

NOTICE OF EXEMPTION

To: ☒ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Chaffey Community College District
5885 Haven Avenue
Rancho Cucamonga, CA 91737

☐ Clerk of the Board
County of San Bernardino
385 North Arrowhead, 2nd Floor
San Bernardino, CA 92410

Chaffey Community College Rancho Cucamonga Campus Modernization
Project Title

5885 Haven Avenue
Project Location - Specific

Rancho Cucamonga
Project Location – City

San Bernardino
Project Location – County

The District proposes to construct a brand new 75,300 square foot Library/Learning Commons building and a 5,500 square foot addition to the Michael Anderson Campus Center (MACC) that would house a new kitchen and food serving space at the Rancho Cucamonga Campus.
Description of Nature, Purpose, and Beneficiaries of Project

Chaffey Community College District
Name of Public Agency Approving Project

Melanie Siddiqi, Associate Superintendent of Administrative Services
Name of Person or Agency Carrying Out Project

Exempt Status: (check one below)

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Class 1, CCR §15301, Existing Facilities; Class 3, CCR §15303, New Construction or Conversion of Small Structures
- ☐ Statutory Exemptions. State code number: _____

The project involves the replacement of the existing library building with a new Library/Learning Commons building and the construction of a kitchen and food serving space to the existing MMAC. The proposed improvements will include the minor alterations to the existing structures, with negligible expansion of the existing uses. Existing uses of the facility as a community college would stay the same under the proposed project; therefore, the project is exempt from CEQA under Section 15301 and 15303. The proposed project was also reviewed for possible exceptions under Section 15300.2 and found that the exceptions do not apply. See Attachment to Notice of Exemption for further explanation of the evaluation, which is available for review at the CCCD's Facilities Department.

Reasons why project is exempt

Melanie Siddiqi,
Associate Superintendent of Administrative Services (909) 652-6780

Contact Person:

Area Code/Telephone/Extension:

If filed by applicant:

1. Attach certified document of exemption findings
2. Has a Notice of Exemption been filed by the public agency approving the project ☒ Yes ☐ No

Date Received for Filing: _____

Signature: _____

Title: Associate Superintendent of Administrative Services

Attachment to Notice of Exemption
CHAFFEY COMMUNITY COLLEGE RANCHO CUCAMONGA CAMPUS MODERNIZATION
Chaffey Community College District
SUPPLEMENTAL INFORMATION

The Chaffey Community College District (District) proposes to construct a brand new 75,300 square foot Library/Learning Commons building, as well as construct a 5,500 square foot addition to the Michael Anderson Campus Center (MACC) that would house a new kitchen and food serving space at its main campus in Rancho Cucamonga (Rancho Cucamonga Campus). This supplemental information provides justification for the Categorical Exemption pursuant to the California Environmental Quality Act (CEQA) Guidelines under California Code of Regulations, Title 14 § 15301.

1. EXISTING CONDITIONS

PROJECT LOCATION

The project site is at the Chaffey College Rancho Cucamonga Campus at 5885 Haven Avenue, in the City of Rancho Cucamonga, in San Bernardino County. Regional access to the campus is from State Route 210 (Foothill Freeway), approximately 0.49 mile to the south and Interstate 15, approximately 5 miles to the east of the campus. The Rancho Cucamonga Campus is bordered by Wilson Avenue to the north, Haven Avenue to the west, Banyan Street to the south, and residential uses to the east. (see Figure 1, *Regional Location* and Figure 2, *Local Vicinity*).

EXISTING CONDITIONS

The Rancho Cucamonga Campus is one of the three Chaffey College locations. Chaffey College is a two-year public community college with a 2015/2016 enrollment of 28,280 students with 23,324 students at the Rancho Cucamonga Campus (Chaffey College 2016). The campus is currently developed with instructional buildings, offices, administration buildings, library, campus center, child development center, gymnasium, science labs, theater, parking lots, a football field, baseball and softball fields, soccer field, pool, tennis courts, pedestrian walkways, and landscaped areas. Main vehicular access to the Rancho Cucamonga Campus and parking lots is provided via Haven Avenue and Wilson Avenue (see Figure 3, *Aerial Photograph*).

GENERAL PLAN AND ZONING

The project site is zoned Low Medium Residential and has a general plan land use designation of Schools (Rancho Cucamonga 2020a, 2020b). Under the City of Rancho Cucamonga Municipal Code, public colleges/universities are allowed under Low Medium Residential zoning upon issuance of a conditional use permit (Rancho Cucamonga 2020c).

SURROUNDING LAND USES

The Rancho Cucamonga Campus is primarily surrounded by residential uses. Single-family homes border the campus directly to the east. To the north across Wilson Avenue, west across Haven Avenue, and south across Banyan are single-family homes and Banyan School to the south.

2. PROJECT DESCRIPTION

The District proposes to construct a brand new 75,300 square foot Library/Learning Commons building and a 5,500 square foot addition to the Michael Anderson Campus Center (MACC) that would house a new kitchen and food serving space at the Rancho Cucamonga Campus. Many of the existing buildings on campus were constructed prior to its opening in 1960 which result in a lack sufficient space and a limitation on the use of innovation teaching methods and technologies. Built in 1959, the existing library will be vacated and a new Library/Learning Commons building will

be constructed to provide more space with electronic media support and improve accessibility and energy efficiency. The 5,500 square foot addition to the MACC would include a 2,750 square foot serving area and 2,750 square feet kitchen which include shared breakrooms and storage/processing space. Improvements would occur on campus, and no off-site improvements would be included as part of the project. The project does not involve an increase in student capacity and is intended to modernize the campus to serve the existing needs.

CONSTRUCTION

Construction of the proposed improvements will be implemented in Fall of 2021 and is anticipated to last approximately 18 months. School administration and the construction contractor will work together to coordinate and stay informed about construction activities, location, and schedule. All construction equipment and workers would be located within the boundaries of the campus and would not interfere with school operations. Contractors will adhere to construction noise regulations to avoid disruption to campus operations. No subterranean construction would occur as no new building construction would occur.

3. REASONS WHY THE PROJECT IS EXEMPT

The project is exempt from further environmental review under the requirements of the California Environmental Quality Act (Public Resources Code §§ 21000 et seq.) because it is consistent with Class 1 Existing Facilities, and Class 3, New Construction or Conversion of Small Structures, as explained below.

- » **Class 1, Existing Facilities (CEQA Guidelines § 15301)** consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The key consideration is whether the project involves negligible or no expansion of use.
- » **Class 3, New Construction or Conversion of Small Structures (CEQA Guidelines § 15303)** consists of the construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.

The project involves the vacating the existing library building and construction of a new Library/Learning Commons building and the construction of a kitchen and food serving space to the existing MMAC. The proposed improvements will include the minor alterations to the existing structures, with negligible expansion of the existing uses. Existing uses of the facility as a community college would stay the same under the proposed project.

4. REVIEW OF EXCEPTIONS TO THE CATEGORICAL EXEMPTION

The project has been reviewed under CEQA Guidelines § 15300.2 - Exceptions, for any characteristics or circumstances that might invalidate findings that the project is exempt from CEQA. Each exception is listed below followed by an assessment of whether that exception applies to the project.

- (a) **Location.** Classes 3,4,5,6 and 11 are qualified by consideration of where the project would be located—a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law by federal, state, or local agencies.

The project site is on an existing community college campus surrounded by developed residential uses. The campus has buildings, asphalt hardcourts and parking lots, concrete driveways and walkways, playfields, and ornamental landscaping. Due to the school's developed nature and frequent human disturbance, it does not contain any sensitive

biological species or habitat. A riparian habit is identified on southern end of the campus near the parking lot and undeveloped land (FWS 2019). However, the proposed construction activities would not encroach on the riparian habitat, and standard best management practices would ensure that no impact occurs to the habitat. Additionally, there is no evidence of hazardous materials or substances (see section (e) below). Therefore, this exception does not apply to the project.

- (b) Cumulative Impacts.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

Campus wide improvements and construction projects are planned at the project site as part of the Rancho Cucamonga Master Plan Update. Campus wide improvements on the project site are planned to begin in Spring 2023, which would not overlap with the proposed project. An EIR would be prepared to analyze the potential environmental impacts of the Master Plan Update. Additionally, District wide projects currently underway at other campus locations of the Chaffey Community College. Construction schedules at other District school improvement sites could overlap with campus wide improvements at the project site, and with the proposed project. Therefore, there would be no significant impacts that could be combined to create a cumulative impact due to implementation of the proposed project. Similar projects at nearby schools would not have an impact on the proposed project as projects would be executed independently, and the proposed project, when combined with cumulative District projects, would not create a cumulative impact under CEQA. Cumulative impacts would not apply. This exception does not apply to the proposed project.

