments at 2002 Addison Street). At this distance, risks, hazards and concentrations due to each stationary source and the roadway would be substantially reduced from the tabulated values.

** The BAAQMD's County Surface Street Screening Tables were used to estimate cancer risk, hazard index, and $PM_{2.5}$ concentration at the ARTech Apartments from the three local streets with the highest daily traffic volumes.

*** The Project construction $PM_{2.5}$ increment is reduced by more than 75%, to a less-than-significant level relative to the CEQA project-level significance threshold, by requiring that Project construction equipment have Tier 3 engines and VDECS Level 2 devices (Mitigation Measure AIR-1).

References

BAAQMD (Bay Area Air Quality Management District). 2009 *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance.* http://baaqmd.gov/~/media/Files/%20Planning%20and%20Research/CEQA/Revised%20Draft%20CEQA%20Thresholds%20%20Justification%20Report%20Oct%202009.ashx_Website accessed on November 2, 2014.

BAAQMD. 2012. *California Environmental Quality Act (CEQA) Air Quality Guidelines.* http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_Final_May%202012.ashx?la=en Website accessed on November 2, 2014.

BAAQMD. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards.* http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Risk%20Modeling%20Approach%20May%202012.ashx?la=en_Website accessed on November 2, 2014.

BAAQMD. Ambient Air Quality Standards and Attainment Status. http://www.baaqmd.gov/Divisions/Planning-and-Research/Emission-Inventory-and-Air-Quality-Related/Air-Quality-Standards.aspx Website accessed on November 2, 2014.

BAAQMD. Stationary Sources and Highways Screening Analysis Tools, and Surface Street Screening Tables. http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx Website accessed on November 2, 2014.

CAPCOA (California Air Pollution Control Officers Association). 2013. California Emissions Estimator Model [CalEEMod], Version 2013.2. http://www.caleemod.com/ Website accessed on November 2, 2014.

CARB (California Air Resources Board). 1998. Fact Sheet - *The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines.* http://www.arb.ca.gov/toxics/dieseltac/factsht1.pdf Website accessed on November 2, 2014.

CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* http://www.arb.ca.gov/ch/handbook.pdf Website accessed on November 2, 2014.

CARB, ADAM Air Quality Data Statistics for 2011 to 2013. Available online at: http://www.arb.ca.gov/adam/ Website accessed on November 2, 2014.

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U.S. EPA (U.S. Environmental Protection Agency). 1995. *SCREEN3 Model User's Guide.* http://www.epa.gov/ttn/scram/userg/screen/screen3d.pdf Website accessed on November 2, 2014.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. 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 Wildlife 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 Wildlife 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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES (cont.)				
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?	☐	☐	☐	☒

Existing Conditions

The Project site is located in downtown Berkeley and developed with a three-story office building.

Impact Discussion

The Project would not adversely affect biological resources. A brief discussion of each environmental issue included under Section 4 is presented below.

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

The Project site is currently developed and surrounded by urban development. The proposed Project would not affect any candidate, sensitive or special status species.

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

The Project site is currently developed and surrounded by urban development. The proposed Project would not affect any riparian habitat or other sensitive natural communities.

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

The Project site is currently developed and surrounded by urban development. The proposed Project would not affect any federally protected wetlands.

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

The Project site is currently developed and surrounded by urban development. The Project would not interfere with the movement of native resident or migratory fish or wildlife species.

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

Street trees are located along the Project sites' Milvia Street and Center Street frontages. Street trees are protected by City of Berkeley ordinance (City of Berkeley). The proposed Project would not affect the street trees located along the site's street frontages.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is not within the boundaries of any conservation plan, and would not conflict with any habitat conservation plan or natural community conservation plans.

Recommended Mitigation Measures

None required.

References

City of Berkeley. *Berkeley Municipal Code, Chapter 12.44 Trees and Shrubs.* Available on the City of Berkeley website at www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. 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 formal cemeteries?	☐	☐	☐	☒

Existing Conditions

The Project site is developed with a three-story office building.

Impact Discussion

The proposed Project would renovate the existing office building and would not require ground disturbance.

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The 2118 Milvia Street building is not identified in the *General Plan* as historic Project would not adversely impact historical resources (City of Berkeley).

b) **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

The proposed Project would not result in ground disturbance at the Project site. The Project would not adversely affect any archaeological resources.

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

The proposed Project would not result in ground disturbance at the Project site. The Project would not adversely affect any paleontological resources.

d) **Would the project disturb any human remains, including those interred outside of formal cemeteries?**

The proposed Project would not result in ground disturbance at the Project site. The Project would not disturb any human remains.

Recommended Mitigation Measures

None required.

References

City of Berkeley. *City of Berkeley General Plan, Urban Design and Preservation.* Available on the City of Berkeley website: www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6. **GEOLOGY AND SOILS.** Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a know 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 of 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?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS (cont.)				
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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Existing Conditions

The San Francisco Bay Area is within a seismically active region associated with the San Andreas fault system. There are 11 known active faults within 50 kilometers/31.1 miles of the Project site: Hayward, Calaveras, Concord-Green Valley, Rodgers Creek, San Andreas, Greenville, San Gregorio, West Napa, Great Valley 5 and 6, Monte Vista – Shannon and Point Reyes. No known active faults cross the Project site and the site is not located within an Alquist-Priolo Zone (Terraphase Engineering, Inc. 2015).

Impact Discussion

The Project site is not located in an Alquist-Priolo Earthquake Zone. The site may be subject to strong ground shaking during seismic events and is located within an area susceptible to liquefaction. These conditions represent a potentially significant impact, however, the Project will undertake a seismic upgrade to bring the building up to current Field Act requirements as part of the building renovation. A brief discussion of each environmental issue included under Section 6 is presented below.

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?

i. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Thus, the potential for surface fault rupture at the Project site is low and the impact is considered less than significant.

ii. It is reasonable to assume that the office building will be subjected to a moderate to severe earthquake from future earthquakes on the identified 11 known active faults within 50 kilometers/31.1 miles of the Project site. During such an earthquake, strong ground shaking may likely occur at the Project site (Terraphase Engineering, Inc. 2015). The proposed seismic upgrade of the existing building located on the Project site will reduce potentially significant seismic impacts to less than significant.

(iii) According to the geotechnical constraints analysis prepared by Terraphase Engineering, Inc., there is the potential for liquefaction at the Project site. The proposed seismic upgrade of the existing building located on the Project site will address liquefaction potential and reduce potentially significant liquefaction impacts to less than significant.

iv. The Project site and surrounding area are essentially flat. No impact associated with landslides is anticipated to occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

The Project would undertake an interior renovation and seismic upgrade of the existing building located at 2118 Milvia Street. There would be no earth disturbance.

c) Would the project be located on a geologic unit of 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?

There is the potential for liquefaction at the Project site. The potential for lateral spreading and subsidence is remote (Terraphase Engineering, Inc. 2015). The Project will undertake a seismic upgrade of the existing building located on the Project site that will account for liquefaction potential. See **Subsection 6a** above.

d) Would the project 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?

While it is possible expansive clays are present at the Project site, the water table is shallow and the area is completely paved. Consequently, if expansive soils are present it is unlikely to change existing conditions at the Project site. The Project will undertake a seismic upgrade of the existing building located on the Project site that will account for the presence of expansive soil at the Project site.

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

The existing office building is connected to the City of Berkeley sanitary sewer system.

Recommended Mitigation Measures

None required.

References

Terraphase Engineering, Inc. 2015. *Geotechnical Constraints Analysis Berkeley City College 2118 Milvia Street, Berkeley, California.* Prepared for Peralta Community College District. February 3, 2015.

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

Existing Conditions

Greenhouse gases (GHG) are atmospheric gases that capture and retain a portion of the heat radiated from the earth after it has been heated by the sun. The primary GHGs are carbon dioxide (CO_2),

methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor. While GHGs are natural components of the atmosphere, CO_2, CH_4, and N_2O, are also emitted from human activities and their accumulation in the atmosphere over the past 200 years has substantially increased their concentrations. This accumulation of GHGs has been implicated as the driving force behind global climate change.

Human emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with organic decay processes in agriculture, landfills, etc. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated by certain industrial processes. The global warming potential of GHGs are typically reported in comparison to that of CO_2, the most common and influential GHG, in units of "carbon dioxide-equivalents" (CO_2e).[3]

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

The California Air Resources Board (CARB) estimated that in 2011 California produced 448 million gross metric tons of CO_2e, or about 535 million U.S. tons. CARB found that transportation is the source of 37.6 percent of the state's GHG emissions, followed by industrial sources at 20.8 percent and electricity generation (both in-state and out-of-state) at 19.3 percent. Commercial and residential fuel use (primarily for heating) accounted for 10.1 percent of GHG emissions.

In the San Francisco Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) and the industrial and commercial sectors are the two largest sources of GHG emissions, each accounting for approximately 36 percent of the San Francisco Bay Area's 95.8 million metric tons of CO_2e emitted in 2007. Electricity generation accounts for approximately 16 percent of the San Francisco Bay Area's GHG emissions followed by residential fuel usage at 7 percent, off-road equipment at 3 percent and agriculture at 1 percent.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for air quality regulation in the nine-county San Francisco Bay Area Air Basin. As part of that role, the BAAQMD has prepared *CEQA Air Quality Guidelines* that provide CEQA thresholds of significance for operational GHG emissions from land use projects (i.e., 1,100 metric tons of CO2e per year, which is also considered the definition of a cumulatively considerable contribution to the global GHG burden and, therefore, of a significant cumulative impact), but has not defined thresholds for project construction GHG emissions. The *CEQA Air Quality Guidelines* methodology and thresholds of significance have been used in this Initial Study's analysis of potential GHG impacts associated with the Project.

[3] Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

Impact Discussion

Estimated GHG Project-related emissions during Project construction and operation would be less than significant. A brief discussion of each environmental issue included under Section 7 is presented below.

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

The CalEEMod (California Emissions Estimator Model, Version 2013.2.2) model was used to quantify GHG emissions associated with Project construction activities (for informational purposes), as well as long-term operational emissions produced by Project motor vehicles, energy and water use, and solid waste generation. CalEEMod incorporates GHG emission factors for motor vehicles, electricity from central electric utilities, and water use and solid waste generation; it can also quantify the effectiveness of GHG mitigation measures based on the California Air Pollution Control Officer's Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* and the California Climate Action Registry *General Reporting Protocol.*

The Project's estimated construction and operational GHG emissions are presented in **Table 7**. The estimated construction GHG emissions are 153.6 metric tons of CO2e (for which there is no BAAQMD CEQA significance threshold). The Project's maximum annual operational GHG emissions would be 759.5 metric tons per year, which is below the BAAQMD threshold of 1100 metric tons and, thus, less than significant; but it's actual net new annual GHG emissions would likely be much lower.[4]

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

Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act, requires the CARB to lower State GHG emissions to 1990 levels by 2020, 25 percent reduction statewide with mandatory caps for significant GHG emission sources. AB 32 directed CARB to develop discrete early actions to reduce GHG while preparing the Climate Change Scoping Plan in order to identify how best to reach the 2020 goal.

Motivated by AB 32, the CARB estimated statewide GHG emissions in 2020 under business-as-usual (BAU) conditions (i.e., a scenario where no GHG reduction measures are taken) and identified a 28.5 percent reduction in GHG from year 2020 BAU levels as necessary to achieve the targets of AB 32. CARB has since updated the BAU forecast to reflect conditions in light of the 2008 economic downturn and measures not previously considered in the Scoping Plan baseline inventory. The revised forecast shows that a 21.6 percent GHG reduction from 2020 BAU would be necessary.

[4] The CalEEMod model estimates that 759.5 metric tons annually of CO2e would be generated from all sources associated with a 25,000 square foot building of the model's "Community College" land use category. However, the Project would replace an existing and functional 25,000 square foot building with similar land uses. Many of the administrative staff, faculty and students who would use the new building are already at the College. Thus, very little if any of the GHG generated by Project mobile sources would be new. And it is very likely that GHG generated by Project building energy use would be less than what the existing building now uses because of the more efficient electrical, lighting and heating/cooling systems planned for installation during Project renovation of the existing building.

TABLE 7: PROJECT GREENHOUSE GAS EMISSIONS

Emission Source	Project GHG CO_2e (metric tons per year)
Construction	
Total (over the 18-month construction period)	153.6
Operations	
Area Sources	0.0
Energy	132.7
Mobile	606.6
Solid Waste	14.8
Water	5.4
Total Operational Emissions	759.5*
BAAQMD GHG CEQA Significance Threshold	1100
Potentially Significant?	No

* The CalEEMod model estimates that 759.5 metric tons annually of CO2e would be generated from all sources associated with a 25,000 square foot building of the model's "Community College" land use category. However, the Project would replace an existing and functional 25,000 square foot building. And many of the administrative staff, faculty and students who would use the new building are already at the college. Thus, very little if any of the GHG generated by Project mobile sources would be new. And it is very likely that GHG generated by Project energy use would decline because of the more efficient electrical, lighting and heating/cooling systems proposed for installation during Project renovation of the existing building.

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32.

In January 2010, the State Building Standards Commission adopted updates to the California Green Building Standards Code (CALGreen), which went into effect in January 2011. CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation. CALGreen provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. CALGreen provides the minimum standard that buildings need to meet in order to be certified for occupancy, but does not prevent a local jurisdiction from adopting a more stringent requirements. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption.

The Project would not conflict with the goals of AB 32 and would be in accord with CALGreen.

The Project would also be in accord with applicable GHG reduction strategies specified in the City of Berkeley's *Climate Action Plan*:

- *"Ensure that new development is "green" development, meaning that it is oriented toward transit and is coupled with enhancements to green and open space, urban forestry efforts, and water conservation efforts, among others."*
- *"The community's task is to reduce conventional energy use in every existing Berkeley home, business, and institution through high-quality energy efficiency retrofits and a greater reliance on renewable energy such as solar"*

The Project would be located in downtown Berkeley less than a block away for the main BCC building with easy access to regional mass transit (i.e., BART and AC Transit stops). Also, GHG generated by Project building energy use would likely be less than what the existing building now generates because of the more efficient electrical, lighting and heating/cooling systems proposed for installation during renovation of the existing building.

In summary, the Project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions and, thus, would have a less than significant impact.

Recommended Mitigation Measures

None required.

References

BAAQMD (Bay Area Air Quality Management District). 2010. *Source Inventory of Bay Area Greenhouse Gas Emissions*. http://www.baaqmd.gov. Website accessed on October 2, 2014.

BAAQMD. 2012. *California Environmental Quality Act (CEQA) Air Quality Guidelines.* http://www.baaqmd.gov. Website accessed on November 2, 2014.

California Climate Change Center. 2012. *Our Changing Climate 2012 Vulnerability & Adaptation to the Increasing Risks from Climate Change in California, A Summary Report on the Third Assessment from the California Climate Change Center.* http://uc-ciee.org/downloads/Our%20Changing%20Climate%202012.pdf Website accessed on October 2, 2014.

CAPCOA (California Air Pollution Control Officers Association). 2010. *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures.* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf Website accessed on October 2, 2014.

CARB (California Air Resources Board), California Greenhouse Gas Emission Inventory: 2000-2012. 2014. Available online at: http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf Website accessed on October 2, 2014.

City of Berkeley. 2009. *Climate Action Plan.* http://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Berkeley%20Climate%20Action%20Plan.pdf Website accessed on February 22, 2015.

Climate Registry. 2008. *General Reporting Protocol, Version 1.1.* http://www.theclimateregistry.org/downloads/GRP.pdf Website accessed on October 2, 2014.

Intergovernmental Panel on Climate Change. 2013. *Climate Change 2013: The Physical Science Basis – Summary for Policy Makers.* http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_SPM_FINAL.pdf Website accessed on October 2, 2014.