- (c) Significant Effects.** A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

The project site is on a currently occupied community college campus and surrounded by residential development. There is no reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances. The air quality technical memorandum has been prepared to address the potential air quality and GHG emissions impacts associated with the proposed project and concluded that no significant impact would occur. The proposed project will not increase the capacity of the campus, nor change access to the campus. The proposed project is part of a larger modernization project ongoing at the project site. The construction manager will execute construction activities per current local, state, and federal laws, regulations, construction Best Management Practices, District standards and guidelines. The proposed project will support ongoing campus improvements. This exemption does not apply to the proposed project.

Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings or similar resources, within a highway officially designated as a state scenic highway.

There are no designated State scenic highways near the Rancho Cucamonga campus. According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the closest eligible state scenic highway is State Route 138, approximately 12.5 miles to the northeast (Caltrans 2020). The project would not affect this highway due to intervening development and the types of surface improvements proposed. The project would not affect scenic resources along any officially designated or eligible scenic highways. Therefore, this exception does not apply to the proposed project.

- (d) Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Government Code § 65962.5.

California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities subject to corrective action; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated.

Five environmental databases were searched for hazardous materials sites on the site and within a quarter mile radius:

- » GeoTracker. State Water Resources Control Board (SWRCB 2015)
- » EnviroStor. Department of Toxic Substances Control (DTSC 2020)
- » EJScreen. US Environmental Protection Agency (USEPA 2018)
- » EnviroMapper. US Environmental Protection Agency (USEPA n.d.)
- » Solid Waste Information System. California Department of Resources Recycling and Recovery (CalRecycle 2020)

The database search did not return any sites within a 0.25-mile (1,320 feet) radius. The project site is not identified on any of the databases; therefore, the project site is not identified as a hazardous materials site pursuant to Government Code Section 65962.5 and the project would not create a hazard to the public. This exception does not apply to the proposed project.

- (e) Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of historical resources. Under Public Resource Code § 21084.1, a historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources. Additionally, historical resources included in a local register of historical resources are presumed to be historically or culturally significant, and a lead agency can determine whether the resource may be an historical resource.

There are no historic resources on or within a 0.25-mile radius of the campus that are listed on the National Register of Historic Places (NPS 2014), the California Register of Historical Resources (OHP n.d.), or as a California State Historical Landmark (OHP n.d.). Project implementation would not cause significant impacts to historical resources, and the historical resources exception would not apply to this project.

5. CONCLUSION

The proposed project at the Chaffey College Rancho Cucamonga campus is exempt from CEQA review pursuant to CEQA Guidelines Section 15301 and 15303. As substantiated in this document, the proposed project would not meet the conditions specified in § 15300.2, Exceptions, of the CEQA Guidelines, and the project is categorically exempt under Class 1 and 3.

6. REFERENCES

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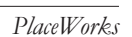


Figure 2 - Local Vicinity

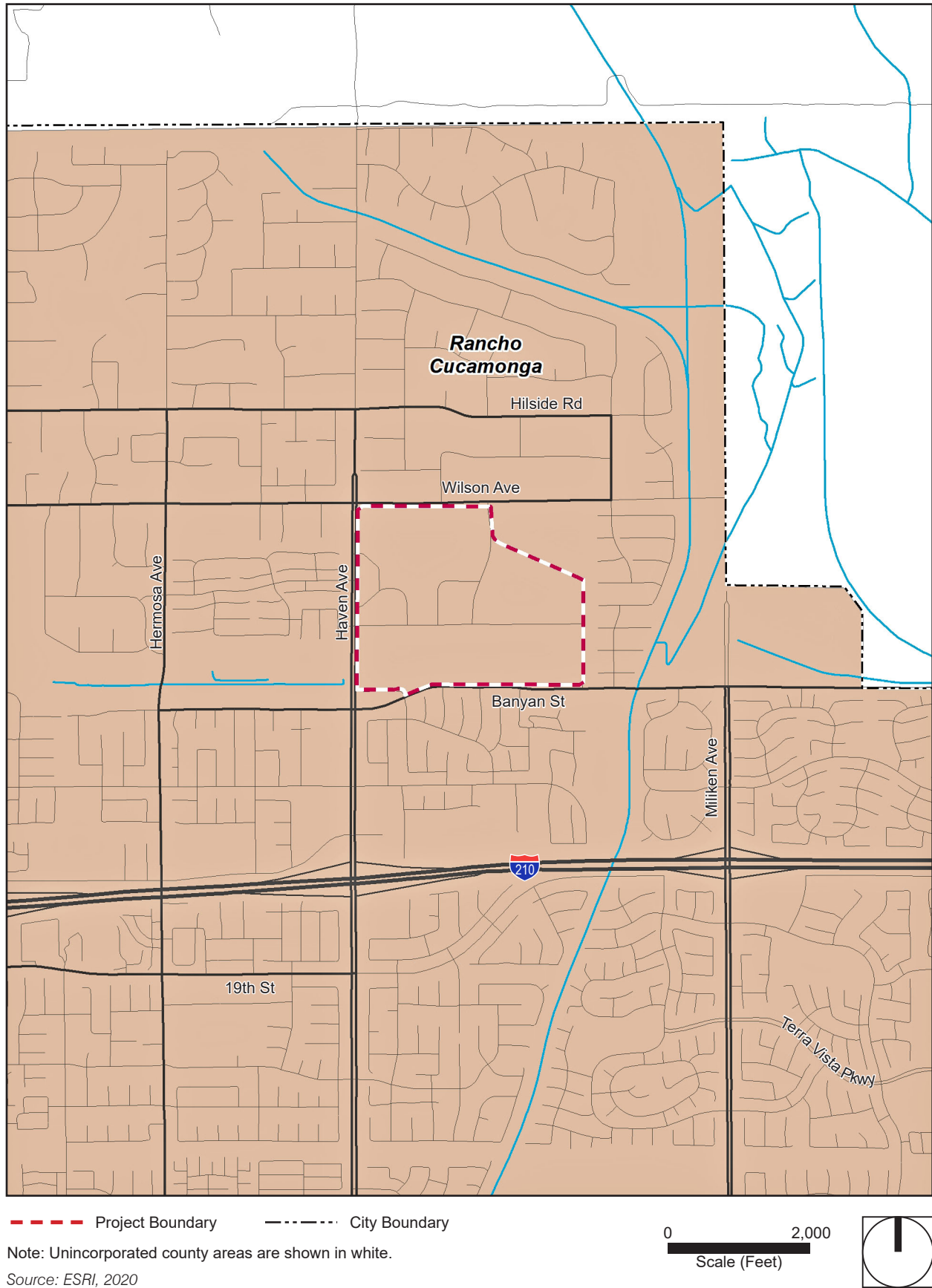


Figure 3 - Aerial Photograph



— Project Boundary

0 750
Scale (Feet)



Source: Nearmap, 2020

PlaceWorks

TECHNICAL MEMORANDUM

DATE	June 5, 2020
TO	Melanie Siddiqi Associate Superintendent, Administrative Services Chaffey College
ADDRESS	5885 Haven Avenue Rancho Cucamonga CA 91737-3002
FROM	Julian Capata, Senior Associate Nicole Vermilion, Principal Kristie Nguyen, Project Planner
SUBJECT	Chaffey College Modernization Air Quality and Greenhouse Gas Emissions Technical Memorandum
PROJECT NUMBER	CCCD-01

1. Introduction

This Air Quality Technical Memorandum, in accordance with the California Environmental Quality Act (CEQA), describes the potential construction and operation-related air quality impacts from the development of the Chaffey Community College Rancho Cucamonga Campus Modernization project (proposed project) in the City of Rancho Cucamonga for Chaffey Community College District (District). This technical memorandum analyzes project-related air quality and greenhouse gas (GHG) emissions impacts associated with the proposed project's construction and operational activities.

2. Thresholds of Significance

2.1 AIR QUALITY

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in the South Coast Air Quality Management District's (South Coast AQMD) *CEQA Air Quality Handbook* and the significance thresholds on the South Coast AQMD's website (South Coast AQMD 1993). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. The South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities. In addition to the daily thresholds listed in Table 1, *South Coast AQMD Significance Thresholds*, below, projects are also subject to the ambient air quality standards (AAQS), which are addressed through the localized significance thresholds (LSTs).

2.1.1 Construction Emissions Regional Significance Thresholds

The South Coast AQMD has adopted regional construction emissions thresholds to determine a project's cumulative impact on air quality in the South Coast Air Basin (SoCAB), shown in Table 1. The table lists thresholds that are applicable for all projects, regardless of size or scope. There is growing evidence that although ultrafine particulates (UFPs) contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from Particulate Matter (PM). However, the US Environmental Protection Agency (EPA) and California Air Resources Board (CARB) have not adopted AAQS to regulate UFPs; therefore, the South Coast AQMD has not developed thresholds for them.

Table 1 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day
Carbon Monoxide (CO)	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day
Lead ¹	3 lbs/day

Source: South Coast AQMD 2019.

¹ Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the project.

Projects that exceed these regional significance thresholds contribute to a nonattainment designation of the SoCAB. Attainment designations are based on the AAQS, which are set at levels of exposure that are determined not to result in adverse health.

Exposure to fine particulate pollution and ozone (O₃) have been determined to cause a number of health impacts, particularly to the respiratory and cardiovascular systems (South Coast AQMD 2015a):

- » Is linked to increased cancer risk (PM_{2.5}, toxic air contaminants)
- » Aggravates respiratory disease (O₃, PM_{2.5})
- » Increases bronchitis (O₃, PM_{2.5})
- » Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- » Reduces resistance to infections and increases fatigue (O₃)
- » Reduces lung growth in children (PM_{2.5})
- » Contributes to heart disease and heart attacks (PM_{2.5})
- » Contributes to premature death (O₃, PM_{2.5})
- » Is linked to lower birth weight in newborns (PM_{2.5})
- » Aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease.

Exposure to existing levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved for children aged 11 to 15 as air pollution declined in five communities in the SoCAB (South Coast AQMD 2015b).

Mass emissions in Table 1 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed above. In addition, any analysis to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment is within the scope of the Air Quality Management Plan (AQMP). The South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, the South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS.

2.1.2 Construction Localized Significance Thresholds

The South Coast AQMD has identified LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at a project site, shown in Table 2, *South Coast AQMD Localized Significance Thresholds*. Offsite mobile-source emissions are not included in an LST analysis. Exceeding these levels of emissions could expose sensitive receptors to substantial concentrations of criteria air pollutants. These LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to exceeding the most stringent federal or state AAQS. A project generating emissions that violate the AAQS when added to the local background concentrations would constitute a significant impact.

Table 2 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
Annual Average PM ₁₀ Standard (South Coast AQMD) ¹	1.0 µg/m ³

Source: South Coast AQMD 2019.

Notes: ppm – parts per million; µg/m³ – micrograms per cubic meter

¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, the South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 2 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 2.

In accordance with the South Coast AQMD’s LST methodology, the screening-level construction LSTs are based on the Source Receptor Area (SRA) in which a project is within, the distance of a project site to the nearest receptors, and the acreage disturbed per day based on equipment use. The screening-level construction LSTs for the project site in SRA 32 are shown in Table 3, *South Coast AQMD Screening-Level Construction Localized Significance Thresholds*, for sensitive receptors within 82 feet (25 meters) for NO_x and CO and 200 feet (61 meters) for PM₁₀ and PM_{2.5}. These two distances represent residences at 200 feet, which

are assumed to be exposed to construction emissions 24 hours a day, and the student population at 82 feet, who would not be exposed to construction emissions for most of the day.

Table 3 South Coast AQMD Screening-Level Construction Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day) ¹			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
≤1.00 Acre Disturbed Per Day	118	863	21	7
1.19 Acres Disturbed Per Day	128	932	21	8
1.44 Acres Disturbed Per Day	141	1,024	21	8
1.56 Acres Disturbed Per Day	147	1,070	22	8
1.86 Acres Disturbed Per Day	163	1,180	22	9

Source: South Coast AQMD 2008 and 2011.

¹ LSTs are based on receptors within 82 feet (25 meters) in SRA 32.

² LSTs are based on receptors within 200 feet (61 meters) in SRA 32.

Because the proposed project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

2.2 GREENHOUSE GAS EMISSIONS

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.¹

2.2.1 Greenhouse Gas Thresholds of Significance

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, the South Coast AQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, South Coast AQMD identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

¹ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project’s geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, the South Coast AQMD requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The Working Group identified that because construction activities would result in a “one-time” net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires its first major renovation. The South Coast AQMD has identified a screening-level threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO₂e) annually for all land use types based on a review of the Governor’s Office of Planning and Research database of 711 CEQA projects since 90 percent of these CEQA projects would exceed that threshold. Therefore, projects that do not exceed this threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions.

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project’s GHG emissions is warranted.

The South Coast AQMD has identified an efficiency target for projects that exceed a 2020 efficiency target of 4.8 MTCO₂e per year per service population (MTCO₂e/year/SP) for project-level analyses and 6.6 MTCO₂e/year/SP for plan-level projects (e.g., general plans). Service population is generally defined as the sum of residential and employment population of a project. These efficiency targets are based on the Assembly Bill (AB) 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB’s 2008 Scoping Plan.²

For purposes of this analysis, because the City of Rancho Cucamonga has not developed its own GHG significance threshold, the South Coast AQMD Working Group’s screening-level criterion of 3,000 MTCO₂e per year is used as the significance threshold for this project. If the project operation-phase emissions exceed this level, GHG emissions would be considered potentially significant in the absence of mitigation measures.

3. Environmental Impacts

MODELING METHODOLOGY

This technical memorandum evaluates the short-term impacts associated with the proposed project’s construction efforts (i.e., demolition, site preparation, grading, trenching, building construction, architectural coating, paving, and finishing and landscaping). Projected-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25. CalEEMod compiles an emissions inventory of construction emissions (fugitive dust, off-gas emissions, and on-road and off-road emissions),

² South Coast AQMD took the 2020 statewide GHG reduction target for “land use only” GHG emissions sectors and divided it by the anticipated 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. For this project, the modeling uses the “library” and “junior college” land use category in CalEEMod and is based on construction data provided by the Client. CalEEMod defaults are used to supplement the available data. Modeling datasheets for the project can be found in the Appendix to this memo.

3.1 AIR QUALITY IMPACTS

AQ-1	Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?
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Less Than Significant Impact. The South Coast AQMD adopted the 2016 AQMP on March 3, 2017. Regional growth projections are used by the South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations included in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. In addition, the consistency analysis is generally only required in connection with the adoption of General Plans, specific plans, and significant projects.

The project consists of construction and operation of a new Library/Learning Commons and campus center for the District. Because on-campus facilities would be replaced with upgraded and new facilities, the project is not considered a project of statewide, regional, or areawide significance that would require intergovernmental review under Section 15206 of the CEQA Guidelines. Therefore, the project would not have the potential to substantially affect SCAG’s demographic projections. Additionally, as demonstrated below in Section 3.3.AQ-2, the regional emissions that would be generated by the operational phases of the proposed project would be less than the South Coast AQMD emissions thresholds. Thus, these emissions would not be considered by the South Coast AQMD to be a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant.

AQ-2	Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
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Less Than Significant Impact. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction-Phase Impacts

Project-related construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust from off-road diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of volatile organic compounds (VOCs) from paints and asphalt.

Construction activities to develop the Library/Learning Commons and campus center are anticipated to disturb about 1.86 acres. The project’s construction phase is anticipated to commence in fall 2021 and take approximately 18 months for the Library/Learning Commons and 3 months for the campus center. Construction would involve demolition, site preparation, grading, trenching, building construction, architectural painting, paving, and finishing and landscaping. Building modernization would not require use

of heavy diesel construction equipment; and therefore, would not generate substantial air pollutant emissions from modernization activities. Construction emissions are based on the project's preliminary construction duration and CalEEMod default phasing and equipment mix. Construction emissions modeling are shown in Table 4, *Maximum Daily Regional Construction Emissions*, and shows maximum daily emissions for VOC, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Therefore, short-term air quality impacts from project-related construction activities would be less than significant.

Table 4 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day) ^{1,2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 2021						
Site Preparation and Soil Haul (Library/Learning Commons) and Asphalt Demolition and Haul (MACC)	4	62	27	<1	7	4
Site Preparation and Soil Haul (Library/Learning Commons) and Grading (MACC)	4	59	19	<1	8	4
Site Preparation and Soil Haul (Library/Learning Commons) and Utilities Trenching (MACC)	2	42	15	<1	5	3
Grading (Library/Learning Commons) and Utilities Trenching (MACC)	2	17	10	<1	3	2
Grading (Library/Learning Commons) and Building Construction (MACC)	3	28	20	<1	4	2
Utilities Trenching (Library/Learning Commons) and Building Construction (MACC)	2	16	16	<1	1	1
Utilities Trenching (Library/Learning Commons) and Architectural Coating (MACC)	11	4	5	<1	<1	<1
Utilities Trenching (Library/Learning Commons) and Finishing and Landscaping (MACC)	<1	4	7	<1	<1	<1
Building Construction 2021 (Library/Learning Commons)	2	16	15	<1	1	1
Year 2022						
Building Construction 2022 (Library/Learning Commons)	2	15	15	<1	1	1
Building Construction 2022 and Paving (Library/Learning Commons)	3	21	24	<1	2	1
Building Construction 2022 and Architectural Coating (Library/Learning Commons)	38	16	17	<1	1	1
Building Construction 2022 and Finishing and Landscaping (Library/Learning Commons)	2	16	18	<1	1	1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	38	62	27	<1	8	4
South Coast AQMD Regional Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.25.

Emissions totals may not equal 100 percent due to rounding.

Table 4 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day) ^{1, 2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
¹ Based on the preliminary information provided by the Client. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the South Coast AQMD of construction equipment. ² Includes implementation of fugitive dust control measures required by the South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.						