U.S. EPA. *Frequently Asked Questions about Global Warming and Climate Change.* http://www.epa.gov/climatechange/Downloads/ghgemissions/Climate_Basics.pdf Website accessed on October 2, 2014.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
8. **HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☐	☐	☒

Existing Conditions

The Project site is developed with a three-story office building and is located in an Environmental Management Area (EMA) as designated by the City of Berkeley. Properties located in EMAs may encounter potential health and environmental concerns during construction activities that involve underground excavation or dewatering (Terraphase Engineering, Inc. 2015).

Historically, the Project site was vacant until about 1939 when the site was developed with a gas station. The gas station remained on the site until about 1968 when it was replaced with the existing office building (Terraphase Engineering, Inc. 2015).

Between the 1920's and 1950's, properties adjacent to the Project site were developed with an auto/fuel service station (2125 Milvia Street) and auto gas service station and garage (2135, 2145, 2171 Milvia Street). A property at 2020 Addison Street (automotive garage) and located about 400 feet east-northeast and up-gradient of the Project site was granted a regulatory closure in 1994 (Terraphase Engineering, Inc.).

The site is not included on the Department of Toxic Substance Control site cleanup list (California Department of Toxic Substance Control 2015).

Impact Discussion

Based on historical use of the site as a gas station and the historical use of adjacent properties with an auto/fuel service station and an auto gas service station and garage, petroleum products may have been released beneath the Project site and adjacent properties. This is considered a potentially significant impact, but with implementation of **Mitigation Measure HAZ-1**, potentially significant impacts would be less than significant. The proposed Project would not emit hazardous emissions. The Project site is not within an area at risk of exposure to wildland fires or within two miles of a public airport or private airstrip A brief discussion of each environmental issue included under Section 8 is presented below.

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

Proposed seismic upgrade work may disturb soils. This is a potentially significant impact. See **Subsection 8b** below.

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

A vapor encroachment screening (VEC) was undertaken by Terraphase Engineering, Inc. because of concern about contaminated soil and groundwater that may be present due to the historical use of the Project site and adjacent properties. The VEC concluded it is likely petroleum products may have been released beneath the Project site, the property located at 2125 Milvia Street, and the property located at 2135, 2145, 2171 Milvia Street potentially impacting groundwater beneath the site and creating a potential vapor encroachment issue. Additionally, the 2020 Addison Street property may have impacted the Project site with respect to groundwater flow. This is considered a potentially significant impact, however with implementation of **Mitigation Measure HAZ-1**, potentially significant impacts would be less than significant.

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

The Project would not emit hazardous emissions or require the handling of hazardous materials. There are no K-12 schools within one-quarter mile of the Project site. The nearest schools are the Berkeley Arts Magnet School and Walden Center and School both located about one-half mile from the Project site (Google Earth 2015).

d) Would the project 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?

The Project site is not included on the Department of Toxic Substance Control's site cleanup list (as per Government Code Section 65962.5 (Department of Toxic Substance Control 2015).

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?

The Project site is not located within two miles of a public airport. The nearest public airport is Oakland International Airport located more than ten miles south of the site (Google Earth 2015).

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The Project site is not located within the vicinity of a private airstrip (Google Earth 2015).

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed Project would consist of interior building renovations and a seismic upgrade to an existing office building. The Project would not interfere with City of Berkeley emergency response and evacuation plans.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The Project site is located in downtown Berkeley. The Project site is not located within an area subject to wildland fires.

Recommended Mitigation Measure

HAZ-1 Prior to initiation of the seismic upgrade of the 2118 Milvia Street building, three subslab soil gas samples taken from below the building foundation shall be collected and analyzed to confirm if petroleum hydrocarbons, volatile organic compounds and methane are present and if so confirm if they are present at levels exceeding environmental screening levels. If any of these chemicals of concern exceed the environmental screening levels, additional environmental sampling shall be undertaken and recommendations shall be implemented.

References

California Department of Toxic Substance Control. 2011. *DTSC's Hazardous Waste and Substances Site List (Cortese List).* www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Viewed on February 3, 2015.

Google Earth. Viewed on February 5, 2015.

Terraphase Engineering, Inc. 2015. *Draft Phase I Environmental Site Assessment 2118 Milvia Street Berkeley, California 94704-1113.* Prepared for Peralta Community College District. January 30, 2015.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
9. **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 (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 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?	☐	☐	☐	☒

Existing Conditions

The Project site is approximately 11,338 square feet or 0.26 acre and covered with a three-story office building.

Impact Discussion

The proposed Project would consist of the interior renovation and seismic upgrade to the existing office building located on the Project site. The Project would not violate any water quality standards or alter

existing drainage conditions at the Project site. A brief discussion of each environmental issue included under Section 9 is presented below.

a) **Would the project violate any water quality standards or waste discharge requirements?**

The proposed Project would seismically upgrade and make interior improvements to the existing office building located on the Project site. The Project would not affect water quality standards or waste discharge requirements. The proposed Project will not result in ground disturbance and the interior improvements would include low flow fixtures that would result in a reduction in water consumption and waste water discharge at the Project site.

b) **Would the project 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 (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?)**

The Project sited is developed with a three-story office building with essentially 100 percent parcel coverage. The proposed Project would not change existing groundwater conditions.

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

The Project site is developed with a three-story office building. The Project would not result in ground disturbance and would not change existing drainage patterns on site or in the Project vicinity.

d) **Would the project substantially alter the existing drainage pattern of the site 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?**

The Project site is developed with a three-story office building. The Project would not change existing drainage patterns on the site or in the Project vicinity. No streams would be altered due to the Project.

e) **Would the project 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?**

The Project site is developed with a three-story building and would not change stormwater drainage in the vicinity and would not result in an increase in runoff at the Project site.

f) **Would the project otherwise substantially degrade water quality?**

The proposed Project would not degrade water quality at the site or Project vicinity.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed Project would renovate an existing office building located on the Project site to house college classrooms, student services, a library and faculty offices. No housing is proposed. The Project site is not within a 100-year flood zone.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

See **Subsection 9g** above.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The Project site is not within any dam inundation zones as mapped by the City of Berkeley (Terrphase Engineering, Inc. 2015).

j) Would the project expose the site to inundation by seiche, tsunami, or mudflow?

Tsunamis do not pose an appreciable risk at this inland location. Seiches do not pose and appreciable risk given the absence of adjacent surface water bodies (Terrphase Engineering, Inc. 2015).

Recommended Mitigation Measures

None required.

References

Terraphase Engineering, Inc. 2015. *Geotechnical Constraints Analysis Berkeley City College 2118 Milvia Street, Berkeley, California.* Prepared for Peralta Community College District. February 3, 2015.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10. 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?	☐	☐	☐	☒

Existing Conditions

The Project site is developed with a three-story office building located in downtown Berkeley. The *Berkeley General Plan* (*General Plan*) land use designation for the site is Downtown (City of Berkeley 2003).

The *Berkeley Downtown Plan* (*Downtown Plan*) was adopted in 1990. The *Downtown Plan* was adopted, in part, to address the economic struggle of Berkeley's city center. The *Downtown Plan* established downtown as a compact, economically vital historic city center with a defined core area and transition zones buffering residential neighborhoods. The *Downtown Plan* organizes the downtown into six subareas: Core, Oxford Edge, South, West, North 1 and North 2. Base height limits, number of stories and floor area ratios (FAR) were identified for each subarea. The Project site is located in the West Subarea which has a base height limit of 40 feet, three stories and a 3:1 FAR. A bonus system allows for a maximum height of 50 feet, five stories and 3.5:1 FAR for projects containing residential, cultural or ground floor retail uses. The site zoning is Commercial Downtown Mixed Use Buffer which allows retail, offices, hotels, institutional, government and residential uses.

Impact Discussion

The proposed Project would consist of the interior renovation and seismic upgrade of an existing three-story office building located in downtown Berkeley for BCC use. The majority of building use would be for classrooms and library purposes, with only a small portion of the building used for faculty offices and support. The Project would not physically divide an established community or conflict with applicable land use plans, policies and regulations. It is noted the District is exempt from local land use regulations such as the *General Plan* and zoning. However, to assess Project compatibility with surrounding development and uses, the proposed Project was evaluated within the context of applicable *General Plan* and *Downtown Plan* policies and the requirements of the Project site's Commercial Downtown Mixed Use District zoning. The Project would be consistent with applicable *General Plan* policies and the site's zoning. The Project would be required to obtain a City permit for construction activities within the public right-of-way. A brief discussion of each environmental issue included under Section 10 is presented below.

a) Physically divide an established community?

The proposed Project would undertake interior renovations and a seismic upgrade to an existing office building for educational use and would not physically divide the West Subarea or Downtown Area. The Project would house existing BCC students, faculty and support staff.

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?

The Project would not conflict with applicable land use plans, policies or zoning requirements of the City of Berkeley. The proposed Project would be consistent with the *General Plan* and the *Downtown Plan.* The Project would: 1) reuse an existing downtown building and maintain its current height and building massing: 2) be compatible with the scale and massing of surrounding buildings; 3) install energy-efficient mechanical and electrical systems; 4) contribute to a diversity of uses in the downtown; 4) contribute to the vitality of the downtown pedestrian experience; and 5) remediate any hazardous materials present on-site.

Table 8 lists applicable *General Plan* and *Downtown Plan* policies and describes the relationship of the proposed Project to these policies in more detail.

TABLE 8: PROJECT CONSISTENCY WITH APPLICABLE GENERAL PLAN POLICIES

Policy	Relationship of Proposed Project to Policy
BERKELEY GENERAL PLAN: A GUIDE FOR PUBLIC DECISION-MAKING	
Land Use Element	
Policy LU-15 Service and Institutional Use Locations: Wherever possible, locate public and private institutional uses and community service centers that serve the city residents or have a regional-service orientation on transit corridors so that they are accessible to public transportation and will not disrupt adjacent residential areas.	*Consistent:* The Project site has good access to public transit. AC Transit bus stops and BART stations are within one block of the Project.
Policy LU-16 Downtown Plan: Implement the Downtown Plan and take actions to achieve the three goals of the Plan: *1. Express and enhance Berkeley's unique social and cultural character in the Downtown.* *2. Create an appealing and safe downtown environment, with a comfortable pedestrian orientation.* *3. Diversify, revitalize, and promote the Downtown economy.*	*Consistent.* The Project would house certain uses to support Berkeley City College (BCC) which is located less than one block from the Project site creating the opportunity for students, faculty and staff to walk to the Project site from BCC. This pedestrian traffic would contribute to the lively pedestrian experience in the downtown area. Building entrances would be improved to meet current ADA requirements.
Policy LU-17 Downtown Development Standards: Maintain the physical character of the Downtown.	*Consistent.* The Project would not change the building footprint, height or massing. The Project building would continue to be in conformance with the building height, number of stories and FAR specified for the Downtown West Subarea.
Transportation Element	
Policy T-6 Transportation Service Fee: Ensure that new development does not impact existing transportation services and facilities.	*Consistent.* The Project would provide facilities to accommodate existing BCC students, faculty and staff. The facilities would not induce an increase in student enrollment. See also discussion of *Policy LU-16* above.
Policy T-10 Trip Reduction: To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support and when appropriate require programs to encourage Berkeley citizens and commuters to reduce automobile trips.	*Consistent.* BCC currently provides reduced price transit passes to its students to encourage public transit use. Bus passes are currently $36 for the semester and are included in tuition fees. Bus passes will increase to $41 next semester.
Environmental Management Element	
Policy EM-8 Building Reuse and Construction Waste: Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.	*Consistent:* The proposed Project would include interior renovation of the existing building and a seismic upgrade to bring it up to Field Act standards. The building façade would remain intact and the building entrances would be improved to meet current ADA requirements.
Policy EM-15 Environmental Investigation: When reviewing applications for new development in areas historically used for industrial uses, require environmental investigation as necessary to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses would not have the potential to affect the environment or the health and safety of future property owners, users or construction workers.	*Consistent:* The Project site is located in an Environmental Management Area. A Phase I Environmental Site Assessment was completed for the Project site and the recommendations identified in this assessment will be implemented prior to building renovation.

TABLE 8: PROJECT CONSISTENCY WITH APPLICABLE GENERAL PLAN POLICIES (continued)

Policy	Relationship of Proposed Project to Policy
BERKELEY GENERAL PLAN: A GUIDE FOR PUBLIC DECISION-MAKING (continued)	
Environmental Management Element (continued)	
Policy EM-35 Energy Efficient Design: Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy resources.	*Consistent.* The Project interior building renovation would include electrical and mechanical systems upgrades that will replace obsolete systems with new and more energy efficient systems that will reduce energy and water consumption.
Urban Design and Preservation Element	
Policy UD-26 Pedestrian-Friendly Design: Architecture and site design should give special emphasis to enjoyment by, and convenience and safety for pedestrians.	*Consistent.* See discussion of Policy LU-16 above.
BERKELEY DOWNTOWN PLAN	
Policy DT-2: Maintain the existing scale of downtown. New construction should fit into the context of the existing built environment ad complement downtown's historic character. Encourage infill development that is compatible with existing uses and improves the pedestrian environment and the streetscape. Permit taller buildings only if they are in scale with other structures in the area.	*Consistent:* See discussion of General Plan Policy LU-16 and LU-17.
Policy DT-13: Support entrance and façade remodeling on downtown buildings that will contribute to the pedestrian experience.	*Consistent:* See discussion of General Plan Policy LU-16.
Policy DT-20: Encourage increased use of the downtown cultural events by providing additional cultural and public facilities and by refurbishing existing facilities.	*Consistent:* The Project would provide public facilities associated with BCC.

The Project would be in conformance with the Commercial Downtown Mixed Use District – Buffer (C-DMU) zoning for the site. The C-DMU zoning permits institutional offices and schools. The building is 40 feet in height, three stories, and an FAR of 2.24:1 which is within the base development standards for buildings located in a Buffer area in the C-DMU zone (City of Berkeley).

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The Project site is not within the boundaries of any habitat conservation or natural community conservation plans; and therefore the proposed Project would not be in conflict with such plans.

Recommended Mitigation Measures

None required.

References

City of Berkeley. 2003. *Berkeley General Plan: A Guide for Public Decision-Making.* Available on the City of Berkeley website: www.ci.berkeley.ca.us.

City of Berkeley. Berkeley Municipal Code, Chapter 23E.68 C-DMU Downtown Mixed Use District Provisions. Available on the City of Berkeley website: www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. 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?	☐	☐	☐	☒

Existing Conditions

The Project site is located in downtown Berkeley and is not located on or within a State-identified area of mineral extraction (City of Berkeley 2003).

Impact Discussion

The Project would have no affect on State-identified mineral resource extraction areas.

a) Would the project 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?

The Project would not affect any known mineral resources.

b) Would the project 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?

See **Subsection 11a** above.

Recommended Mitigation Measures

None required.

References

City of Berkeley. 2003. *Berkeley General Plan: A Guide for Public Decision-Making.* Available on the City of Berkeley website: www.ci.berkeley.ca.us.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12. 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, specific plan, 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?	☐	☒	☐	☐

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE (cont.)				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? A substantial permanent 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?	☐	☐	☐	☒
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan, specific plan, 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? A substantial permanent 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?	☐	☐	☐	☒

Existing Conditions

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is a sound or series of sounds that are intrusive, objectionable or disruptive to daily life. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener; these include the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the time of day when it occurs, the acuity of a listener's hearing, the activity of the listener during exposure – is s/he sleeping, working, talking? etc.). Environmental noise has many

documented undesirable effects on human health and welfare both psychological (e.g., annoyance and speech interference) and physiological (e.g., hearing impairment and sleep disturbance).

The Project site and vicinity was surveyed to identify existing noise-sensitive uses that could be adversely impacted by Project development. During this survey, short-term noise measurements were taken during the daytime off-commute-peak, as shown in **Table 9**, to establish baseline noise levels that affect existing noise-sensitive uses and that could affect the proposed Project use. This time-of-day was selected because Project construction and the period of peak Project operational use would occur then (i.e., when normal BCC activities would be in progress in the renovated building).