Regional Long-Term Operation-Phase Impacts

Typical long-term air pollutant emissions associated with the project would be generated by area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement) and energy use (natural gas). The project would not result in an increase in students and associated mobile sources (i.e., on-road vehicles) of emissions. The proposed new building would, at minimum, be designed and built to meet the 2019 Building Energy Efficiency Standards and the 2019 California Green Building Standards Code (CALGreen). As shown in Table 5, *Maximum Daily Regional Operation Emissions*, it is anticipated that operation of the proposed project would result in overall minimal emissions and would not exceed the South Coast AQMD regional operation-phase significance thresholds. Therefore, impacts to the regional air quality associated with operation of the project would be less than significant.

Table 5 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs/Day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	2	<1	<1	<1	<1	<1
Energy ¹	<1	<11	<1	<1	<1	<1
Mobile	0	0	0	0	0	0
Total	2	<1	<1	<1	<1	<1
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.25

Notes: lbs: Pounds.

AQ-3 Would the proposed project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The following describes potential localized impacts from short-term construction activities and long-term operation of the proposed project.

Construction

Localized Construction Impacts

A project could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevated levels. Unlike the mass of construction emissions shown in the regional emissions analysis in Table 4 which is described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or µg/m³) and can be correlated to potential health effects. The screening-level localized significance thresholds (LSTs) are the amount of

project-related emissions at which localized concentrations (ppm or $\mu\text{g}/\text{m}^3$) could exceed the California AAQS for criteria air pollutants for which the SoCAB is designated nonattainment and are based on the proposed project site size and distance to the nearest sensitive receptor. The California AAQS, which are the most stringent AAQS, were established to provide a margin of safety in the protection of the public health and welfare. The screening-level LSTs are designed to protect sensitive receptor areas most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. As stated, the screening-level construction LSTs are based on the size of the project site, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). The nearest offsite sensitive receptors are the adjacent residences along Hamilton Street to the south.

Air pollutant emissions generated by construction activities are anticipated to cause temporary increases in air pollutant concentrations. Table 6 shows the maximum daily construction emissions (lbs. per day) generated during onsite construction activities compared with the SCAQMD's screening-level construction LSTs. As shown in this table, construction activities during site preparation would not generate emissions that exceed SCAQMD screening-level construction LSTs. Thus, project-related construction activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations. Therefore, localized air quality impacts from construction activities would be less than significant.

Table 6 Construction Emissions Compared to the Screening-Level LSTs

Construction Activity	Pollutants(lbs/day) ¹			
	NO _x	CO	PM ₁₀ ²	PM _{2.5} ²
South Coast AQMD ≤1.00 -acre LST	118	863	21	7
Utilities Trenching (Library/Learning Commons) and Building Construction (MACC)	16	16	1	1
Utilities Trenching (Library/Learning Commons) and Architectural Coating (MACC)	4	5	<1	<1
Utilities Trenching (Library/Learning Commons) and Finishing and Landscaping (MACC)	4	7	<1	<1
Building Construction 2021 (Library/Learning Commons)	14	13	1	1
Building Construction 2022 (Library/Learning Commons)	13	13	1	1
Building Construction 2022 and Paving (Library/Learning Commons)	19	22	1	1
Building Construction 2022 and Architectural Coating (Library/Learning Commons)	14	15	1	1
Building Construction 2022 and Finishing and Landscaping (Library/Learning Commons)	14	16	1	1
Exceeds LST?	No	No	No	No
South Coast AQMD 1.19-Acre LSTs	128	932	21	8
Grading (Library/Learning Commons) and Utilities Trenching (MACC)	17	10	3	2
Exceeds LST?	No	No	No	No
South Coast AQMD 1.44-Acre LSTs	141	1,024	21	8
Site Preparation and Soil Haul (Library/Learning Commons) and Utilities Trenching (MACC)	20	11	3	2
Exceeds LST?	No	No	No	No
South Coast AQMD 1.56-Acre LSTs	147	1,070	22	8
Grading (Library/Learning Commons) and Building Construction (MACC)	28	20	4	2

Table 6 Construction Emissions Compared to the Screening-Level LSTs

Exceeds LST?	No	No	No	No
South Coast AQMD 1.86-Acre LSTs	163	1,180	22	9
Site Preparation and Soil Haul (Library/Learning Commons) and Asphalt Demolition and Haul (MACC)	37	22	5	3
Site Preparation and Soil Haul (Library/Learning Commons) and Grading (MACC)	32	14	6	4
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2016.3.2.25, and South Coast AQMD 2008 and 2011.

Notes: In accordance with South Coast AQMD methodology, only onsite stationary sources and mobile equipment occurring on the project site are included in the analysis. NO_x and CO screening level LSTs are based on an 82 ft receptor (students), while PM₁₀ and PM_{2.5} screening level LSTs are based on a 200 ft receptor (residences) as students would not be on campus 24 hours per day.

¹ Based on information provided by the Client. Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the South Coast AQMD.

² Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

Construction Health Risk

Emissions from construction equipment primarily consist of diesel particulate matter (DPM). In 2015, the Office of Environmental Health Hazards Assessment (OEHHA) adopted guidance for preparation of health risk assessments, which included the development of a cancer risk factor and non-cancer chronic reference exposure level for DPM over a 30-year time frame (OEHHA 2015). The proposed project is anticipated to be completed in approximately 18 months, which would limit the exposure to onsite and offsite receptors. Furthermore, construction activities would not generate onsite exhaust emissions that would exceed the screening-level construction LSTs. Currently, the South Coast AQMD does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. Thus, construction emissions would not pose a health risk to onsite and offsite receptors, and project-related construction health impacts would be less than significant.

Operation LSTs

Operation of the proposed project would not generate substantial emissions from onsite stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions include industrial land uses, such as chemical processing and warehousing operations where truck idling would occur onsite and would require a permit from South Coast AQMD. The proposed project does not fall within these categories of uses. While operation of the new building would use standard onsite mechanical equipment such as heating, ventilation, and air conditioning, air pollutant emissions would be nominal. Localized air quality impacts related to operation-related emissions would be less than significant.

Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

The SoCAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2017). Because implementation of the proposed project would not increase student capacity, operation of the proposed project would not generate any new trips. Therefore, the project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project site, and impacts would be less than significant.

AQ-4 **Would the proposed project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Less Than Significant Impact. The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project does not fall within the aforementioned land uses; no operational odors are anticipated.

During the development of the proposed project, emissions from construction equipment, such as diesel exhaust, may generate odors. However, these odors would be low in concentration, temporary, disperse rapidly, and are not expected to affect a substantial number of people. Any odors produced during the installation phase are not expected to be significant or highly objectionable and would be in compliance with South Coast AQMD Rule 402. Therefore, impacts would be less than significant.

3.2 GREENHOUSE GAS IMPACTS

GHG-1 **Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Project-related construction and operation-phase GHG emissions are shown in Table 7, *Project-Related Operation GHG Emissions*. Because implementation of the proposed project would not increase student capacity, no additional vehicle trips, water use, wastewater generation, and solid waste generation would occur. As shown in the table, the proposed project would generate GHG emissions from energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating and area sources (e.g., landscaping equipment used on-site, consumer products, coatings). Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction phase of the project. Overall, development and operation of the proposed project would not generate annual emissions that exceed the South Coast AQMD bright-line threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year (South Coast AQMD 2010). Therefore, the proposed project's cumulative contribution to GHG emissions would be less than significant.

Table 7 Project-Related Operation GHG Emissions

Source	GHG (MTCO ₂ e/Year)
Area	<1
Energy	177
Amortized Construction Emissions ¹	20
Total	198
South Coast AQMD Bright-Line Threshold	3,000 MTCO ₂ e/Yr
Exceeds Bright-Line Threshold?	No

Source: CalEEMod, Version 2016.3.2.25.
Notes: MTons: metric tons; MTCO₂e: metric ton of carbon dioxide equivalent
¹ Total construction emission are amortized over 30 years per South Coast AQMD methodology.

GHG-2 Would the proposed project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions include the CARB Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by Assembly Bill (AB) 32, which is to return to 1990 emission levels by year 2020. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Since adoption of the 2008 Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy (CAFE) standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32. Also, new buildings are required to comply with the latest applicable Building Energy Efficiency Standards and California Green Building Code (CALGreen). On December 24, 2017, CARB adopted the Final 2017 Climate Change Scoping Plan Update to address the new 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030, established by SB 32 (CARB 2017). While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the proposed project would not obstruct implementation of the CARB Scoping Plan and impacts would be less than significant.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

SCAG recently released the 2020-2045 RTP/SCS (Draft Connect SoCal Plan) on November 7, 2019 and anticipates adoption of the Connect SoCal Plan in May 2020 (SCAG 2019). The Draft Connect SoCal Plan identifies that land use strategies that focus on new housing and job growth in areas rich with destinations and mobility options would be consistent with a land use development pattern that supports and

complements the proposed transportation network. The overarching strategy in the Draft Connect SoCal Plan is to provide for a plan that allows the southern California region to grow in more compact communities in transit priority areas and priority growth areas, provide neighborhoods with efficient and plentiful public transit, establish abundant and safe opportunities to walk, bike and pursue other forms of active transportation, and preserve more of the region's remaining natural lands and farmlands (SCAG 2019). The Draft Connect SoCal Plan contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecasted development that is generally consistent with regional-level general plan data so as to promote active transport and reduce GHG emissions. The projected regional development, when integrated with the proposed regional transportation network identified in the Draft Connect SoCal Plan, would reduce per capita vehicular travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region.

The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers. The proposed project would provide new facilities to the Chaffey College campus in Rancho Cucamonga, whose student capacity would not increase as a result of project implementation. Furthermore, implementation of this project would also go to serve the local population. Serving the local community could contribute to reducing the vehicle miles traveled by providing the local community with closer options. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS, and no impact would occur.

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Appendix Air Quality and GHG Modeling

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Regional Construction Emissions Worksheet:

Site Preparation (Library)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2021 Summer						
	Fugitive Dust					2.48	1.26
	Off-Road	1.56	17.42	7.56	0.02	0.77	0.70
	Total	1.56	17.42	7.56	0.02	3.24	1.97
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
	Total	0.05	0.22	0.37	0.00	0.10	0.03
TOTAL		1.60	17.64	7.93	0.02	3.34	1.99
Onsite	2021 Winter						
	Fugitive Dust					2.48	1.26
	Off-Road	1.56	17.42	7.56	0.02	0.77	0.70
	Total	1.56	17.42	7.56	0.02	3.24	1.97
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.27	0.00	0.08	0.02
	Total	0.05	0.22	0.31	0.00	0.10	0.03
TOTAL		1.60	17.64	7.87	0.02	3.34	1.99
Onsite	2021 Max						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.48	1.26
	Off-Road	1.56	17.42	7.56	0.02	0.77	0.70
	Total	1.56	17.42	7.56	0.02	3.24	1.97
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
	Total	0.05	0.22	0.37	0.00	0.10	0.03
TOTAL		1.60	17.64	7.93	0.02	3.34	1.99
Site Preparation Haul (Library)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2021 Summer						
	Fugitive Dust					0.04	0.01
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.04	0.01
Offsite	Hauling	0.58	22.18	3.43	0.08	1.65	0.50
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.58	22.18	3.43	0.08	1.65	0.50
TOTAL		0.58	22.18	3.43	0.08	1.69	0.50
Onsite	2021 Winter						
	Fugitive Dust					0.04	0.01
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.04	0.01
Offsite	Hauling	0.60	22.26	3.92	0.07	1.65	0.50
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.60	22.26	3.92	0.07	1.65	0.50
TOTAL		0.60	22.26	3.92	0.07	1.69	0.50
Onsite	2021 Max						
	Fugitive Dust	0.00	0.00	0.00	0.00	0.04	0.01
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.04	0.01
Offsite	Hauling	0.60	22.26	3.92	0.08	1.65	0.50
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.60	22.26	3.92	0.08	1.65	0.50
TOTAL		0.60	22.26	3.92	0.08	1.69	0.50

Grading (Library)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Fugitive Dust					2.10	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.74	1.67
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
	Total	0.05	0.22	0.37	0.00	0.10	0.03
TOTAL		1.33	14.55	6.70	0.02	2.83	1.69
Onsite		2021 Winter					
	Fugitive Dust					2.10	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.74	1.67
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.27	0.00	0.08	0.02
	Total	0.05	0.22	0.31	0.00	0.10	0.03
TOTAL							
Onsite		2021 Max					
	Fugitive Dust	0.00	0.00	0.00	0.00	2.10	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.74	1.67
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
	Total	0.05	0.22	0.37	0.00	0.10	0.03
TOTAL		1.33	14.55	6.70	0.02	2.83	1.69
Asphalt Demolition (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2020 Summer					
	Off-Road	1.99	19.70	14.49	0.02	1.04	0.97
	Total	1.99	19.70	14.49	0.02	1.04	0.97
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.07	0.04	0.54	0.00	0.13	0.04
	Total	0.07	0.23	0.57	0.00	0.15	0.04
TOTAL		2.06	19.93	15.07	0.03	1.19	1.01
Onsite		2020 Winter					
	Off-Road	1.99	19.70	14.49	0.02	1.04	0.97
	Total	1.99	19.70	14.49	0.02	1.04	0.97
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.07	0.04	0.44	0.00	0.13	0.04
	Total	0.07	0.23	0.48	0.00	0.15	0.04
TOTAL		2.06	19.93	14.98	0.03	1.19	1.01
Onsite		2020 Max					
	Off-Road	1.99	19.70	14.49	0.02	1.04	0.97
	Total	1.99	19.70	14.49	0.02	1.04	0.97
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.07	0.04	0.54	0.00	0.13	0.04
	Total	0.07	0.23	0.57	0.00	0.15	0.04
TOTAL		2.06	19.93	15.07	0.03	1.19	1.01

Asphalt Demolition Haul (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Fugitive Dust					0.92	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.92	0.14
Offsite							
	Hauling	0.06	2.28	0.35	0.01	0.17	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		0.06	2.28	0.35	0.01	0.17	0.05
		0.06	2.28	0.35	0.01	1.09	0.19
Onsite		2021 Winter					
	Fugitive Dust					0.92	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.92	0.14
Offsite							
	Hauling	0.06	2.29	0.40	0.01	0.17	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		0.06	2.29	0.40	0.01	0.17	0.05
		0.06	2.29	0.40	0.01	1.09	0.19
Onsite		2021 Max					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.92	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.92	0.14
Offsite							
	Hauling	0.06	2.29	0.40	0.01	0.17	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		0.06	2.29	0.40	0.01	0.17	0.05
		0.06	2.29	0.40	0.01	1.09	0.19
Grading/ Grading Haul (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Fugitive Dust					2.11	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.75	1.67
Offsite							
	Hauling	0.12	4.65	0.72	0.02	0.35	0.10
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
TOTAL		0.17	4.87	1.09	0.02	0.44	0.13
		1.46	19.20	7.42	0.03	3.19	1.80
Onsite		2021 Winter					
	Fugitive Dust					2.11	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.75	1.67
Offsite							
	Hauling	0.13	4.67	0.82	0.02	0.35	0.10
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.27	0.00	0.08	0.02
TOTAL		0.17	4.89	1.14	0.02	0.44	0.13
		1.46	19.22	7.47	0.03	3.19	1.80
Onsite		2021 Max					
	Fugitive Dust	0.00	0.00	0.00	0.00	2.11	1.08
	Off-Road	1.29	14.33	6.33	0.01	0.64	0.59
	Total	1.29	14.33	6.33	0.01	2.75	1.67
Offsite							
	Hauling	0.13	4.67	0.82	0.02	0.35	0.10
	Vendor	0.01	0.19	0.04	0.00	0.01	0.00
	Worker	0.04	0.03	0.33	0.00	0.08	0.02
TOTAL		0.17	4.89	1.14	0.02	0.44	0.13
		1.46	19.22	7.47	0.03	3.19	1.80

Utilities Trenching (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.12	0.00	0.03	0.01
	Total	0.02	0.01	0.12	0.00	0.03	0.01
TOTAL		0.25	2.17	3.41	0.01	0.14	0.11
Onsite		2021 Winter					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.10	0.00	0.03	0.01
	Total	0.02	0.01	0.10	0.00	0.03	0.01
TOTAL		0.25	2.17	3.39	0.01	0.14	0.11
Onsite		2021 Max					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.12	0.00	0.03	0.01
	Total	0.02	0.01	0.12	0.00	0.03	0.01
TOTAL		0.25	2.17	3.41	0.01	0.14	0.11
Building Construction 2021 (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	1.81	13.64	12.90	0.02	0.68	0.66
	Total	1.81	13.64	12.90	0.02	0.68	0.66
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.10	0.02	0.00	0.01	0.00
	Worker	0.01	0.01	0.08	0.00	0.02	0.01
	Total	0.01	0.10	0.10	0.00	0.03	0.01
TOTAL		1.83	13.74	13.00	0.02	0.71	0.67
Onsite		2021 Winter					
	Off-Road	1.81	13.64	12.90	0.02	0.68	0.66
	Total	1.81	13.64	12.90	0.02	0.68	0.66
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.10	0.02	0.00	0.01	0.00
	Worker	0.01	0.01	0.07	0.00	0.02	0.01
	Total	0.01	0.10	0.09	0.00	0.03	0.01
TOTAL		1.83	13.74	12.99	0.02	0.71	0.67
Onsite		2021 Max					
	Off-Road	1.81	13.64	12.90	0.02	0.68	0.66
	Total	1.81	13.64	12.90	0.02	0.68	0.66
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.10	0.02	0.00	0.01	0.00
	Worker	0.01	0.01	0.08	0.00	0.02	0.01
	Total	0.01	0.10	0.10	0.00	0.03	0.01
TOTAL		1.83	13.74	13.00	0.02	0.71	0.67