TABLE 9: PROJECT SITE VICINITY NOISE MEASUREMENT DATA AND SURVEY OBSERVATIONS

Location	Time Period	Noise Levels (dBA)*	Observations of Contributing Noise Sources
Location #1: Southwest corner Center St./Milvia St.	Mid-Day Off Commute Peak Thurs. 1/22/15 11 am – 12 noon	Leq: 62.7 L_{dn}: 61** Max: 77.3 Min: 51.8	Motor vehicle traffic on Center St. and Milvia St. Peaks in upper 60s dBA from passing cars. Cement trucks from construction project on Addison St. pass about every 5 minutes; their peaks in mid 70s dBA.
Location #2: South sidewalk Addison St., midblock between Milvia St. and Martin Luther King Jr. Way	Mid-Day Off Commute Peak Thurs. 1/22/15 11 am – 12 noon	Leq: 87.0 Max: 90.2 Min: 85.9	Construction in progress on large building on the north side of Addison St.; concrete pumping during the entire measurement period; concrete trucks come and go about every 5 minutes.

* Decibels are said to be **A–weighted**, abbreviated as dBA, when corrections are made to the measurements to reflect the known, varying sensitivity of the human ear to sounds of different frequencies. The **Equivalent Sound Level**, abbreviated as L_{eq}, is a constant sound level that carries the same sound energy as the actual time–varying sound over the measurement period; the project Leq values tabulated above apply to the indicated 1-hour-average period. The **Day–Night Average Sound Level**, abbreviated as L_{dn}, is a 24–hour average, A–weighted Leq with a 10–decibel penalty added to sound levels occurring at night between 10:00 p.m. and 7:00 a.m.

** According to Federal Transit Administration (FTA) methodology, L_{dn} can be adequately estimated by subtracting 2 dBA from the measured value of the daytime hourly L_{eq}; see *Transit Noise and Vibration Impact Assessment, Appendix D, Determining Existing Noise* (FTA, May 2006).

Impact Discussion

During Project renovation of the 2118 Milvia building, noise levels would temporarily increase and could adversely affect workers in nearby buildings and the residents of the ARTech Apartments east of Milvia Street across from the Project site. When the renovated building becomes operational, noise from the rooftop heating ventilation and air conditioning (HVAC) equipment could have adverse effects. But with implementation of **Mitigation Measure NOISE-1**, noise impacts would be less than significant. Project construction activities could expose nearby offices and residences to average noise levels about five dBA higher than existing levels, however with implementation of **Mitigation Measure NOISE-2** noise levels would be reduced. A brief discussion of each environmental issue included under Section 12 is presented below.

a) **Would the project expose persons to or generate noise levels in excess of standards established in the local general plan, specific plan, noise ordinance or applicable standards of other agencies?**

The renovated building would contain classrooms, library, office and support space. The majority of building use would be for classrooms and library space with a small portion of the building used for faculty and support space. These internal uses are considered noise-sensitive because intruding noise would reduce work, teaching and learning effectiveness, and communication ability.

Existing noise source types and levels observed in the Project site vicinity seem typical of downtown Berkeley: traffic sources are dominant, with average noise levels in the mid-60s dBA; passing trucks and buses produce frequent peaks in the upper 60s dBA, and occasionally as high as the mid-70s dBA.

In *Protective Noise Levels* (1978), the US Environmental Protection Agency (EPA) recommends that for noise-sensitive uses other than residential (i.e., offices, schools, etc.) that interior 24-hour Leq be kept below 45 dBA to avoid undue annoyance and interference with indoor activities. With typical outdoor daytime average noise levels in the Project site vicinity in the mid-60s dBA, standard acoustical insulation for a building of its type (i.e., an outdoor-to-indoor noise level reduction of at least 25 dBA with windows closed), the Project building would attain interior noise levels that are adequately protective of work and learning efficiency. This impact would be less than significant.

b) **Would the project expose persons to or generate excessive ground-borne vibration or ground-borne noise levels?**

Just as vibrating objects radiate sound through the air, if they are in contact with the ground they also radiate acoustical energy through the ground. If such an object is massive enough and/or close enough to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough (as measured in vibration decibels, abbreviated VdB), they can cause annoyance to the observer and/or damage to buildings. Background ground vibration levels in most inhabited areas are usually 50 VdB or lower, well below the threshold of perception (i.e., typically about 65 VdB).

It is most common for government agencies to rely on assessment methodologies, impact standards and vibration-reduction strategies developed by the Federal Transit Agency (FTA) in *Transit Noise and Vibration Impact Assessment* (2006). According to the FTA, limiting vibration levels to 94 VdB or less would avoid structural damage to most residential structures, while limiting vibration levels to 80 VdB or less at residential locations would avoid significant annoyance to the occupants.

The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving will be required for the Project. Other types of construction equipment are far less vibration-intensive. Even so, more commonly used pieces of equipment, such as heavily loaded trucks, could pose a damage or annoyance threat if they would regularly and often come within 25 feet of a vibration-sensitive receptor during construction. At a maximum, there would be four trucks per day accessing the Project site on local streets for debris removal and supply deliveries. Although these truck could pass local residential

uses, their infrequency compared to the existing number of truck pass-bys on local streets would limit Project construction vibration impact severity to a less-than-significant level.

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

After its construction, potential incremental noise impacts could be caused by the building HVAC equipment.

Current plans call for the Project HVAC equipment to be located on the building roof. Provision of an effective noise enclosure for the Project HVAC equipment, as specified and verified by the implementation of **Mitigation Measure NOISE-1**, will assure that HVAC noise impacts would be less than significant.

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

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the maximum and average outdoor noise levels during Project construction that the closest residential use would experience, as presented in **Table 10**. Project construction activities could expose the existing residential use (ARTech Apartments) to average outdoor noise levels about five dBA higher than local existing levels, with more frequent noise peaks comparable to what is now experienced from a large truck or bus passby.

TABLE 10: MODELED CONSTRUCTION NOISE LEVELS AT THE CLOSEST RESIDENTIAL USES TO THE PROJECT SITE

Receptor	Distance from Construction Activity (feet)	Maximum Construction Daytime Noise Level (dB)	Average Construction Daytime Noise Level (dB)
Closest Residential to the Project site (ARTech Apartments, 2002 Addison St.)	125	73	68

FTA recommends that RCNM be run assuming the two loudest pieces of equipment to be used for the project are operating simultaneously in close proximity to each other; for this Project, they were taken to be a crane and a dump truck.

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

With implementation of **Mitigation Measure NOISE-2**, the Project's construction noise severity would be reduced to the maximum extent possible and the impact would be less than significant.

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

The proposed Project site is not located within an airport land use plan nor within two miles of a public airport or public use airport.

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?**

The proposed Project site is not located in the vicinity of a private airstrip.

Recommended Mitigation Measures

NOISE-1 The roof-top acoustic enclosure surrounding the Project building HVAC equipment shall be designed to ensure noise levels do not interfere with indoor activities and cause annoyance to nearby office and residential uses. Specifications for the enclosure shall be set by a Project building-specific acoustical analysis and incorporated into the Project design to assure the tranquility of nearby office and residential receptors. When the HVAC equipment is fully operational, the effectiveness of its noise control features shall be verified by noise measurements.

NOISE-2 The following Best Management Practices shall be incorporated into the construction documents to be implemented by the Project contractor:

- Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Provide sound-control devices on equipment no less effective than those provided by the manufacturer.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.
- Designate a noise disturbance coordinator who shall be responsible for responding to complaints about noise during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site. Copies of the project purpose, description and construction schedule shall also be distributed to the nearby residences.
- Limit project construction activity to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, 9:00 a.m. to 8:00 p.m. on weekends and holidays.

References

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment.* http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf Website accessed on November 2, 2014.

FHWA (Federal Highway Administration). 2006. *Roadway Construction Noise Model User's Guide.* https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf Website accessed on November 2, 2014.

US EPA (Environmental Protection Agency). 1978. *Protective Noise Levels.* http://nepis.epa.gov.

13. POPULATION AND HOUSING	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) 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?	☐	☐	☐	☒

Existing Conditions

The Project site contains a three-story office building in downtown Berkeley.

Impact Discussion

The proposed Project would not induce population growth in Berkeley. The Project would provide space for existing BCC students, faculty and staff. The Project would not displace any housing,. A brief discussion of each environmental issue included under Section 13 is presented below.

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed Project would renovate an existing office building located less than one block from BCC. The building renovation would include interior improvements to provide classroom space, faculty offices and support space for existing BCC students, faculty and staff.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The Project would not affect any residential housing.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project would not displace any residents.

Recommended Mitigation Measures

None required.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
14. **PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government 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:				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Existing Conditions

The City of Berkeley provides police and fire protection to the Project site.

Impact Discussion

The proposed Project would result in similar demands for police and fire protection services as with the existing office use of the building. Project-related impacts to public services would be similar as with the existing use of the office building. A brief discussion of each environmental issue included under Section 14 is presented below.

a) Fire protection

The Project site is located in Fire Response District 2 and served by Station 2 located at 2029 Berkeley Way (Berkeley Fire Department). The interior building renovations would include a new sprinkler system and fire alarm system. The proposed Project would result in similar demands for fire protection services as with existing conditions.

b) Police protection

The Project site is located in Beat 5 (Berkeley Police Department). The proposed Project would result in similar demands for police protection services as with existing conditions.

c) Schools

The proposed Project would provide classrooms, a library, faculty offices and support space for existing BCC students, faculty and staff in support of its educational mission.

d) Parks

Because the proposed Project will not generate increased student enrollment or the need for additional faculty and staff there would be no increased demand placed on existing parks.

e) Other Public Facilities

Because the proposed Project will not generate increased student enrollment or the need for additional faculty and staff there would be no increased demand placed on other public facilities.

Recommended Mitigation Measure

None required.

References

City of Berkeley Fire Department. Website: www.ci.berkeley.ca.us/fire.

City of Berkeley Police Department. Website: www.ci.berkeley.ca.us/police.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. RECREATION. Would the project:				
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?	☐	☐	☐	☒

Existing Conditions

The Project site currently contains an office building in downtown Berkeley.

Impact Discussion

The proposed Project would result in similar demands for recreational facilities as with the existing office use. A brief discussion of each environmental issue included under Section 15 is presented below.

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?

The proposed Project would not generate demand for new recreational facilities. The renovated office building would provide space for existing BCC students, faculty and staff.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The proposed Project would not generate demand for new recreational facilities. The renovated office building would provide space for BCC students, faculty and staff.

Recommended Mitigation Measures

None required.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION AND CIRCULATION. Would the project result in:				
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 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?	☐	☐	☐	☒

Existing Conditions

The Project site is located at the corner of Center Street and Milvia Street. Center Street is two lanes with angled parking along the curb. Milvia Street is two lanes with parking along the curb. Milvia Street is a Class III bicycle facility and part of the City of Berkeley Bicycle Boulevard Network.

Impact Discussion

The proposed Project would not result in significant operational transportation and circulation impacts. There would be no increase in vehicle trips due to the Project. There would be temporary circulation conflicts during building renovation which is considered a potentially significant impact, however, with

implementation of **Mitigation Measure TRAFFIC-1**, temporary circulation impacts would be less than significant. A brief discussion of each environmental issue included under Section 16 is presented below.

a) **Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian bicycle paths, and mass transit?**

The proposed Project would not conflict with applicable plans, ordinances or policies. The Project would be required to obtain a *Street and Sidewalk Permit* from the City of Berkeley during renovation of the existing building on the Project site to allow temporary land and/or sidewalk closures if necessary.

The proposed Project would seismically upgrade and renovate the interior of the existing office building located at 2118 Milvia Street, which is currently occupied. The Project would contain classroom space, a library, faculty offices and support space to accommodate existing BCC students, faculty and staff. The majority of building use would be for classroom and library use with a small portion of the building used for faculty offices and support space. As the travel characteristics associated with the Project tenants are expected to be similar to that of current tenants, an assessment of Project trip generation is not necessary. Site access, circulation, and other building features would remain unchanged from existing conditions. Therefore, this analysis of transportation impacts focuses on construction-related impacts resulting from the Project's temporary encroachment along the public right-of-way. Detailed construction plans for the Project have not yet been finalized, but it is anticipated that construction activities would take place over an 18-month period starting in September 2016 and ending in March 2017. Work is expected to occur Monday through Friday from 8:00 AM to 6:00 PM. **Table 1** in the **Project Description** presents proposed Project construction activities. Presented below is a discussion of potential temporary transportation impacts during Project construction.

Construction Staging

Construction staging would primarily occur within the confines of the building; however, certain construction activities such as storage, transport of construction debris from building renovation work and delivery of materials to the site would require the use of the adjacent sidewalk and roadway. The sidewalk along the west side of Milvia Street abutting the Project site's building frontage would be closed during periods of construction. Additionally, the curbside (parking) lane, consisting of seven standard motor vehicle parking spaces and approximately three motorcycle parking spaces, would also be temporarily closed to allow for the storage of construction staging materials (including a large dumpster) and other building materials that cannot be housed within the building. **Figure 4** shows the proposed staging area for the Project). The sidewalk and curbside (parking) lane closures will be subject to joint approval by the City's Traffic Engineering and the Engineering Inspectors in the Permit Service Center (City of Berkeley). No major Alameda County Transit (AC Transit) travel lanes or bus stops would require closure or relocation during Project construction activities. Temporary sidewalk and curbside lane closures could result in potential disruptions to traffic, pedestrian and bicycle circulation on adjacent

streets and is considered a potentially significant impact. However with implementation of **Mitigation Measure TRAFFIC-1** and **TRAFFIC-2** impacts would be less than significant.

Construction Workers

The estimated number of peak daily construction workers would be 18 over a seven and one-half month period (see **Table 1**). Vehicle parking for construction workers would not be possible on-site, thus construction workers would be expected to make their own parking arrangements in area parking facilities. As the peak daily number of construction workers would be 18, this demand is not considered significant.

Given the Project's location in close proximity to high-quality local and regional transit services, Project construction workers would have a convenient alternative to driving. The Project site is located one block (approximately 700 feet) west of the Downtown Berkeley Bay Area Rapid Transit (BART) station. The Project site is also served by several high-frequency AC Transit bus lines, operating along University Avenue, Center Street, Shattuck Avenue, and Martin Luther King Way including Local Lines 12, 25, 51b, and 52, and Transbay Lines F and FS.