Architectural Coating (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Archit. Coating	10.62				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	10.84	1.53	1.82	0.00	0.09	0.09
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		10.84	1.53	1.82	0.00	0.09	0.09
Onsite		2022 Winter					
	Archit. Coating	10.62				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	10.84	1.53	1.82	0.00	0.09	0.09
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		10.84	1.53	1.82	0.00	0.09	0.09
Onsite		2022 Max					
	Archit. Coating	10.62	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	10.84	1.53	1.82	0.00	0.09	0.09
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		10.84	1.53	1.82	0.00	0.09	0.09
Finishing and Landscaping (MACC)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.12	0.00	0.03	0.01
	Total	0.02	0.01	0.12	0.00	0.03	0.01
TOTAL		0.25	2.17	3.41	0.01	0.14	0.11
Onsite		2022 Winter					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.10	0.00	0.03	0.01
	Total	0.02	0.01	0.10	0.00	0.03	0.01
TOTAL		0.25	2.17	3.39	0.01	0.14	0.11
Onsite		2022 Max					
	Off-Road	0.23	2.16	3.29	0.01	0.11	0.10
	Total	0.23	2.16	3.29	0.01	0.11	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.12	0.00	0.03	0.01
	Total	0.02	0.01	0.12	0.00	0.03	0.01
TOTAL		0.25	2.17	3.41	0.01	0.14	0.11

Utilities Trenching (Library)								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer						
	Off-Road		0.23	2.16	3.29	0.01	0.11	0.10
	Total		0.23	2.16	3.29	0.01	0.11	0.10
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.02	0.01	0.12	0.00	0.03	0.01
	Total		0.02	0.01	0.12	0.00	0.03	0.01
TOTAL			0.25	2.17	3.41	0.01	0.14	0.11
Onsite		2021 Winter						
	Off-Road		0.23	2.16	3.29	0.01	0.11	0.10
	Total		0.23	2.16	3.29	0.01	0.11	0.10
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.02	0.01	0.10	0.00	0.03	0.01
	Total		0.02	0.01	0.10	0.00	0.03	0.01
TOTAL			0.25	2.17	3.39	0.01	0.14	0.11
Onsite		2021 Max						
	Off-Road		0.23	2.16	3.29	0.01	0.11	0.10
	Total		0.23	2.16	3.29	0.01	0.11	0.10
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.02	0.01	0.12	0.00	0.03	0.01
	Total		0.02	0.01	0.12	0.00	0.03	0.01
TOTAL			0.25	2.17	3.41	0.01	0.14	0.11
Building Construction 2021 (Library)								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer						
	Off-Road		1.81	13.64	12.90	0.02	0.68	0.66
	Total		1.81	13.64	12.90	0.02	0.68	0.66
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.05	2.03	0.38	0.01	0.13	0.04
	Worker		0.27	0.17	2.19	0.01	0.55	0.15
	Total		0.32	2.19	2.58	0.01	0.68	0.19
TOTAL			2.14	15.83	15.47	0.03	1.36	0.85
Onsite		2021 Winter						
	Off-Road		1.81	13.64	12.90	0.02	0.68	0.66
	Total		1.81	13.64	12.90	0.02	0.68	0.66
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.06	2.00	0.45	0.01	0.13	0.04
	Worker		0.27	0.18	1.80	0.01	0.55	0.15
	Total		0.33	2.18	2.25	0.01	0.68	0.19
TOTAL			2.14	15.81	15.14	0.03	1.36	0.85
Onsite		2021 Max						
	Off-Road		1.81	13.64	12.90	0.02	0.68	0.66
	Total		1.81	13.64	12.90	0.02	0.68	0.66
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.06	2.03	0.45	0.01	0.13	0.04
	Worker		0.27	0.18	2.19	0.01	0.55	0.15
	Total		0.33	2.19	2.58	0.01	0.68	0.19
TOTAL			2.14	15.83	15.47	0.03	1.36	0.85

Building Construction 2022 (Library)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	1.65	12.50	12.73	0.02	0.59	0.57
	Total	1.65	12.50	12.73	0.02	0.59	0.57
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.92	0.35	0.01	0.13	0.04
	Worker	0.25	0.15	2.02	0.01	0.55	0.15
	Total	0.30	2.07	2.37	0.01	0.68	0.19
TOTAL		1.95	14.57	15.09	0.03	1.27	0.76
Onsite		2022 Winter					
	Off-Road	1.65	12.50	12.73	0.02	0.59	0.57
	Total	1.65	12.50	12.73	0.02	0.59	0.57
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.90	0.41	0.01	0.13	0.04
	Worker	0.25	0.16	1.65	0.01	0.55	0.15
	Total	0.31	2.06	2.06	0.01	0.68	0.19
TOTAL		1.96	14.56	14.79	0.03	1.27	0.76
Onsite		2022 Max					
	Off-Road	1.65	12.50	12.73	0.02	0.59	0.57
	Total	1.65	12.50	12.73	0.02	0.59	0.57
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.92	0.41	0.01	0.13	0.04
	Worker	0.25	0.16	2.02	0.01	0.55	0.15
	Total	0.31	2.07	2.37	0.01	0.68	0.19
TOTAL		1.96	14.57	15.09	0.03	1.27	0.76
Paving (Library)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.69	6.77	8.81	0.01	0.35	0.32
	Paving	0.01				0.00	0.00
	Total	0.69	6.77	8.81	0.01	0.35	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.49	0.00	0.13	0.04
	Total	0.06	0.04	0.49	0.00	0.13	0.04
TOTAL		0.76	6.81	9.30	0.01	0.48	0.36
Onsite		2023 Winter					
	Off-Road	0.69	6.77	8.81	0.01	0.35	0.32
	Paving	0.01				0.00	0.00
	Total	0.69	6.77	8.81	0.01	0.35	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.40	0.00	0.13	0.04
	Total	0.06	0.04	0.40	0.00	0.13	0.04
TOTAL		0.76	6.81	9.21	0.01	0.48	0.36
Onsite		2023 Max					
	Off-Road	0.69	6.77	8.81	0.01	0.35	0.32
	Paving	0.01	0.00	0.00	0.00	0.00	0.00
	Total	0.69	6.77	8.81	0.01	0.35	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.49	0.00	0.13	0.04
	Total	0.06	0.04	0.49	0.00	0.13	0.04
TOTAL		0.76	6.81	9.30	0.01	0.48	0.36

Architectural Coating (Library)								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer						
	Archit. Coating		35.95				0.00	0.00
	Off-Road		0.20	1.41	1.81	0.00	0.08	0.08
	Total		36.16	1.41	1.81	0.00	0.08	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.05	0.03	0.42	0.00	0.11	0.03
	Total		0.05	0.03	0.42	0.00	0.11	0.03
TOTAL			36.21	1.44	2.23	0.00	0.20	0.11
Onsite		2023 Winter						
	Archit. Coating		35.95				0.00	0.00
	Off-Road		0.20	1.41	1.81	0.00	0.08	0.08
	Total		36.16	1.41	1.81	0.00	0.08	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.05	0.03	0.34	0.00	0.11	0.03
	Total		0.05	0.03	0.34	0.00	0.11	0.03
TOTAL			36.21	1.44	2.16	0.00	0.20	0.11
Onsite		2023 Max						
	Archit. Coating		35.95	0.00	0.00	0.00	0.00	0.00
	Off-Road		0.20	1.41	1.81	0.00	0.08	0.08
	Total		36.16	1.41	1.81	0.00	0.08	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.05	0.03	0.42	0.00	0.11	0.03
	Total		0.05	0.03	0.42	0.00	0.11	0.03
TOTAL			36.21	1.44	2.23	0.00	0.20	0.11
Finishing and Landscaping (Library)								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer						
	Off-Road		0.20	1.79	3.27	0.01	0.09	0.08
	Total		0.20	1.79	3.27	0.01	0.09	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.01	0.01	0.11	0.00	0.03	0.01
	Total		0.01	0.01	0.11	0.00	0.03	0.01
TOTAL			0.22	1.79	3.39	0.01	0.12	0.09
Onsite		2023 Winter						
	Off-Road		0.20	1.79	3.27	0.01	0.09	0.08
	Total		0.20	1.79	3.27	0.01	0.09	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.01	0.01	0.09	0.00	0.03	0.01
	Total		0.01	0.01	0.09	0.00	0.03	0.01
TOTAL			0.22	1.79	3.36	0.01	0.12	0.09
Onsite		2023 Max						
	Off-Road		0.20	1.79	3.27	0.01	0.09	0.08
	Total		0.20	1.79	3.27	0.01	0.09	0.08
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.01	0.01	0.11	0.00	0.03	0.01
	Total		0.01	0.01	0.11	0.00	0.03	0.01
TOTAL			0.22	1.79	3.39	0.01	0.12	0.09

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
<i>Site Preparation and Soil Haul (Library) and Asphalt Demolition and Haul (MACC)</i>	4	62	27	0	7	4
<i>Site Preparation and Soil Haul (Library) and Grading (MACC)</i>	4	59	19	0	8	4
<i>Site Preparation and Soil Haul (Library) and Utilities Trenching (MACC)</i>	2	42	15	0	5	3
<i>Grading (Library) and Utilities Trenching (MACC)</i>	2	17	10	0	3	2
<i>Grading (Library) and Building Construction (MACC)</i>	3	28	20	0	4	2
<i>Utilities Trenching (Library) and Building Construction (MACC)</i>	2	16	16	0	1	1
<i>Utilities Trenching (Library) and Architectural Coating (MACC)</i>	11	4	5	0	0	0
<i>Utilities Trenching (Library) and Finishing and Landscaping (MACC)</i>	0	4	7	0	0	0
<i>Building Construction 2021 (Library)</i>	2	16	15	0	1	1
<i>Building Construction 2022 (Library)</i>	2	15	15	0	1	1
<i>Building Construction 2022 and Paving (Library)</i>	3	21	24	0	2	1
<i>Building Construction 2022 and Architectural Coating (Library)</i>	38	16	17	0	1	1
<i>Building Construction 2022 and Finishing and Landscaping (Library)</i>	2	16	18	0	1	1
MAX DAILY	38	62	27	0	8	4
Regional Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Regional Construction Emissions Worksheet:

**NOx and CO LSTs based on 82 ft receptor (students), PM10 and PM2.5 LSTs based on 200 ft receptor (residences) as students would not be on campus 24hrs/day

Site Preparation (Library)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Fugitive Dust		0.00	0.00	2.48	1.26
	Off-Road		17.42	7.56	0.77	0.70
	Total		17.42	7.56	3.24	1.97
TOTAL			17.42	7.56	3.24	1.97
Site Preparation Haul (Library)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Fugitive Dust		0.00	0.00	0.04	0.01
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.04	0.01
TOTAL			0.00	0.00	0.04	0.01
Grading (Library)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Fugitive Dust		0.00	0.00	2.10	1.08
	Off-Road		14.33	6.33	0.64	0.59
	Total		14.33	6.33	2.74	1.67
TOTAL			14.33	6.33	2.74	1.67
Asphalt Demolition (MACC)						
		2020	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		19.70	14.49	1.04	0.97
	Total		19.70	14.49	1.04	0.97
TOTAL			19.70	14.49	1.04	0.97
Asphalt Demolition Haul (MACC)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Fugitive Dust		0.00	0.00	0.92	0.14
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.92	0.14
TOTAL			0.00	0.00	0.92	0.14
Grading/ Grading Haul (MACC)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		13.64	12.90	0.68	0.66
	Total		13.64	12.90	0.68	0.66
TOTAL			13.64	12.90	0.68	0.66
Architectural Coating (MACC)						
		2022	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		1.53	1.82	0.09	0.09
	Total		1.53	1.82	0.09	0.09
TOTAL			1.53	1.82	0.09	0.09
Finishing and Landscaping (MACC)						
		2022	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		2.16	3.29	0.11	0.10
	Total		2.16	3.29	0.11	0.10
TOTAL			2.16	3.29	0.11	0.10
Utilities Trenching (Library)						
		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		2.16	3.29	0.11	0.10
	Total		2.16	3.29	0.11	0.10
TOTAL			2.16	3.29	0.11	0.10

Regional Construction Emissions Worksheet:

**NOx and CO LSTs based on 82 ft receptor (students), PM10 and PM2.5 LSTs based on 200 ft receptor (residences) as students would not be on campus 24hrs/day

Building Construction 2021 (Library)

		2021	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		13.64	12.90	0.68	0.66
	Total		13.64	12.90	0.68	0.66
TOTAL			13.64	12.90	0.68	0.66

Building Construction 2022 (Library)

		2022	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		12.50	12.73	0.59	0.57
	Total		12.50	12.73	0.59	0.57
TOTAL			12.50	12.73	0.59	0.57

Paving (Library)

		2023	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		6.77	8.81	0.35	0.32
	Paving		0.00	0.00	0.00	0.00
	Total		6.77	8.81	0.35	0.32
TOTAL			6.77	8.81	0.35	0.32

Architectural Coating (Library)

		2023	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		1.41	1.81	0.08	0.08
	Total		1.41	1.81	0.08	0.08
TOTAL			1.41	1.81	0.08	0.08

Finishing and Landscaping (Library)

		2023	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		1.79	3.27	0.09	0.08
	Total		1.79	3.27	0.09	0.08
TOTAL			1.79	3.27	0.09	0.08

Regional Construction Emissions Worksheet:

**NOx and CO LSTs based on 82 ft receptor (students), PM10 and PM2.5 LSTs based on 200 ft receptor (residences) as students would not be on campus 24hrs/day

	NOx	CO	PM10 Total	PM2.5 Total
Site Preparation and Soil Haul (Library) and Asphalt Demolition and Haul (MACC)	37	22	5.25	3.08
1.86 Acre LST	163	1180	22.05	9.04
Exceeds LST?	no	no	no	no
Site Preparation and Soil Haul (Library) and Grading (MACC)	32	14	6.03	3.64
1.86 Acre LST	163	1180	22.05	9.04
Exceeds LST?	no	no	no	no
Site Preparation and Soil Haul (Library) and Utilities Trenching (MACC)	20	11	3.39	2.07
1.44 Acre LST	141	1024	21.33	8.19
Exceeds LST?	no	no	no	no
Grading (Library) and Utilities Trenching (MACC)	16	10	2.84	1.76
1.19 Acre LST	128	932	20.90	7.69
Exceeds LST?	no	no	no	no
Grading (Library) and Building Construction (MACC)	28	19	3.42	2.33
1.56 Acre LST	147	1070	21.54	8.44
Exceeds LST?	no	no	no	no
Utilities Trenching (Library) and Building Construction (MACC)	16	16	0.79	0.76
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Utilities Trenching (Library) and Architectural Coating (MACC)	4	5	0.20	0.19
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Utilities Trenching (Library) and Finishing and Landscaping (MACC)	4	7	0.21	0.19
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Building Construction 2021 (Library)	14	13	0.68	0.66

Regional Construction Emissions Worksheet:

**NOx and CO LSTs based on 82 ft receptor (students), PM10 and PM2.5 LSTs based on 200 ft receptor (residences) as students would not be on campus 24hrs/day

≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Building Construction 2022 (Library)	13	13	0.59	0.57
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Building Construction 2022 and Paving (Library)	19	22	0.94	0.89
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Building Construction 2022 and Architectural Coating (Library)	14	15	0.67	0.65
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no
Building Construction 2022 and Finishing and Landscaping (Library)	14	16	0.68	0.65
≤1 Acre LST	118	863	20.58	7.32
Exceeds LST?	no	no	no	no

Regional Operation Emissions Worksheet: Combined Buildout Year 2023¹

¹ CalEEMod, Version 2016.3.2

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.75	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.21	0.18	0.00	0.02	0.02
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.77	0.21	0.19	0.00	0.02	0.02

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.75	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.21	0.18	0.00	0.02	0.02
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.77	0.21	0.19	0.00	0.02	0.02

Total Operational Emissions

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.75	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.21	0.18	0.00	0.02	0.02
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.77	0.21	0.19	0.00	0.02	0.02

Regional Thresholds	55	55	550	150	150	55
Exceeds Thresholds	No	No	No	No	No	No

GHG Emissions Inventory

Source: CalEEMod, Version 2016.3.2.

Notes: MTCO₂e=metric tons of carbon dioxide equivalent.