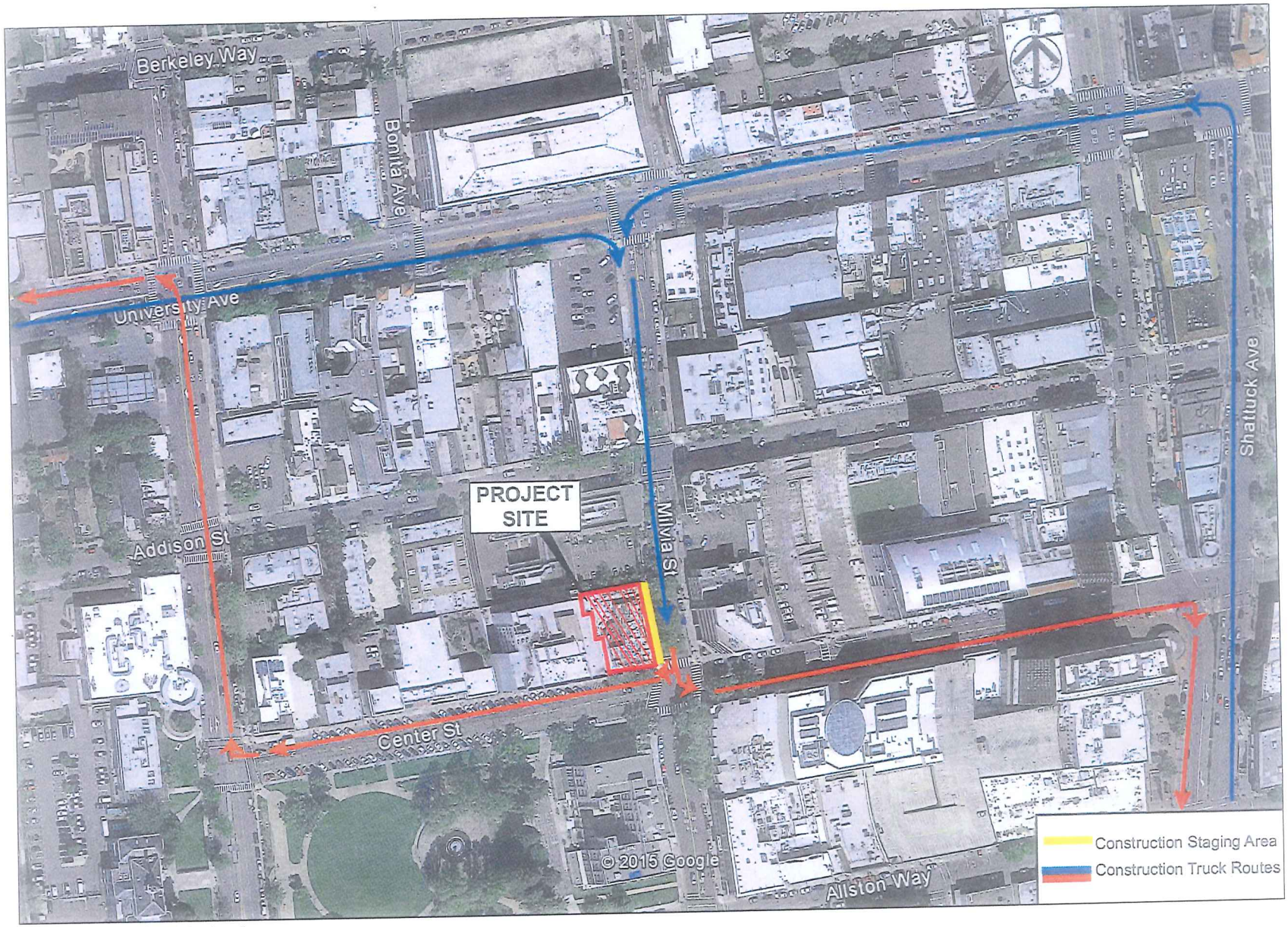
Construction Truck Traffic Routes

Construction vehicles accessing the Project site from Interstate 80 (I-80) located west of the site would exit the freeway at University Avenue and travel east along University Avenue to Milvia Street. Construction vehicles accessing the Project site from the east would travel north along Shattuck Avenue to University Avenue and continue onto Milvia Street. Construction vehicles would park along the curbside (parking) lane on Milvia Street during loading activities. As Milvia Street is a narrow roadway that cannot accommodate construction vehicle U-turns, construction vehicles leaving the Project site would continue traveling south along Milvia Street to Center Street. Construction vehicles would either continue east on Center Street onto Shattuck Avenue, or travel west on Center Street, and turn right onto Martin Luther King Junior Way, to continue north onto University Avenue. Construction vehicle travel routes are shown in **Figure 4**.

Bicycle Impacts

Milvia Street is a Class III bicycle facility (i.e. shared road space in the paved right-of-way, operating in mixed flow with other vehicles such as cars, buses, and trucks). Additionally, Milvia Street is part of the City of Berkeley's Bicycle Boulevard Network, a network of streets where all types of vehicles are allowed, and roadways are modified as needed to enhance bicycle safety and convenience. Milvia Street features painted arrows and signage identifying it as part of the Bicycle Boulevard Network.

Project construction would not include any roadway closures but would result in an increase in the number of heavy vehicles travelling along Milvia Street. No more than four construction truck trips are expected per day, and construction truck trips would be spread out throughout the day. However, during construction activities there could be potential safety conflicts between construction trucks and bicycles,



Source: AECOM Technical Services, Inc.

Figure 4
Proposed Construction Truck Routes and Staging Area

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but with implementation of **Mitigation Measure TRAFFIC-3** such conflicts would be reduced to a less-than-significant level.

The closure of the sidewalk on the west side of Milvia Street would result in the temporary loss of access to one Class II bicycle parking rack. Additional Class II bicycle parking racks provided along the north sidewalk of Center Street, and the south sidewalk of Addison Street, would be able to accommodate the needs of bicyclists looking for parking within the vicinity of the Project site.

Pedestrian Impacts

The closure of the sidewalk on the west side of Milvia Street abutting the Project site would result in minor disruptions to pedestrian circulation within the vicinity of the Project site. Pedestrians traversing this section of Milvia Street would be forced to travel on the sidewalk along the east side of Milvia Street. Pedestrians would be able to access this sidewalk by crossing Milvia Street at the Milvia Street / Addison Street or the Milvia Street / Center Street crosswalks. Both crosswalks are marked, and the Milvia Street / Center Street crosswalk also features high-visibility striping. **Mitigation Measure TRAFFIC-3** requires wayfinding signage to safely direct pedestrians when sidewalks are closed.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The proposed Project would not generate any vehicle trips. The Project would not conflict with applicable congestion management programs.

c) Would the project 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?

The Project would have no effect on air traffic patterns. The nearest airport is Oakland International Airport located about ten miles south of the Project site.

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

The Project would not result in any circulation hazards. There are no vehicle access points/entrances at the Project site.

e) Would the project result in inadequate emergency access?

The Project site is developed with an existing office building, there is no vehicle access onto the site. The existing building has three entrances (one on Center Street and two on Milvia Street). The Project would improve the three building entrances to meet current ADA requirements.

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

The proposed Project would not conflict with local, regional or state policies regarding public transit, bicycles or pedestrian facilities.

Recommended Mitigation Measure

TRAFFIC-1 To minimize disruptions to traffic, transit, bicycle, and pedestrian circulation on adjacent streets during the weekday AM and PM peak periods, the Project contractor shall restrict construction-related truck movements and deliveries to, from, and around the Project site during peak hours (generally 7:00 to 9:00 AM and 4:00 to 6:00 PM) or other times, as determined by the City of Berkeley Traffic Engineering department, and the Engineering Inspectors in the Permit Service Center.

TRAFFIC-2 In order to reduce potential conflicts between construction activities and traffic, bicycles, and pedestrians at the Project site, the contractor shall identify construction traffic management best practices to avoid or minimize conflicts. Management practices could include, but are not limited to, the following:

- Identifying ways to reduce construction worker vehicle-trips through transportation demand management programs and methods to manage construction worker parking demands.
- Identifying best practices for accommodating pedestrians, such as temporary pedestrian wayfinding signage.
- Identifying ways to consolidate truck delivery trips, including a plan to consolidate deliveries from a centralized construction material and equipment storage facility.
- Requiring consultation with the surrounding community, including business and property owners near the Project site, to assist coordination of construction traffic management strategies as they relate to the needs of other users adjacent to the Project site.
- Developing a public information plan to provide adjacent residents and businesses with regularly updated information regarding Project construction activities, peak construction vehicle activities, sidewalk and parking lane closures, and providing a Project contact for such construction-related concerns.

TRAFFIC-3 The Project contractor shall deploy construction staff along Milvia Street and at the Milvia Street / Center Street intersection to direct truck traffic during loading activities.

References

City of Berkeley. Construction and Demolition Debris Diversion Requirements (Berkeley Municipal Code [BMC] 19.24), and the City of Berkeley Green Code (BMC 19.37).

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
17. 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'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?	☐	☐	☒	☐

Existing Conditions

East Bay Municipal Utilities District (EBMUD) provides water and wastewater service to the Project site. The City of Berkeley provides solid waste disposal service to the site.

Impact Discussion

The proposed Project would not adversely affect utilities and service systems. A brief discussion of each environmental issue included under Section 17 is presented below.

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

Project wastewater generation at the Project site would be similar to or slightly less than with existing conditions at the Project site. The Project would replace existing fixtures with energy efficient low-flow fixtures. Project impacts would be less than significant.

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

The proposed Project would consume water and generate wastewater at similar rates or slightly less than with existing conditions at the Project site. The Project would replace existing fixtures with energy efficient low-flow fixtures. Project impacts would be less than significant.

c) Would the project 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?

The Project would not require the need to construct new storm water drainage facilities or expand existing facilities (see **Section 9 Hydrology** and **Water Quality**). Project impacts would be less than significant.

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

The Project would require similar water supplies as with existing conditions at the site and would not generate demand for new or expanded water entitlements. Project impacts would be less than significant.

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

The Project would not require a determination from EBMUD regarding capacity. See **Subsection 17a** and **17b**.

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

Solid waste from the City of Berkeley is transported to the Altamont landfill. The expected closure of the landfill is 2040 and there is about 48 percent capacity remaining (Alameda County Waste Management Authority 2003). Project impacts would be less than significant.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

The Project would be served by the City of Berkeley which collects and disposes refuse and recyclables for residential and commercial properties. The City of Berkeley is committed to Zero Waste Programs to reduce and ultimately eliminating/diverting the waste that goes into landfills. The City established one of the first recycling programs in the nation. Thus the Project will comply with local, state and federal statutes related to solid waste (City of Berkeley). Project impacts would be less than significant.

Recommended Mitigation Measures

None required.

References

Alameda County Waste Management Authority. 2003. *Alameda County Waste Management Integrated Management Plan, Countywide Element.* Adopted February 26, 2003, Factual Update April 28, 2010, Amended January 26, 2011. Available at: www.naco.org.

City of Berkeley Website: www.ci.berkeley.ca.us/zerowaste.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
18. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	☐	☒	☐	☐

Discussion

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?

The proposed Project not affect biological resources, water quality or cultural resources.

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.)

The proposed Project would not result in cumulatively considerable impacts.

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

During Project construction, the maximum annual $PM_{2.5}$ concentration would exceed the Project-level CEQA threshold, but with implementation of Mitigation Measure AIR-1, the maximum annual $PM_{2.5}$

concentration increment would be reduced to below the BAAQMD threshold. The Project site is located in an Environmental Management Area and there is concern contaminated soil and groundwater may be present at the site due to the historical use of the Project site and adjacent properties. With implementation of **Mitigation Measure HAZ-1**, potentially significant impacts would be less than significant. Rooftop HVAC equipment could affect Project occupants as well as nearby offices and residences but with implementation of **Mitigation Measure NOISE-1** would be less than significant. Temporary construction activities may result in significant noise impacts that could adversely affect nearby offices and residences, however with implementation of **Mitigation Measure NOISE-2**, construction noise impacts would be less than significant. There may be temporary circulation conflicts during Project construction activities but with implementation of **Mitigation Measure TRAFFIC-1**, **TRAFFIC-2** and **TRAFFIC-3** such conflicts would be less than significant.

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APPENDIX A
AIR QUALITY AND GREENHOUSE GAS EMISSIONS DATA

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BCC 2128 Milvia

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.00	1000sqft	0.26	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual project site acerage

Construction Phase - Actual project phases/schedule

Off-road Equipment - Accept default equipment

Off-road Equipment - Accept default equipment.

Off-road Equipment - No heavy equipment for interior demo.

Off-road Equipment - No grading required.

Off-road Equipment - No paving needed

Off-road Equipment - No site prep required

Trips and VMT - Actual project worker and truck trips.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstructionPhase	NumDays	5.00	185.00
tblConstructionPhase	NumDays	100.00	319.00
tblConstructionPhase	NumDays	10.00	72.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	11/15/2017	12/15/2017
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2018
tblConstructionPhase	PhaseEndDate	12/9/2016	12/10/2016
tblConstructionPhase	PhaseEndDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2017
tblConstructionPhase	PhaseStartDate	3/2/2017	4/1/2017
tblConstructionPhase	PhaseStartDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseStartDate	12/13/2016	12/11/2016
tblConstructionPhase	PhaseStartDate	3/2/2018	3/1/2017
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LotAcreage	0.57	0.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	2.00	6.00

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					
2016	0.0298	0.2249	0.1785	3.0000e-004	2.5900e-003	0.0159	0.0185	6.5000e-004	0.0156	0.0162	0.0000	25.5902	25.5902	3.0800e-003	0.0000	25.6548
2017	0.4167	1.1161	0.7697	1.2900e-003	0.0226	0.0686	0.0911	6.0700e-003	0.0644	0.0704	0.0000	113.2360	113.2360	0.0224	0.0000	113.7060
2018	0.0138	0.1338	0.0901	1.6000e-004	2.9700e-003	7.4500e-003	0.0104	8.0000e-004	6.8500e-003	7.6500e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.4602	1.4748	1.0383	1.7500e-003	0.0281	0.0919	0.1200	7.5200e-003	0.0868	0.0943	0.0000	152.9704	152.9704	0.0288	0.0000	153.5746

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					
2016	0.0298	0.2249	0.1785	3.0000e-004	2.5900e-003	0.0159	0.0185	6.5000e-004	0.0156	0.0162	0.0000	25.5901	25.5901	3.0800e-003	0.0000	25.6548
2017	0.4167	1.1161	0.7697	1.2900e-003	0.0226	0.0686	0.0911	6.0700e-003	0.0644	0.0704	0.0000	113.2359	113.2359	0.0224	0.0000	113.7059
2018	0.0138	0.1338	0.0901	1.6000e-004	2.9700e-003	7.4500e-003	0.0104	8.0000e-004	6.8500e-003	7.6500e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.4602	1.4748	1.0383	1.7500e-003	0.0281	0.0919	0.1200	7.5200e-003	0.0868	0.0943	0.0000	152.9702	152.9702	0.0288	0.0000	153.5745

	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	tons/yr										MT/yr					
Area	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4186
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4581	2.6500e-003	759.5155

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	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4180
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4580	2.6500e-003	759.5148

	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	9/1/2016	12/10/2016	5	72	
2	Site Preparation	Site Preparation	12/11/2016	12/12/2016	5	1	
3	Grading	Grading	12/11/2016	12/12/2016	5	1	
4	Building Construction	Building Construction	12/12/2016	3/1/2018	5	319	
5	Paving	Paving	3/1/2017	3/1/2017	5	1	
6	Architectural Coating	Architectural Coating	4/1/2017	12/15/2017	5	185	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37

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	1	4.00	0.00	1.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	4.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950
Total	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950

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	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

3.2 Demolition - 2016

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	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950
Total	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950

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	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

3.3 Site Preparation - 2016

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2016

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2016

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	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

3.5 Building Construction - 2016

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	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

3.5 Building Construction - 2017

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	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765
Total	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765

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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

3.5 Building Construction - 2017

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	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764
Total	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764

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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

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	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395
Total	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395

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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

3.5 Building Construction - 2018

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	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395
Total	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395

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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2017

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	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0307	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700
Total	0.3204	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700

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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

3.7 Architectural Coating - 2017

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	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0307	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699
Total	0.3204	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699

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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

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	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Unmitigated	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	687.25	280.75	30.25	1,359,469	1,359,469
Total	687.25	280.75	30.25	1,359,469	1,359,469

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
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

5.0 Energy Detail

4.4 Fleet Mix

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	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
NaturalGas Mitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
NaturalGas Unmitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Unmitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

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	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

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					
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.2721	0.0401	9.8000e-004	5.4180
Unmitigated	4.2721	0.0401	9.8000e-004	5.4186

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4186
Total		4.2721	0.0401	9.8000e-004	5.4186

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4180
Total		4.2721	0.0401	9.8000e-004	5.4180

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5972	0.3899	0.0000	14.7848
Unmitigated	6.5972	0.3899	0.0000	14.7848

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

9.0 Operational Offroad

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

10.0 Vegetation

BCC 2128 Milvia

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.00	1000sqft	0.26	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual project site acerage

Construction Phase - Actual project phases/schedule

Off-road Equipment - Accept default equipment

Off-road Equipment - Accept default equipment.

Off-road Equipment - No heavy equipment for interior demo.

Off-road Equipment - No grading required.

Off-road Equipment - No paving needed

Off-road Equipment - No site prep required

Trips and VMT - Actual project worker and truck trips.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstructionPhase	NumDays	5.00	185.00
tblConstructionPhase	NumDays	100.00	319.00
tblConstructionPhase	NumDays	10.00	72.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	11/15/2017	12/15/2017
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2018
tblConstructionPhase	PhaseEndDate	12/9/2016	12/10/2016
tblConstructionPhase	PhaseEndDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2017
tblConstructionPhase	PhaseStartDate	3/2/2017	4/1/2017
tblConstructionPhase	PhaseStartDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseStartDate	12/13/2016	12/11/2016
tblConstructionPhase	PhaseStartDate	3/2/2018	3/1/2017
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LotAcreage	0.57	0.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	2.00	6.00

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					
2016	0.7922	7.6466	4.5109	7.4700e-003	0.6701	0.4456	1.1157	0.0949	0.4099	0.5048	0.0000	745.2674	745.2674	0.1672	0.0000	748.7782
2017	4.2103	9.2019	6.4628	0.0111	0.1964	0.5774	0.7739	0.0527	0.5451	0.5977	0.0000	1,069.0289	1,069.0289	0.1992	0.0000	1,073.2112
2018	0.6234	6.0641	3.9966	7.4700e-003	0.1399	0.3386	0.4785	0.0377	0.3115	0.3492	0.0000	716.8493	716.8493	0.1661	0.0000	720.3381
Total	5.6259	22.9126	14.9703	0.0261	1.0064	1.3616	2.3680	0.1852	1.2665	1.4517	0.0000	2,531.1456	2,531.1456	0.5325	0.0000	2,542.3274

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					
2016	0.7922	7.6466	4.5109	7.4700e-003	0.6701	0.4456	1.1157	0.0949	0.4099	0.5048	0.0000	745.2674	745.2674	0.1672	0.0000	748.7782
2017	4.2103	9.2019	6.4628	0.0111	0.1964	0.5774	0.7739	0.0527	0.5451	0.5977	0.0000	1,069.0289	1,069.0289	0.1992	0.0000	1,073.2112
2018	0.6234	6.0641	3.9966	7.4700e-003	0.1399	0.3386	0.4785	0.0377	0.3115	0.3492	0.0000	716.8493	716.8493	0.1661	0.0000	720.3381
Total	5.6259	22.9126	14.9703	0.0261	1.0064	1.3616	2.3680	0.1852	1.2665	1.4517	0.0000	2,531.1456	2,531.1456	0.5325	0.0000	2,542.3274

	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	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Energy	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Mobile	2.5866	7.2792	26.0427	0.0578	3.7233	0.0997	3.8230	0.9975	0.0917	1.0892		4,964.3334	4,964.3334	0.1815		4,968.1441
Total	3.2198	7.5206	26.2481	0.0592	3.7233	0.1181	3.8414	0.9975	0.1101	1.1075		5,254.0246	5,254.0246	0.1870	5.3100e-003	5,259.5986

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	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Energy	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Mobile	2.5866	7.2792	26.0427	0.0578	3.7233	0.0997	3.8230	0.9975	0.0917	1.0892		4,964.3334	4,964.3334	0.1815		4,968.1441
Total	3.2198	7.5206	26.2481	0.0592	3.7233	0.1181	3.8414	0.9975	0.1101	1.1075		5,254.0246	5,254.0246	0.1870	5.3100e-003	5,259.5986

	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	9/1/2016	12/10/2016	5	72	
2	Site Preparation	Site Preparation	12/11/2016	12/12/2016	5	1	
3	Grading	Grading	12/11/2016	12/12/2016	5	1	
4	Building Construction	Building Construction	12/12/2016	3/1/2018	5	319	
5	Paving	Paving	3/1/2017	3/1/2017	5	1	
6	Architectural Coating	Architectural Coating	4/1/2017	12/15/2017	5	185	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37

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	1	4.00	0.00	1.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	4.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473		592.6657	592.6657	0.0574		593.8702
Total	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473		592.6657	592.6657	0.0574		593.8702

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	2.6000e-004	4.0200e-003	2.6200e-003	1.0000e-005	2.4000e-004	5.0000e-005	3.0000e-004	7.0000e-005	5.0000e-005	1.2000e-004		1.0575	1.0575	1.0000e-005		1.0577
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	0.0164	0.0199	0.2330	4.7000e-004	0.0377	3.1000e-004	0.0380	0.0100	2.8000e-004	0.0103		39.2237	39.2237	2.0600e-003		39.2670
Total	0.0167	0.0239	0.2356	4.8000e-004	0.0380	3.6000e-004	0.0383	0.0101	3.3000e-004	0.0104		40.2813	40.2813	2.0700e-003		40.3247

3.2 Demolition - 2016

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	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473	0.0000	592.6657	592.6657	0.0574		593.8702
Total	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473	0.0000	592.6657	592.6657	0.0574		593.8702

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	2.8000e-004	4.0200e-003	2.6200e-003	1.0000e-005	2.4000e-004	5.0000e-005	3.0000e-004	7.0000e-005	5.0000e-005	1.2000e-004		1.0575	1.0575	1.0000e-005		1.0577
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	0.0164	0.0199	0.2330	4.7000e-004	0.0377	3.1000e-004	0.0380	0.0100	2.8000e-004	0.0103		39.2237	39.2237	2.0600e-003		39.2670
Total	0.0167	0.0239	0.2356	4.8000e-004	0.0380	3.6000e-004	0.0383	0.0101	3.3000e-004	0.0104		40.2813	40.2813	2.0700e-003		40.3247

3.3 Site Preparation - 2016

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.5303	0.0000	0.5303	0.0573	0.0000	0.0573		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.3 Site Preparation - 2016

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.5303	0.0000	0.5303	0.0573	0.0000	0.0573	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.5 Building Construction - 2016

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	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035		531.2003	531.2003	0.1602		534.5651
Total	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035		531.2003	531.2003	0.1602		534.5651

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	0.0425	0.3912	0.4249	9.6000e-004	0.0267	6.0600e-003	0.0328	7.6300e-003	5.5700e-003	0.0132		96.3959	96.3959	7.7000e-004		96.4120
Worker	0.0493	0.0598	0.6991	1.4000e-003	0.1132	9.3000e-004	0.1141	0.0300	8.5000e-004	0.0309		117.6712	117.6712	6.1800e-003		117.8011
Total	0.0918	0.4509	1.1240	2.3600e-003	0.1399	6.9900e-003	0.1468	0.0376	6.4200e-003	0.0441		214.0671	214.0671	6.9500e-003		214.2131

3.5 Building Construction - 2016

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	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035	0.0000	531.2003	531.2003	0.1602		534.5651
Total	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035	0.0000	531.2003	531.2003	0.1602		534.5651

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	0.0425	0.3912	0.4249	9.6000e-004	0.0267	6.0600e-003	0.0328	7.6300e-003	5.5700e-003	0.0132		96.3959	96.3959	7.7000e-004		96.4120
Worker	0.0493	0.0598	0.6991	1.4000e-003	0.1132	9.3000e-004	0.1141	0.0300	8.5000e-004	0.0309		117.6712	117.6712	6.1800e-003		117.8011
Total	0.0918	0.4509	1.1240	2.3600e-003	0.1399	6.9900e-003	0.1468	0.0376	6.4200e-003	0.0441		214.0671	214.0671	6.9500e-003		214.2131

3.5 Building Construction - 2017

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	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657		523.0012	523.0012	0.1603		526.3663
Total	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657		523.0012	523.0012	0.1603		526.3663

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	0.0399	0.3505	0.4059	9.6000e-004	0.0267	5.2500e-003	0.0319	7.6300e-003	4.8200e-003	0.0125		94.7773	94.7773	7.3000e-004		94.7926
Worker	0.0439	0.0535	0.6247	1.4000e-003	0.1132	8.9000e-004	0.1141	0.0300	8.2000e-004	0.0308		113.2016	113.2016	5.6400e-003		113.3201
Total	0.0839	0.4040	1.0306	2.3600e-003	0.1399	6.1400e-003	0.1460	0.0376	5.6400e-003	0.0433		207.9789	207.9789	6.3700e-003		208.1127

3.5 Building Construction - 2017

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	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657	0.0000	523.0012	523.0012	0.1603		526.3663
Total	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657	0.0000	523.0012	523.0012	0.1603		526.3663

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	0.0399	0.3505	0.4059	9.6000e-004	0.0267	5.2500e-003	0.0319	7.6300e-003	4.8200e-003	0.0125		94.7773	94.7773	7.3000e-004		94.7926
Worker	0.0439	0.0535	0.6247	1.4000e-003	0.1132	8.9000e-004	0.1141	0.0300	8.2000e-004	0.0308		113.2016	113.2016	5.6400e-003		113.3201
Total	0.0839	0.4040	1.0306	2.3600e-003	0.1399	6.1400e-003	0.1460	0.0376	5.6400e-003	0.0433		207.9789	207.9789	6.3700e-003		208.1127

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	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063		514.6968	514.6968	0.1602		518.0617
Total	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063		514.6968	514.6968	0.1602		518.0617

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	0.0377	0.3177	0.3859	9.6000e-004	0.0267	4.8600e-003	0.0316	7.6300e-003	4.4700e-003	0.0121		93.1452	93.1452	7.2000e-004		93.1602
Worker	0.0393	0.0481	0.5602	1.4000e-003	0.1132	8.5000e-004	0.1140	0.0300	7.9000e-004	0.0308		109.0073	109.0073	5.1800e-003		109.1162
Total	0.0770	0.3657	0.9461	2.3600e-003	0.1399	5.7100e-003	0.1456	0.0376	5.2600e-003	0.0429		202.1525	202.1525	5.9000e-003		202.2764

3.5 Building Construction - 2018

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	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063	0.0000	514.6968	514.6968	0.1602		518.0617
Total	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063	0.0000	514.6968	514.6968	0.1602		518.0617

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	0.0377	0.3177	0.3859	9.6000e-004	0.0267	4.8600e-003	0.0316	7.6300e-003	4.4700e-003	0.0121		93.1452	93.1452	7.2000e-004		93.1602
Worker	0.0393	0.0481	0.5602	1.4000e-003	0.1132	8.5000e-004	0.1140	0.0300	7.9000e-004	0.0308		109.0073	109.0073	5.1800e-003		109.1162
Total	0.0770	0.3657	0.9461	2.3600e-003	0.1399	5.7100e-003	0.1456	0.0376	5.2600e-003	0.0429		202.1525	202.1525	5.9000e-003		202.2764

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Architectural Coating - 2017

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	3.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	3.4641	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

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	0.0220	0.0267	0.3123	7.0000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		56.6008	56.6008	2.8200e-003		56.6601
Total	0.0220	0.0267	0.3123	7.0000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		56.6008	56.6008	2.8200e-003		56.6601

3.7 Architectural Coating - 2017

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	3.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	3.4641	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

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	0.0220	0.0267	0.3123	7.0000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		56.6008	56.6008	2.8200e-003		56.6601
Total	0.0220	0.0267	0.3123	7.0000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		56.6008	56.6008	2.8200e-003		56.6601

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	2.5866	7.2792	26.0427	0.0578	3.7233	0.0997	3.8230	0.9975	0.0917	1.0892		4,964.3334	4,964.3334	0.1815		4,968.1441
Unmitigated	2.5866	7.2792	26.0427	0.0578	3.7233	0.0997	3.8230	0.9975	0.0917	1.0892		4,964.3334	4,964.3334	0.1815		4,968.1441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	687.25	280.75	30.25	1,359,469	1,359,469
Total	687.25	280.75	30.25	1,359,469	1,359,469

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
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

5.0 Energy Detail

4.4 Fleet Mix

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	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
NaturalGas Unmitigated	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487

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					
Junior College (2Yr)	2462.33	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Total		0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487

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					
Junior College (2Yr)	2.46233	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Total		**0.0266**	**0.2414**	**0.2028**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**		**289.6857**	**289.6857**	**5.5500e-003**	**5.3100e-003**	291.4487

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Unmitigated	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

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					
Consumer Products	0.5350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Architectural Coating	0.0714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

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					
Consumer Products	0.5350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Architectural Coating	0.0714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

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 Vegetation

BCC 2128 Milvia

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.00	1000sqft	0.26	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual project site acerage

Construction Phase - Actual project phases/schedule

Off-road Equipment - Accept default equipment

Off-road Equipment - Accept default equipment.

Off-road Equipment - No heavy equipment for interior demo.

Off-road Equipment - No grading required.

Off-road Equipment - No paving needed

Off-road Equipment - No site prep required

Trips and VMT - Actual project worker and truck trips.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstructionPhase	NumDays	5.00	185.00
tblConstructionPhase	NumDays	100.00	319.00
tblConstructionPhase	NumDays	10.00	72.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	11/15/2017	12/15/2017
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2018
tblConstructionPhase	PhaseEndDate	12/9/2016	12/10/2016
tblConstructionPhase	PhaseEndDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2017
tblConstructionPhase	PhaseStartDate	3/2/2017	4/1/2017
tblConstructionPhase	PhaseStartDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseStartDate	12/13/2016	12/11/2016
tblConstructionPhase	PhaseStartDate	3/2/2018	3/1/2017
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LotAcreage	0.57	0.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	2.00	6.00

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					
2016	0.8035	7.6796	4.7819	7.3600e-003	0.6701	0.4456	1.1157	0.0949	0.4100	0.5049	0.0000	735.2322	735.2322	0.1672	0.0000	738.7434
2017	4.2201	9.2378	6.7124	0.0110	0.1964	0.5775	0.7739	0.0527	0.5451	0.5978	0.0000	1,054.8627	1,054.8627	0.1992	0.0000	1,059.0454
2018	0.6322	6.0905	4.2452	7.3500e-003	0.1399	0.3387	0.4785	0.0377	0.3116	0.3492	0.0000	707.4973	707.4973	0.1662	0.0000	710.9864
Total	5.6557	23.0079	15.7395	0.0257	1.0064	1.3617	2.3681	0.1852	1.2667	1.4519	0.0000	2,497.5922	2,497.5922	0.5325	0.0000	2,508.7752

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					
2016	0.8035	7.6796	4.7819	7.3600e-003	0.6701	0.4456	1.1157	0.0949	0.4100	0.5049	0.0000	735.2322	735.2322	0.1672	0.0000	738.7433
2017	4.2201	9.2378	6.7124	0.0110	0.1964	0.5775	0.7739	0.0527	0.5451	0.5978	0.0000	1,054.8627	1,054.8627	0.1992	0.0000	1,059.0454
2018	0.6322	6.0905	4.2452	7.3500e-003	0.1399	0.3387	0.4785	0.0377	0.3116	0.3492	0.0000	707.4973	707.4973	0.1662	0.0000	710.9864
Total	5.6557	23.0079	15.7395	0.0257	1.0064	1.3617	2.3681	0.1852	1.2667	1.4519	0.0000	2,497.5922	2,497.5922	0.5325	0.0000	2,508.7752

	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	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Energy	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Mobile	2.7427	7.9772	31.1371	0.0545	3.7233	0.1002	3.8236	0.9975	0.0922	1.0897		4,689.1912	4,689.1912	0.1817		4,693.0077
Total	3.3760	8.2186	31.3425	0.0559	3.7233	0.1186	3.8419	0.9975	0.1106	1.1080		4,978.8824	4,978.8824	0.1873	5.3100e-003	4,984.4622

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	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Energy	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Mobile	2.7427	7.9772	31.1371	0.0545	3.7233	0.1002	3.8236	0.9975	0.0922	1.0897		4,689.1912	4,689.1912	0.1817		4,693.0077
Total	3.3760	8.2186	31.3425	0.0559	3.7233	0.1186	3.8419	0.9975	0.1106	1.1080		4,978.8824	4,978.8824	0.1873	5.3100e-003	4,984.4622

	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	9/1/2016	12/10/2016	5	72	
2	Site Preparation	Site Preparation	12/11/2016	12/12/2016	5	1	
3	Grading	Grading	12/11/2016	12/12/2016	5	1	
4	Building Construction	Building Construction	12/12/2016	3/1/2018	5	319	
5	Paving	Paving	3/1/2017	3/1/2017	5	1	
6	Architectural Coating	Architectural Coating	4/1/2017	12/15/2017	5	185	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37

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	1	4.00	0.00	1.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	4.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473		592.6657	592.6657	0.0574		593.8702
Total	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473		592.6657	592.6657	0.0574		593.8702

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	3.4000e-004	4.2300e-003	4.1300e-003	1.0000e-005	2.4000e-004	5.0000e-005	3.0000e-004	7.0000e-005	5.0000e-005	1.2000e-004		1.0551	1.0551	1.0000e-005		1.0552
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	0.0164	0.0248	0.2282	4.3000e-004	0.0377	3.1000e-004	0.0380	0.0100	2.8000e-004	0.0103		36.1225	36.1225	2.0600e-003		36.1658
Total	0.0168	0.0290	0.2323	4.4000e-004	0.0380	3.6000e-004	0.0383	0.0101	3.3000e-004	0.0104		37.1776	37.1776	2.0700e-003		37.2210

3.2 Demolition - 2016

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	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473	0.0000	592.6657	592.6657	0.0574		593.8702
Total	0.6466	4.6220	3.7752	6.2600e-003		0.3473	0.3473		0.3473	0.3473	0.0000	592.6657	592.6657	0.0574		593.8702

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	3.4000e-004	4.2300e-003	4.1300e-003	1.0000e-005	2.4000e-004	5.0000e-005	3.0000e-004	7.0000e-005	5.0000e-005	1.2000e-004		1.0551	1.0551	1.0000e-005		1.0552
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	0.0164	0.0248	0.2282	4.3000e-004	0.0377	3.1000e-004	0.0380	0.0100	2.8000e-004	0.0103		36.1225	36.1225	2.0600e-003		36.1658
Total	0.0168	0.0290	0.2323	4.4000e-004	0.0380	3.6000e-004	0.0383	0.0101	3.3000e-004	0.0104		37.1776	37.1776	2.0700e-003		37.2210

3.3 Site Preparation - 2016

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.5303	0.0000	0.5303	0.0573	0.0000	0.0573		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.3 Site Preparation - 2016

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.5303	0.0000	0.5303	0.0573	0.0000	0.0573	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035		531.2003	531.2003	0.1602		534.5651
Total	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035		531.2003	531.2003	0.1602		534.5651

Unmitigated Construction Off-Site

Category	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
	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	0.0538	0.4095	0.7104	9.6000e-004	0.0267	6.1200e-003	0.0328	7.6300e-003	5.6300e-003	0.0133		95.6644	95.6644	7.9000e-004		95.6809
Worker	0.0493	0.0743	0.6846	1.2900e-003	0.1132	9.3000e-004	0.1141	0.0300	8.5000e-004	0.0309		108.3675	108.3675	6.1800e-003		108.4973
Total	0.1030	0.4839	1.3950	2.2500e-003	0.1399	7.0500e-003	0.1469	0.0376	6.4800e-003	0.0441		204.0319	204.0319	6.9700e-003		204.1783

3.5 Building Construction - 2016

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035	0.0000	531.2003	531.2003	0.1602		534.5651
Total	0.7004	7.1957	3.3869	5.1100e-003		0.4386	0.4386		0.4035	0.4035	0.0000	531.2003	531.2003	0.1602		534.5651

Mitigated Construction Off-Site

Category	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
	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	0.0538	0.4095	0.7104	9.6000e-004	0.0267	6.1200e-003	0.0328	7.6300e-003	5.6300e-003	0.0133		95.6644	95.6644	7.9000e-004		95.6809
Worker	0.0493	0.0743	0.6846	1.2900e-003	0.1132	9.3000e-004	0.1141	0.0300	8.5000e-004	0.0309		108.3675	108.3675	6.1800e-003		108.4973
Total	0.1030	0.4839	1.3950	2.2500e-003	0.1399	7.0500e-003	0.1469	0.0376	6.4800e-003	0.0441		204.0319	204.0319	6.9700e-003		204.1783

3.5 Building Construction - 2017

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657		523.0012	523.0012	0.1603		526.3663
Total	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657		523.0012	523.0012	0.1603		526.3663

Unmitigated Construction Off-Site

Category	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
	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	0.0504	0.3669	0.6830	9.6000e-004	0.0267	5.3000e-003	0.0320	7.6300e-003	4.8700e-003	0.0125		94.0558	94.0558	7.5000e-004		94.0715
Worker	0.0435	0.0666	0.6064	1.2900e-003	0.1132	8.9000e-004	0.1141	0.0300	8.2000e-004	0.0308		104.2385	104.2385	5.6400e-003		104.3570
Total	0.0939	0.4334	1.2893	2.2500e-003	0.1399	6.1900e-003	0.1460	0.0376	5.6900e-003	0.0433		198.2943	198.2943	6.3900e-003		198.4285

3.5 Building Construction - 2017

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	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657	0.0000	523.0012	523.0012	0.1603		526.3663
Total	0.6404	6.5861	3.2518	5.1100e-003		0.3975	0.3975		0.3657	0.3657	0.0000	523.0012	523.0012	0.1603		526.3663

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	0.0504	0.3669	0.6830	9.6000e-004	0.0267	5.3000e-003	0.0320	7.6300e-003	4.8700e-003	0.0125		94.0558	94.0558	7.5000e-004		94.0715
Worker	0.0435	0.0666	0.6064	1.2900e-003	0.1132	8.9000e-004	0.1141	0.0300	8.2000e-004	0.0308		104.2385	104.2385	5.6400e-003		104.3570
Total	0.0939	0.4334	1.2893	2.2500e-003	0.1399	6.1900e-003	0.1460	0.0376	5.6900e-003	0.0433		198.2943	198.2943	6.3900e-003		198.4285

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	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063		514.6968	514.6968	0.1602		518.0617
Total	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063		514.6968	514.6968	0.1602		518.0617

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	0.0472	0.3323	0.6560	9.5000e-004	0.0267	4.9100e-003	0.0316	7.6300e-003	4.5100e-003	0.0122		92.4344	92.4344	7.4000e-004		92.4498
Worker	0.0385	0.0599	0.5387	1.2900e-003	0.1132	8.5000e-004	0.1140	0.0300	7.9000e-004	0.0308		100.3661	100.3661	5.1800e-003		100.4749
Total	0.0857	0.3922	1.1948	2.2400e-003	0.1399	5.7600e-003	0.1456	0.0376	5.3000e-003	0.0430		192.8005	192.8005	5.9200e-003		192.9247

3.5 Building Construction - 2018

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	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063	0.0000	514.6968	514.6968	0.1602		518.0617
Total	0.5464	5.6983	3.0505	5.1100e-003		0.3329	0.3329		0.3063	0.3063	0.0000	514.6968	514.6968	0.1602		518.0617

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	0.0472	0.3323	0.6560	9.5000e-004	0.0267	4.9100e-003	0.0316	7.6300e-003	4.5100e-003	0.0122		92.4344	92.4344	7.4000e-004		92.4498
Worker	0.0385	0.0599	0.5387	1.2900e-003	0.1132	8.5000e-004	0.1140	0.0300	7.9000e-004	0.0308		100.3661	100.3661	5.1800e-003		100.4749
Total	0.0857	0.3922	1.1948	2.2400e-003	0.1399	5.7600e-003	0.1456	0.0376	5.3000e-003	0.0430		192.8005	192.8005	5.9200e-003		192.9247

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Archit. Coating	3.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	3.4641	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

Unmitigated Construction Off-Site

Category	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
	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	0.0218	0.0333	0.3032	6.5000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		52.1192	52.1192	2.8200e-003		52.1785
Total	0.0218	0.0333	0.3032	6.5000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		52.1192	52.1192	2.8200e-003		52.1785

3.7 Architectural Coating - 2017

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	3.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	3.4641	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

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	0.0218	0.0333	0.3032	6.5000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		52.1192	52.1192	2.8200e-003		52.1785
Total	0.0218	0.0333	0.3032	6.5000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.1000e-004	0.0154		52.1192	52.1192	2.8200e-003		52.1785

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	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
	lb/day										lb/day					
Mitigated	2.7427	7.9772	31.1371	0.0545	3.7233	0.1002	3.8236	0.9975	0.0922	1.0897		4,689.1912	4,689.1912	0.1817		4,693.0077
Unmitigated	2.7427	7.9772	31.1371	0.0545	3.7233	0.1002	3.8236	0.9975	0.0922	1.0897		4,689.1912	4,689.1912	0.1817		4,693.0077

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	687.25	280.75	30.25	1,359,469	1,359,469
Total	687.25	280.75	30.25	1,359,469	1,359,469

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

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	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
NaturalGas Unmitigated	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487

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					
Junior College (2Yr)	2462.33	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Total		0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487

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					
Junior College (2Yr)	2.46233	0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487
Total		0.0266	0.2414	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184		289.6857	289.6857	5.5500e-003	5.3100e-003	291.4487

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Unmitigated	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

6.2 Area by SubCategory

Unmitigated

SubCategory	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
	lb/day										lb/day					
Consumer Products	0.5350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Architectural Coating	0.0714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

Mitigated

SubCategory	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
	lb/day										lb/day					
Consumer Products	0.5350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003
Architectural Coating	0.0714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6067	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	2.0000e-005		5.7900e-003

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 Vegetation

BCC 2128 Milvia

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.00	1000sqft	0.26	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual project site acerage

Construction Phase - Actual project phases/schedule

Off-road Equipment - Accept default equipment

Off-road Equipment - Accept default equipment.

Off-road Equipment - No heavy equipment for interior demo.

Off-road Equipment - No grading required.

Off-road Equipment - No paving needed

Off-road Equipment - No site prep required

Trips and VMT - Actual project worker and truck trips.

Construction Off-road Equipment Mitigation - Tier 3 Mitigation Only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	185.00
tblConstructionPhase	NumDays	100.00	319.00
tblConstructionPhase	NumDays	10.00	72.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	11/15/2017	12/15/2017
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2018
tblConstructionPhase	PhaseEndDate	12/9/2016	12/10/2016
tblConstructionPhase	PhaseEndDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2017
tblConstructionPhase	PhaseStartDate	3/2/2017	4/1/2017
tblConstructionPhase	PhaseStartDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseStartDate	12/13/2016	12/11/2016
tblConstructionPhase	PhaseStartDate	3/2/2018	3/1/2017
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LotAcreage	0.57	0.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	2.00	6.00

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					
2016	0.0298	0.2249	0.1785	3.0000e-004	2.5900e-003	0.0159	0.0185	6.5000e-004	0.0156	0.0162	0.0000	25.5902	25.5902	3.0800e-003	0.0000	25.6548
2017	0.4167	1.1161	0.7697	1.2900e-003	0.0226	0.0686	0.0911	6.0700e-003	0.0644	0.0704	0.0000	113.2360	113.2360	0.0224	0.0000	113.7060
2018	0.0138	0.1338	0.0901	1.6000e-004	2.9700e-003	7.4500e-003	0.0104	8.0000e-004	6.8500e-003	7.6500e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.4602	1.4748	1.0383	1.7500e-003	0.0281	0.0919	0.1200	7.5200e-003	0.0868	0.0943	0.0000	152.9704	152.9704	0.0288	0.0000	153.5746

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					
2016	6.7200e-003	0.1271	0.1805	3.0000e-004	2.5900e-003	8.3300e-003	0.0109	6.5000e-004	8.3300e-003	8.9800e-003	0.0000	25.5901	25.5901	3.0800e-003	0.0000	25.6548
2017	0.3246	0.5254	0.7655	1.2900e-003	0.0226	0.0280	0.0506	6.0700e-003	0.0279	0.0340	0.0000	113.2359	113.2359	0.0224	0.0000	113.7059
2018	4.4900e-003	0.0663	0.0944	1.6000e-004	2.9700e-003	3.2300e-003	6.2000e-003	8.0000e-004	3.2200e-003	4.0300e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.3358	0.7188	1.0403	1.7500e-003	0.0281	0.0396	0.0677	7.5200e-003	0.0395	0.0470	0.0000	152.9702	152.9702	0.0288	0.0000	153.5745

	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	27.04	51.26	-0.20	0.00	0.00	56.93	43.58	0.00	54.51	50.14	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	tons/yr										MT/yr					
Area	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4186
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4581	2.6500e-003	759.5155

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	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4180
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4580	2.6500e-003	759.5148

	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	9/1/2016	12/10/2016	5	72	
2	Site Preparation	Site Preparation	12/11/2016	12/12/2016	5	1	
3	Grading	Grading	12/11/2016	12/12/2016	5	1	
4	Building Construction	Building Construction	12/12/2016	3/1/2018	5	319	
5	Paving	Paving	3/1/2017	3/1/2017	5	1	
6	Architectural Coating	Architectural Coating	4/1/2017	12/15/2017	5	185	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
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	1	4.00	0.00	1.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	12.00	4.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 2016

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	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950
Total	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950

3.2 Demolition - 2016

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	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

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	4.5100e-003	0.1029	0.1389	2.3000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950
Total	4.5100e-003	0.1029	0.1389	2.3000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950

3.2 Demolition - 2016

Mitigated Construction Off-Site

Category	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
	tons/yr										MT/yr					
Hauling	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

Mitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

Category	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
	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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	9.4000e-004	0.0197	0.0243	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	9.4000e-004	0.0197	0.0243	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

3.5 Building Construction - 2016

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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

3.5 Building Construction - 2017

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	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765
Total	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

Category	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
	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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0164	0.3421	0.4219	6.6000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764
Total	0.0164	0.3421	0.4219	6.6000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764

3.5 Building Construction - 2017

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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

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	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395
Total	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

Category	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
	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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	2.7700e-003	0.0579	0.0714	1.1000e-004		3.1100e-003	3.1100e-003		3.1100e-003	3.1100e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395
Total	2.7700e-003	0.0579	0.0714	1.1000e-004		3.1100e-003	3.1100e-003		3.1100e-003	3.1100e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395

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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2017

Unmitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2017

Mitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Archit. Coating	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0307	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700
Total	0.3204	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700

3.7 Architectural Coating - 2017

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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

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	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-003	0.1255	0.1695	2.7000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699
Total	0.2952	0.1255	0.1695	2.7000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699

3.7 Architectural Coating - 2017

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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

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	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Unmitigated	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	687.25	280.75	30.25	1,359,469	1,359,469
Total	687.25	280.75	30.25	1,359,469	1,359,469

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

5.0 Energy Detail

4.4 Fleet Mix

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	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
NaturalGas Mitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
NaturalGas Unmitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Unmitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

6.2 Area by SubCategory

Unmitigated

SubCategory	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
	tons/yr										MT/yr					
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

Mitigated

SubCategory	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
	tons/yr										MT/yr					
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.2721	0.0401	9.8000e-004	5.4180
Unmitigated	4.2721	0.0401	9.8000e-004	5.4186

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4186
Total		4.2721	0.0401	9.8000e-004	5.4186

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4180
Total		4.2721	0.0401	9.8000e-004	5.4180

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5972	0.3899	0.0000	14.7848
Unmitigated	6.5972	0.3899	0.0000	14.7848

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

9.0 Operational Offroad

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

10.0 Vegetation

BCC 2128 Milvia

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.00	1000sqft	0.26	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual project site acerage

Construction Phase - Actual project phases/schedule

Off-road Equipment - Accept default equipment

Off-road Equipment - Accept default equipment.

Off-road Equipment - No heavy equipment for interior demo.

Off-road Equipment - No grading required.

Off-road Equipment - No paving needed

Off-road Equipment - No site prep required

Trips and VMT - Actual project worker and truck trips.

Construction Off-road Equipment Mitigation - Tier 3 Mitigation and Level 2 Particulate Filter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	185.00
tblConstructionPhase	NumDays	100.00	319.00
tblConstructionPhase	NumDays	10.00	72.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	11/15/2017	12/15/2017
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2018
tblConstructionPhase	PhaseEndDate	12/9/2016	12/10/2016
tblConstructionPhase	PhaseEndDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseEndDate	3/2/2018	3/1/2017
tblConstructionPhase	PhaseStartDate	3/2/2017	4/1/2017
tblConstructionPhase	PhaseStartDate	12/13/2016	12/12/2016
tblConstructionPhase	PhaseStartDate	12/13/2016	12/11/2016
tblConstructionPhase	PhaseStartDate	3/2/2018	3/1/2017
tblGrading	AcresOfGrading	0.00	0.50

tblLandUse	LotAcreage	0.57	0.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	2.00	6.00

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					
2016	0.0298	0.2249	0.1785	3.0000e-004	2.5900e-003	0.0159	0.0185	6.5000e-004	0.0156	0.0162	0.0000	25.5902	25.5902	3.0800e-003	0.0000	25.6548
2017	0.4167	1.1161	0.7697	1.2900e-003	0.0226	0.0686	0.0911	6.0700e-003	0.0644	0.0704	0.0000	113.2360	113.2360	0.0224	0.0000	113.7060
2018	0.0138	0.1338	0.0901	1.6000e-004	2.9700e-003	7.4500e-003	0.0104	8.0000e-004	6.8500e-003	7.6500e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.4602	1.4748	1.0383	1.7500e-003	0.0281	0.0919	0.1200	7.5200e-003	0.0868	0.0943	0.0000	152.9704	152.9704	0.0288	0.0000	153.5746

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					
2016	6.7200e-003	0.1271	0.1805	3.0000e-004	2.5900e-003	4.2000e-003	6.7900e-003	6.5000e-004	4.1900e-003	4.8500e-003	0.0000	25.5901	25.5901	3.0800e-003	0.0000	25.6548
2017	0.3246	0.5254	0.7655	1.2900e-003	0.0226	0.0144	0.0370	6.0700e-003	0.0144	0.0204	0.0000	113.2359	113.2359	0.0224	0.0000	113.7059
2018	4.4900e-003	0.0663	0.0944	1.6000e-004	2.9700e-003	1.6800e-003	4.6500e-003	8.0000e-004	1.6700e-003	2.4700e-003	0.0000	14.1442	14.1442	3.3200e-003	0.0000	14.2138
Total	0.3358	0.7188	1.0403	1.7500e-003	0.0281	0.0203	0.0484	7.5200e-003	0.0202	0.0278	0.0000	152.9702	152.9702	0.0288	0.0000	153.5745

	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	27.04	51.26	-0.20	0.00	0.00	77.90	59.64	0.00	76.71	70.58	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	tons/yr										MT/yr					
Area	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4186
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4581	2.6500e-003	759.5155

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	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Energy	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	132.1069	132.1069	4.7200e-003	1.6700e-003	132.7227
Mobile	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Waste						0.0000	0.0000		0.0000	0.0000	6.5972	0.0000	6.5972	0.3899	0.0000	14.7848
Water						0.0000	0.0000		0.0000	0.0000	0.3890	3.8831	4.2721	0.0401	9.8000e-004	5.4180
Total	0.4756	1.1364	3.9839	8.0100e-003	0.5085	0.0175	0.5260	0.1367	0.0164	0.1530	6.9862	742.0895	749.0757	0.4580	2.6500e-003	759.5148

	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	9/1/2016	12/10/2016	5	72	
2	Site Preparation	Site Preparation	12/11/2016	12/12/2016	5	1	
3	Grading	Grading	12/11/2016	12/12/2016	5	1	
4	Building Construction	Building Construction	12/12/2016	3/1/2018	5	319	
5	Paving	Paving	3/1/2017	3/1/2017	5	1	
6	Architectural Coating	Architectural Coating	4/1/2017	12/15/2017	5	185	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
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	1	4.00	0.00	1.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	12.00	4.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Clean Paved Roads

3.2 Demolition - 2016

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	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950
Total	0.0233	0.1664	0.1359	2.3000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	19.3557	19.3557	1.8700e-003	0.0000	19.3950

3.2 Demolition - 2016

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	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

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	4.5100e-003	0.1029	0.1389	2.3000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950
Total	4.5100e-003	0.1029	0.1389	2.3000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	19.3556	19.3556	1.8700e-003	0.0000	19.3950

3.2 Demolition - 2016

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	1.0000e-005	1.5000e-004	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0345	0.0345	0.0000	0.0000	0.0345
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	5.5000e-004	8.1000e-004	7.8700e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1889	1.1889	7.0000e-005	0.0000	1.1903
Total	5.6000e-004	9.6000e-004	7.9900e-003	2.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2234	1.2234	7.0000e-005	0.0000	1.2248

3.3 Site Preparation - 2016

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction 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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2016

Mitigated Construction Off-Site

Category	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
	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	5.2500e-003	0.0540	0.0254	4.0000e-005		3.2900e-003	3.2900e-003		3.0300e-003	3.0300e-003	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

3.5 Building Construction - 2016

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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

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	9.4000e-004	0.0197	0.0243	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371
Total	9.4000e-004	0.0197	0.0243	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	3.6142	3.6142	1.0900e-003	0.0000	3.6371

3.5 Building Construction - 2016

Mitigated Construction Off-Site

Category	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
	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	3.6000e-004	3.0300e-003	4.3000e-003	1.0000e-005	1.9000e-004	5.0000e-005	2.4000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.6538	0.6538	1.0000e-005	0.0000	0.6539
Worker	3.4000e-004	5.1000e-004	4.9200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7431	0.7431	4.0000e-005	0.0000	0.7440
Total	7.0000e-004	3.5400e-003	9.2200e-003	2.0000e-005	1.0100e-003	6.0000e-005	1.0600e-003	2.8000e-004	5.0000e-005	3.2000e-004	0.0000	1.3969	1.3969	5.0000e-005	0.0000	1.3979

3.5 Building Construction - 2017

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765
Total	0.0833	0.8562	0.4227	6.6000e-004		0.0517	0.0517		0.0475	0.0475	0.0000	61.6796	61.6796	0.0189	0.0000	62.0765

3.5 Building Construction - 2017

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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

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	0.0164	0.3421	0.4219	6.6000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764
Total	0.0164	0.3421	0.4219	6.6000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	61.6796	61.6796	0.0189	0.0000	62.0764

3.5 Building Construction - 2017

Mitigated Construction Off-Site

Category	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
	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	5.8500e-003	0.0471	0.0715	1.2000e-004	3.3600e-003	6.8000e-004	4.0500e-003	9.7000e-004	6.3000e-004	1.6000e-003	0.0000	11.1417	11.1417	9.0000e-005	0.0000	11.1436
Worker	5.2800e-003	7.9000e-003	0.0757	1.7000e-004	0.0142	1.2000e-004	0.0143	3.7700e-003	1.1000e-004	3.8700e-003	0.0000	12.3893	12.3893	6.7000e-004	0.0000	12.4033
Total	0.0111	0.0550	0.1472	2.9000e-004	0.0175	8.0000e-004	0.0183	4.7400e-003	7.4000e-004	5.4700e-003	0.0000	23.5311	23.5311	7.6000e-004	0.0000	23.5469

3.5 Building Construction - 2018

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395
Total	0.0120	0.1254	0.0671	1.1000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	10.2724	10.2724	3.2000e-003	0.0000	10.3395

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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

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	2.7700e-003	0.0579	0.0714	1.1000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395
Total	2.7700e-003	0.0579	0.0714	1.1000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	10.2723	10.2723	3.2000e-003	0.0000	10.3395

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	9.3000e-004	7.2200e-003	0.0116	2.0000e-005	5.7000e-004	1.1000e-004	6.8000e-004	1.6000e-004	1.0000e-004	2.6000e-004	0.0000	1.8530	1.8530	1.0000e-005	0.0000	1.8533
Worker	7.9000e-004	1.2000e-003	0.0114	3.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0188	2.0188	1.0000e-004	0.0000	2.0210
Total	1.7200e-003	8.4200e-003	0.0230	5.0000e-005	2.9700e-003	1.3000e-004	3.0900e-003	8.0000e-004	1.2000e-004	9.1000e-004	0.0000	3.8718	3.8718	1.1000e-004	0.0000	3.8743

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2017

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	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0307	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700
Total	0.3204	0.2021	0.1728	2.7000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6700

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

Category	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
	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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Archit. Coating	0.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-003	0.1255	0.1695	2.7000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699
Total	0.2952	0.1255	0.1695	2.7000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	23.6176	23.6176	2.4900e-003	0.0000	23.6699

3.7 Architectural Coating - 2017

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	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127
Total	1.8800e-003	2.8100e-003	0.0270	6.0000e-005	5.0400e-003	4.0000e-005	5.0800e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.4077	4.4077	2.4000e-004	0.0000	4.4127

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	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890
Unmitigated	0.3600	1.0923	3.9466	7.7500e-003	0.5085	0.0142	0.5226	0.1367	0.0130	0.1497	0.0000	606.0991	606.0991	0.0233	0.0000	606.5890

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	687.25	280.75	30.25	1,359,469	1,359,469
Total	687.25	280.75	30.25	1,359,469	1,359,469

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

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	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.1461	84.1461	3.8000e-003	7.9000e-004	84.4701
NaturalGas Mitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
NaturalGas Unmitigated	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

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					
Junior College (2Yr)	898750	4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526
Total		4.8500e-003	0.0441	0.0370	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	47.9607	47.9607	9.2000e-004	8.8000e-004	48.2526

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	289250	84.1461	3.8000e-003	7.9000e-004	84.4701
Total		84.1461	3.8000e-003	7.9000e-004	84.4701

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Unmitigated	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

6.2 Area by SubCategory

Unmitigated

SubCategory	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
	tons/yr										MT/yr					
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

Mitigated

SubCategory	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
	tons/yr										MT/yr					
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1107	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.2721	0.0401	9.8000e-004	5.4180
Unmitigated	4.2721	0.0401	9.8000e-004	5.4186

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4186
Total		**4.2721**	**0.0401**	**9.8000e-004**	**5.4186**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.22623 / 1.91794	4.2721	0.0401	9.8000e-004	5.4180
Total		4.2721	0.0401	9.8000e-004	5.4180

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5972	0.3899	0.0000	14.7848
Unmitigated	6.5972	0.3899	0.0000	14.7848

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	32.5	6.5972	0.3899	0.0000	14.7848
Total		6.5972	0.3899	0.0000	14.7848

9.0 Operational Offroad

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

10.0 Vegetation

Construction -

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2016	0.03	0.22	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	0.0	25.6	25.6	0.0	0.0	25.7
2017	0.42	1.12	0.77	0.00	0.02	0.07	0.09	0.01	0.06	0.07	0.0	113.2	113.2	0.0	0.0	113.7
2018	0.01	0.13	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.0	14.1	14.1	0.0	0.0	14.2
Total	0.46	1.47	1.04	0.00	0.03	0.09	0.12	0.01	0.09	0.09	0.0	153.0	153.0	0.0	0.0	153.6

Operational - Annual

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.11	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Energy	0.00	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.0	132.1	132.1	0.0	0.0	132.7
Mobile	0.36	1.09	3.95	0.01	0.51	0.01	0.52	0.14	0.01	0.15	0.0	606.1	606.1	0.0	0.0	606.6
Waste						0.00	0.00		0.00	0.00	6.6	0.0	6.6	0.4	0.0	14.8
Water						0.00	0.00		0.00	0.00	0.4	3.9	4.3	0.0	0.0	5.4
Total	0.48	1.14	3.98	0.01	0.51	0.02	0.53	0.14	0.02	0.15	7.0	742.1	749.1	0.5	0.0	759.5

Construction (Maximum Daily Emission) - Summer

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2016	0.79	7.65	4.51	0.01	0.67	0.45	1.12	0.09	0.41	0.50	0.0	745.3	745.3	0.2	0.0	748.8
2017	4.21	9.20	6.46	0.01	0.20	0.58	0.77	0.05	0.55	0.60	0.0	1,069.0	1,069.0	0.2	0.0	1,073.2
2018	0.62	6.06	4.00	0.01	0.14	0.34	0.48	0.04	0.31	0.35	0.0	716.8	716.8	0.2	0.0	720.3
Total	5.63	22.91	14.97	0.03	1.01	1.36	2.37	0.19	1.27	1.45	0.0	2,531.1	2,531.1	0.5	0.0	2,542.3

Operational - Summer

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.61	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.0	0.0	0.0		0.0
Energy	0.03	0.24	0.20	0.00		0.02	0.02		0.02	0.02		289.7	289.7	0.0	0.0	291.4
Mobile	2.59	7.28	26.04	0.06	3.72	0.10	3.82	1.00	0.09	1.09		4,964.3	4,964.3	0.2		4,968.1
Total	3.22	7.52	26.25	0.06	3.72	0.12	3.84	1.00	0.11	1.11		5,254.0	5,254.0	0.2	0.0	5,259.6

Construction (Maximum Daily Emission) - Winter

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2016	0.80	7.68	4.78	0.01	0.67	0.45	1.12	0.09	0.41	0.50	0.0	735.2	735.2	0.2	0.0	738.7
2017	4.22	9.24	6.71	0.01	0.20	0.58	0.77	0.05	0.55	0.60	0.0	1054.9	1054.9	0.2	0.0	1059.0
2018	0.63	6.09	4.25	0.01	0.14	0.34	0.48	0.04	0.31	0.35	0.0	707.5	707.5	0.2	0.0	711.0
Total	5.66	23.01	15.74	0.03	1.01	1.36	2.37	0.19	1.27	1.45	0.0	2497.6	2497.6	0.5	0.0	2508.8

Operational - Winter

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.61	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.0	0.0	0.0		0.0
Energy	0.03	0.24	0.20	0.00		0.02	0.02		0.02	0.02		289.7	289.7	0.0	0.0	291.4
Mobile	2.74	7.98	31.14	0.05	3.72	0.10	3.82	1.00	0.09	1.09		4689.2	4689.2	0.2		4693.0
Total	3.38	8.22	31.34	0.06	3.72	0.12	3.84	1.00	0.11	1.11		4978.9	4978.9	0.2	0.0	4984.5

Construction (Maximum Daily Emission) - Average Day

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.80	7.66	4.65	0.01	0.67	0.45	1.12	0.09	0.41	0.50	0.0	740.2	740.2	0.2	0.0	743.8
2016	4.22	9.22	6.59	0.01	0.20	0.58	0.77	0.05	0.55	0.60	0.0	1061.9	1061.9	0.2	0.0	1066.1
2017	0.63	6.08	4.12	0.01	0.14	0.34	0.48	0.04	0.31	0.35	0.0	712.2	712.2	0.2	0.0	715.7
Total	5.64	22.96	15.35	0.03	1.01	1.36	2.37	0.19	1.27	1.45	0.0	2514.4	2514.4	0.5	0.0	2525.6

Operational - Average Day

	ROG	NOx	CO	SO2	Fugitive PM1	Exhaust PM1	PM10 Total	Fugitive PM2	Exhaust PM2	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Energy	0.03	0.24	0.20	0.00	0.00	0.02	0.02	0.00	0.02	0.02	0.0	289.7	289.7	0.0	0.0	291.4
Mobile	2.66	7.63	28.59	0.06	3.72	0.10	3.82	1.00	0.09	1.09	0.0	4826.8	4826.8	0.2	0.0	4830.6
Total	3.30	7.87	28.80	0.06	3.72	0.12	3.84	1.00	0.11	1.11	0.0	5116.5	5116.5	0.2	0.0	5122.0

PCCD/BCC 2118 Milvia Building HEALTH RISK MODEL

	Area (acres)	Area (sq ft)	Area (sq m)	Long Side (feet)	Short Side (feet)	Long Side (meters)	Short Side (meters)
CCF Model Area							
Building Footprint (0.26 acres)	0.26	11,236	1,044	106	106	32.3	32.3
Total Model Area	**0.26**	**11,236**	**1,044**				

OUSD CCF SCREEN3 Model
California Average
Construction Fleet

Contributing Model Area	Total DPM Emissions (grams)	Total Days	Daily DPM Emissions (grams)	Hours/ Day	Seconds/ Day	Average Daily Emission Rate (g/sec)	Average Daily Emission Rate/Area (g/sec*m2)
CCF Building Footprint	83,370	548	152.14	24	86,400	1.76E-03	1.69E-06

Receptor Distance (feet)	Chi/Q SCREEN3	DPM Conc Avg Hour ug/m3	DPM Annual Conc ug/m3	CHI
200	4.709E+06	7.9433	0.7943	0.1589

	Dose Factors						
Affected Receptor	Air Conc (ug/m3)	DBR (L /kg day)	EF (days/yr)	ED (years)	CF	AT (days)	Dose mg/kg day
Closest Residence 29th Street	0.7943	302	350	0.25	1.00E+00	25550	8.22E-01

Risk Factors		
Cancer Potency Factor (mg/kg day)^-1	Age Sens. Fac.	Cancer Risk
1.10	1.7	1.54

1.54 per million

OUSD CCF HEALTH RISK MODEL

	Area (acres)	Area (sq ft)	Area (sq m)	Long Side (feet)	Short Side (feet)	Long Side (meters)	Short Side (meters)
CCF Model Area							
CCF Building Footprint	0.26	11,236	1,044	106	106	32.3	32.3
Total Model Area	**0.26**	**11,236**	**1,044**				

Hayward Library SCREEN3 Model
Construction Fleet with
EPA Tier 3 Engines & Level 2 Filters

Contributing Model Area	Total DPM Emissions (grams)	Total Days	Daily DPM Emissions (grams)	Hours/ Day	Seconds/ Day	Average Daily Emission Rate (g/sec)	Average Daily Emission Rate/Area (g/sec*m2)
CCF Building Footprint	18,416	548	33.61	24	86,400	3.89E-04	3.73E-07

Receptor Distance (feet)	Chi/Q SCREEN3	DPM Conc Avg Hour ug/m3	DPM Annual Conc ug/m3	CHI
200	4.709E+06	1.7546	0.1755	0.0351

	Dose Factors						
Affected Receptor	Air Conc (ug/m3)	DBR (L /kg day)	EF (days/yr)	ED (years)	CF	AT (days)	Dose mg/kg day
Closest Residence 29th Street	0.1755	302	350	0.25	1.00E+00	25550	1.81E-01

Risk Factors		
Cancer Potency Factor (mg/kg day)^-1	Age Sens. Fac.	Cancer Risk
1.10	1.7	0.34

0.34 per million

Cancer Risks at Project Site from Surface Streets with >10,000 vehicles/day within the 1000-foot Zone of Influence

Roadway	Screening Table	Distance (feet)	AADT in Table[1]	Cancer Risk (1 x10^6)	AADT in Table[1]	Cancer Risk (1 x10^6)	Actual AADT[2]	Cancer Risk Adjusted for Actual AADT[3] (1 x10^6)
Shattuck Avenue	North-South Directional Roadway	700	30,000	0.4	40,000	0.6	34,000	0.48
		1000		0.26		0.37		0.30
MLK Jr. Way	North-South Directional Roadway	500	20,000	0.46	30,000	0.63	24,500	0.54
		700		0.32		0.4		0.36

Impacts on Project[4]		
Roadway	Distance (feet)	Cancer Risk (1 x10^6)
Shattuck Avenue MLK Jr. Way	750	0.45
	550	0.49

PM2.5 Concentrations at Project Site from Surface Streets with >10,000 vehicles/day within the 1000-foot Zone of Influence

Roadway	Screening Table	Distance (feet)	AADT in Table[1]	PM25 Concentration	AADT in Table[1]	PM25 Concentration	Actual AADT[2]	PM25 Adjusted for Actual AADT
Shattuck Avenue	North-South Directional Roadway	700	30,000	0.015	40,000	0.019	34,000	0.017
		1000		0.010		0.014		0.012
MLK Jr. Way	North-South Directional Roadway	500	20,000	0.016	30,000	0.021	24,500	0.018
		700		0.010		0.015		0.012

Impacts on Project[4]		
Roadway	Distance (feet)	PM25 Concentration
Shattuck Avenue MLK Jr. Way	750	0.016
	550	0.017

Cancer Risks at Project Site from Surface Streets with >10,000 vehicles/day within the 1000-foot Zone of Influence

Roadway	Screening Table	Distance (feet)	AADT in Table[1]	Cancer Risk (1 x10^6)	AADT in Table[1]	Cancer Risk (1 x10^6)	Actual AADT[2]	Cancer Risk Adjusted for Actual AADT[3] (1 x10^6)
University Avenue	East-West Directional Roadway	500	30,000	0.84	40,000	1.15	35,900	1.02
		700		0.63		0.89		0.78

Impacts on Project[4]		
Roadway	Distance (feet)	Cancer Risk (1 x10^6)
University Avenue	500	1.02
		#DIV/0!

PM2.5 Concentrations at Project Site from Surface Streets with >10,000 vehicles/day within the 1000-foot Zone of Influence

Roadway	Screening Table	Distance (feet)	AADT in Table[1]	PM25 Concentration	AADT in Table[1]	PM25 Concentration	Actual AADT[2]	PM25 Adjusted for Actual AADT
University Avenue	East-West Directional Roadway	500	30,000	0.030	40,000	0.043	35,900	0.038
		700		0.020		0.033		0.028

Impacts on Project[4]		
Roadway	Distance (feet)	PM25 Concentration
University Avenue	500	0.038
		#DIV/0!

```
***  SCREEN3 MODEL RUN  ***
*** VERSION DATED 96043 ***

C:\Lakes\Screen View\PCCD_BCC 2118 Milvia Construction.scr

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE                =          AREA
   EMISSION RATE (G/(S-M**2)) =       1.00000
   SOURCE HEIGHT (M)          =        3.0480
   LENGTH OF LARGER SIDE (M)  =       32.0040
   LENGTH OF SMALLER SIDE (M) =       32.0040
   RECEPTOR HEIGHT (M)        =        1.6764
   URBAN/RURAL OPTION         =         URBAN
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

   MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION


BUOY. FLUX =     0.000 M**4/S**3;  MOM. FLUX =     0.000 M**4/S**2.

*** FULL METEOROLOGY ***

**********************************
*** SCREEN DISCRETE DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF     0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

  DIST     CONC                    U10M   USTK  MIX HT   PLUME  MAX DIR
   (M)  (UG/M**3)    STAB  (M/S)  (M/S)   (M)    HT (M)  (DEG)
-------  ----------  ----  -----  -----  ------  ------  -------
    61.  0.4709E+07     5    1.0    1.0 10000.0    3.05     45.

         ****************************************
         *** SUMMARY OF SCREEN MODEL RESULTS ***
         ****************************************

  CALCULATION          MAX CONC     DIST TO    TERRAIN
   PROCEDURE          (UG/M**3)    MAX (M)     HT (M)
--------------       ----------   -------     -------
SIMPLE TERRAIN       0.4709E+07        61.         0.

**************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
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APPENDIX B
NOISE DATA

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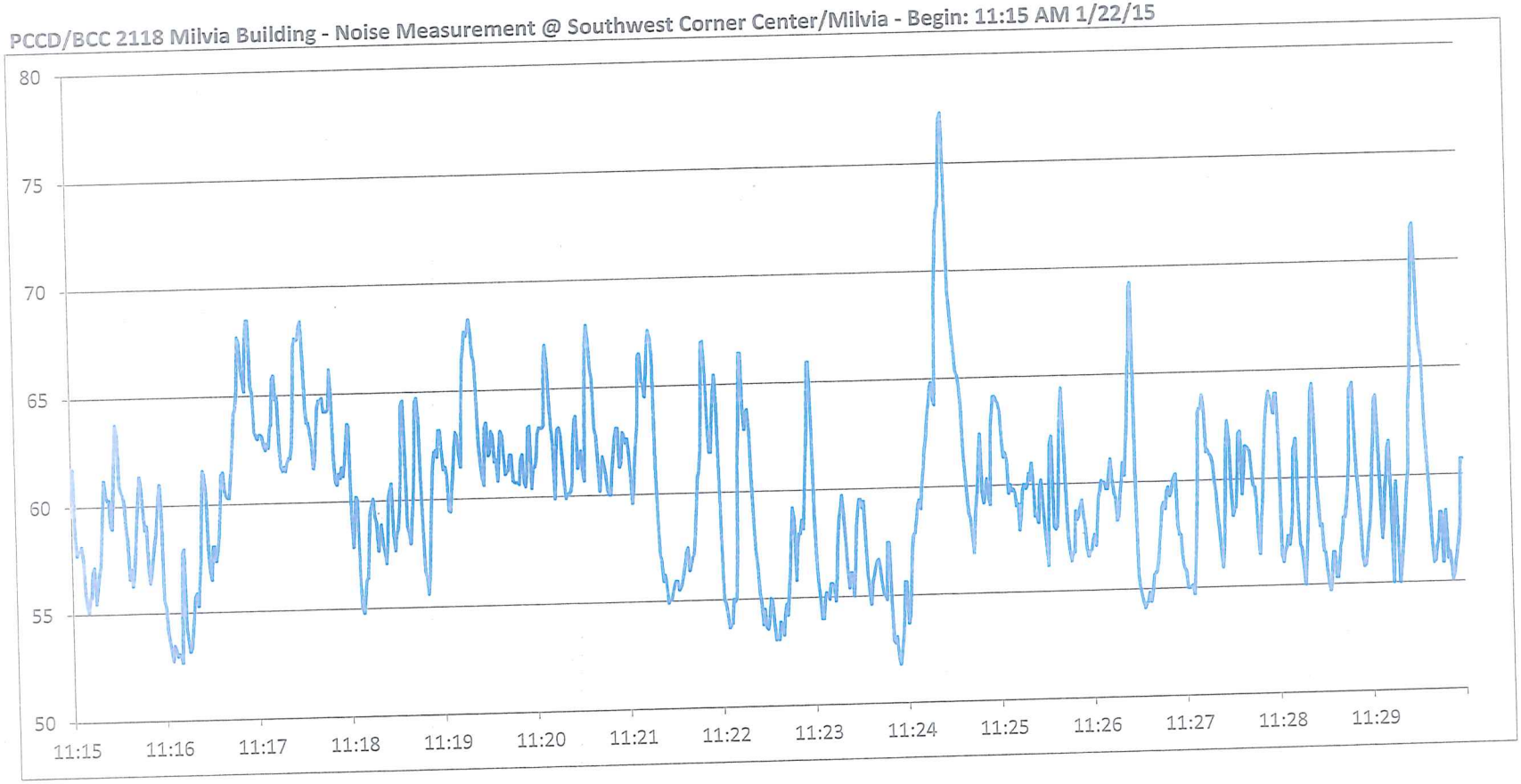
PCCD/BCC 2118 Milvia Building - Noise Measurement @ Southwest Corner Center/Milvia - Begin: 11:15 AM 1/22/15



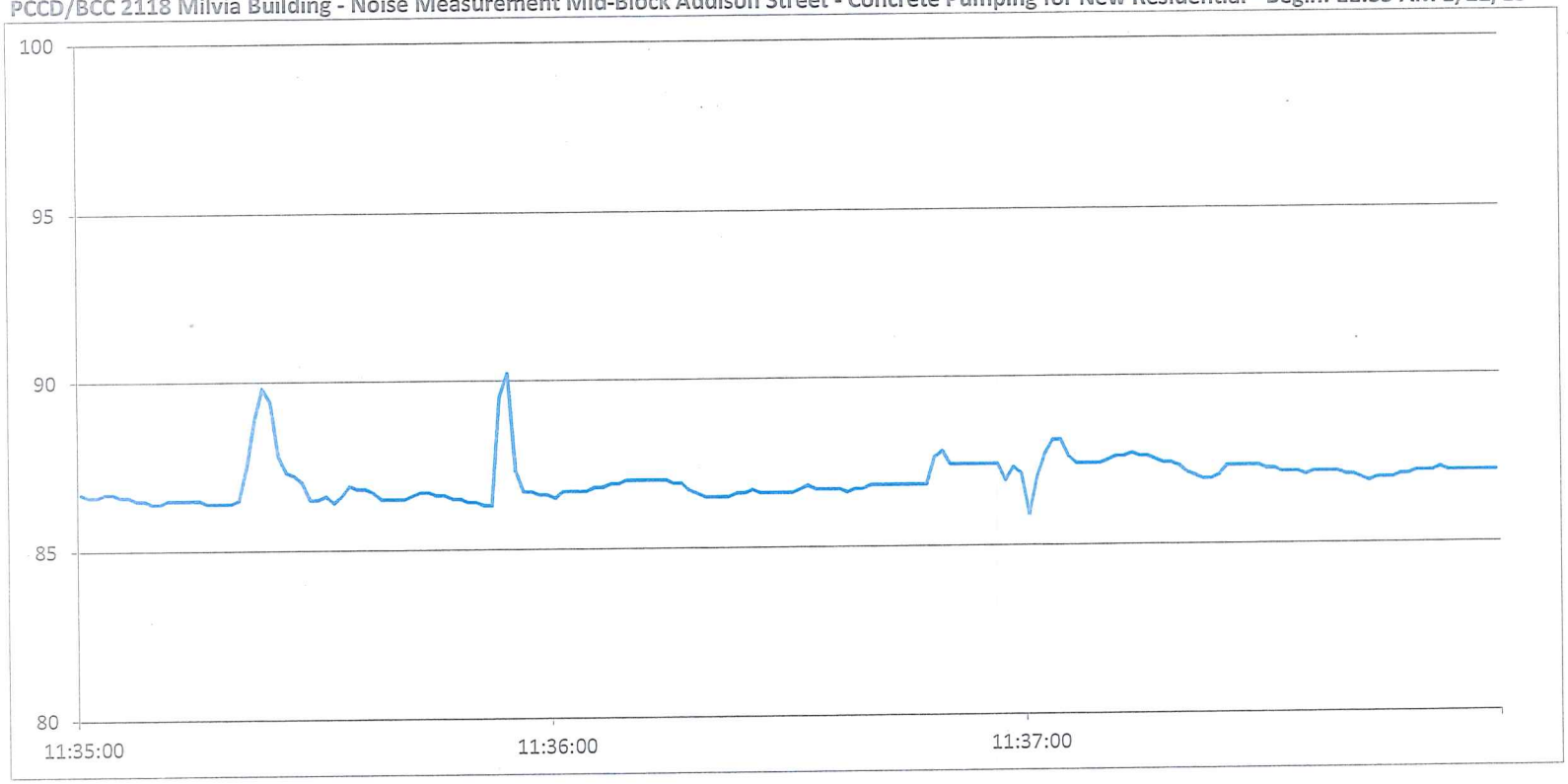
600 # of Data Points

62.7 Leq Total

51.8 Lmin

77.3 Lmax

PCCD/BCC 2118 Milvia Building - Noise Measurement Mid-Block Addison Street - Concrete Pumping for New Residential - Begin: 11:35 AM 1/22/15



180 # of Data Points 87.0 Leq Total 85.9 Lmin 90.2 Lmax

2118 Milvia Construction Noise RCNM Output
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/23/2015
Case Description:

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
2002 Addison Street	Residential	63.0	63.0	53.0

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Equipment Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	125.0	0.0
Dump Truck	No	40		76.5	125.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Crane	72.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	68.5	64.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	72.6	67.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A