Construction

	MTCO ₂ e/Year
2021	238
2022	367
Total	605

Operation*

	MTCO ₂ e/Year	Percent of Total
Area	0.003	0.002%
Energy	177	90%
Amortized Construction Emissions ¹	20	10%
Total	198	100%

SCAQMD Bright-Line Screening Threshold	3,000
Exceed Threshold?	No

Notes:

Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

CalEEMod Inputs - Chaffey College Modernization - Library

Name: Chaffey College Modernization
Project Number: CCCD-01
Project Location: 5885 Haven Ave, Rancho Cucamonga, CA 91737
County/Air Basin: San Bernardino
Climate Zone: 10
Land Use Setting: Urban
Operational Year: 2023
Utility Company: SCE
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 32- Northwest San Bernardino Valley

Project Site Acreage 1.86
 Disturbed Site Acreage 1.86

Project Components			
Demolition	Tons		
Asphalt Demo (MACC)	101		
New Construction	SQFT	Acres	Floors
Library	75,300	0.58	3.00
MACC	5,500		
Total Other Asphalt Surfaces	1,600	0.04	
Total Hardscape	4,800	0.11	
Total Landscape	1,600	0.04	
Additional Area- Landscaping	42,259	0.97	

CalEEMod Land Use Inputs- Library

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage*	Land Use Square Feet
Educational	Junior College	75.300	1000 sqft	0.576	75,300
Educational	Junior College	5.500	1000 sqft	0.13	5,500
Parking Lot	Other Asphalt Surfaces	1.600	1000 sqft	0.04	1,600
Parking Lot	Other Non-asphalt Surfaces	48.659	1000 sqft	1.12	48,659
				1.86	

Soil Haul

Construction Activities	Haul Volume (CY)	Haul Truck Capacity (cy) ¹	Hauling Distance (Miles) ¹	Total Haul Trips	Total Haul Days	Haul Trips/Day
Site Preparation Export	7000	16	20	875	9	97

¹ CalEEMod Default

Soil Haul (MACC)¹

Construction Activities	Import Volume (CY)	Haul Truck Capacity (cy) ¹	Hauling Distance (Miles) ¹	Total Haul Trips	Total Haul Days	Haul Trips/Day
Grading Import	410	16	20	51	5	10
Grading Export	410	16	20	51	5	10
	820			102		

¹ CalEEMod Default

Demolition (MACC)

Component	Amount to be Demolished (Tons)	Haul Truck Capacity (tons) ¹	Hauling Distance (Miles) ¹	Total Haul Trips	Duration (days)	Haul Trip/Day
Asphalt Demolition	101	20	20	10	1	10.0

¹ CalEEMod Default**Architectural Coating**

	Library		MACC
Percentage of Interior Painted:	100%	Percentage of Interior Painted:	100%
Percentage of Exterior Painted:	100%	Percentage of Exterior Painted:	100%

Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	100	grams per liter

Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
NonResidential Structures					
MACC	5,500	2.0	11,000	8,250	2,750
Library	75,300	2.0	150,600	112,950	37,650
Operational Area Coated:			161,600	121,200	40,400
NonResidential Structures					
Parking Lot	1,600	6%	96		96
			96		96

¹ CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.² The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.³ 100% of the interior and exterior of buildings to be modernized will be painted**Southern California Edison Carbon Intensity Factors**

CO ₂ : ¹	504.43634	pounds per megawatt hour
CH ₄ : ^{2,3}	0.029	pound per megawatt hour
N ₂ O: ^{2,3}	0.00617	pound per megawatt hour

¹ Based on CO₂e intensity factor of 507 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf>.² Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH₄ and N₂O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.³ CalEEMod default values.**Construction Mitigation****SCAQMD Rule 403**

Replace Ground Cover	PM10:	5	% Reduction
Replace Ground Cover	PM2.5:	5	% Reduction
	PM25:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph
SCAQMD Rule 1186	Clean Paved Road	9	% PM Reduction

Construction Activities and Schedule Assumptions: Chaffey College Modernization

Demolition and general construction schedule provided by applicant, reflects an 18 month construction period

Library Construction Activities

Construction Activities	Phase Type	Construction Schedule		
		Start Date	End Date	CalEEMod Duration (Workday)
Site Preparation	Site Preparation	6/15/2021	6/21/2021	5
Site Preparation Haul	Site Preparation	6/15/2021	6/21/2021	5
Grading	Grading	6/15/2021	8/14/2021	44
Utilities Trenching	Trenching	6/22/2021	7/5/2021	10
Building Construction	Building Construction	7/6/2021	4/11/2022	200
Paving	Paving	4/12/2022	4/25/2022	10
Architectural Coating	Architectural Coating	4/26/2022	5/9/2022	10
Finishing and Landscaping	Trenching	5/10/2022	5/23/2022	10

Normalization Calculations

CalEEMod Defaults Construction Duration (Library)	
342	days of construction
0.94	years of construction
11.24	months of construction

Assumed Construction Duration	
6/15/2021	12/15/2022
548	days
18.02	months

Norm Factor: 1.60

CalEEMod Inputs*

Construction Activities	Phase Type	Start Date	End Date	CalEEMod
Site Preparation (Library)	Site Preparation	6/15/2021	6/26/2021	9
Site Preparation Haul (Library)	Site Preparation	6/15/2021	6/26/2021	9
Grading (Library)	Grading	6/27/2021	8/28/2021	45
Asphalt Demolition (MACC)	Demolition	6/15/2021	6/15/2021	1
Asphalt Demolition Haul (MACC)	Demolition	6/15/2021	6/15/2021	1
Grading (MACC)	Grading	6/16/2021	6/22/2021	5
Utilities Trenching (MACC)	Trenching	6/23/2021	7/6/2021	10
Building Construction (MACC)	Building Construction	7/7/2021	9/5/2021	43
Architectural Coating (MACC)	Architectural Coating	9/6/2021	9/8/2021	3
Finishing and Landscaping (MACC)	Trenching	9/9/2021	9/13/2021	3
Utilities Trenching (Library)	Trenching	8/29/2021	9/13/2021	11
Building Construction (Library)	Building Construction	9/14/2021	12/15/2022	328
Paving (Library)	Paving	10/17/2022	11/8/2022	17
Architectural Coating (Library)	Architectural Coating	11/9/2022	12/1/2022	17
Finishing and Landscaping (Library)	Trenching	12/2/2022	12/15/2022	10

* library construction activity default durations were normalized to fit the 18 month construction period by multiplying duration by 1.60 (except for grading phase (given by applicant), utilities trenching (assumed 11 days), and finishing/landscaping (assumed 10 days))

* all MACC construction activity default durations have been based on reasonable estimates to fit a 3 month schedule.

CalEEMod Construction Off-Road Equipment Inputs

**Based on CalEEMod defaults, assumed equipment would not be shared for most conservative results*

General Construction Hours: 8 hours btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Library Construction Activities Equipment List

Equipment	# of Equipment	hr/day	hp	load factor*	total trips
Site Preparation					
Graders	1	8	187	0.41	
Rubber Tired Dozers	1	7	247	0.4	
Tractors/Loaders/Backhoes	1	8	97	0.37	
Worker Trips					8
Vendor Trips					0
Hauling Trips					0
Water Trucks					2
Site Preparation Soil Haul					
no additional equipment required for Site Prep Soil Haul					
Worker Trips					0
Vendor Trips					0
Hauling Trips					875
Grading					
Graders	1	6	187	0.41	
Rubber Tired Dozers	1	6	247	0.4	
Tractors/Loaders/Backhoes	1	7	97	0.37	
Worker Trips					8
Vendor Trips					0
Hauling Trips					0
Water Trucks					2
Utilities Trenching					
Excavators	1	8	158	0.3819	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0
Building Construction					
Cranes	1	6	231	0.29	
Forklifts	1	6	89	0.2	
Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	1	6	97	0.37	
Welders	3	8	46	0.45	
Worker Trips					53
Vendor Trips					21
Hauling Trips					0
Paving					
Cement and Mortar Mixers	1	6	9	0.56	
Pavers	1	6	130	0.42	
Paving Equipment	1	8	132	0.36	
Rollers	1	7	80	0.38	
Tractors/Loaders/Backhoes	1	8	97	0.37	
Worker Trips					13
Vendor Trips					0
Hauling Trips					0
Architectural Coating					
Air Compressors	1	6	78	0.48	
Worker Trips					11
Vendor Trips					0
Hauling Trips					0
Finishing/Landscaping					
Excavators	1	8	158	0.3819	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

CalEEMod Construction Off-Road Equipment Inputs

**Based on CalEEMod defaults, assumed equipment would not be shared for most conservative results*

General Construction Hours: 8 hours btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

MACC Construction Activities Equipment List

Asphalt Demolition

Concrete/Industrial Saws	1	8	81	0.73	
Rubber Tired Dozers	1	8	247	0.4	
Tractors/Loaders/Backhoes	3	8	97	0.37	
Worker Trips					13
Vendor Trips					0
Hauling Trips					0
Water Trucks					2

Asphalt Demolition Debris Haul

no additional equipment required for Demo Haul					
Worker Trips					0
Vendor Trips					0
Hauling Trips					10

Grading

Concrete/Industrial Saws	1	6	187	0.41	
Rubber Tired Dozers	1	6	247	0.4	
Tractors/Loaders/Backhoes	1	7	97	0.37	
Worker Trips					8
Vendor Trips					0
Hauling Trips					102
Water Trucks					2

Utilities Trenching

Excavators	1	8	158	0.3819	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

Building Construction

Cranes	1	6	231	0.29	
Forklifts	1	6	89	0.2	
Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	1	6	97	0.37	
Welders	3	8	46	0.45	
Worker Trips					2
Vendor Trips					1
Hauling Trips					0

Architectural Coating

Air Compressors	1	6	78	0.48	
Worker Trips					1
Vendor Trips					0
Hauling Trips					0

Finishing/Landscaping

Excavators	1	8	158	0.3819	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

Chaffey College Modernization - San Bernardino-South Coast County, Summer

Chaffey College Modernization

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	75.30	1000sqft	0.58	75,300.00	0
Junior College (2Yr)	5.50	1000sqft	0.13	5,500.00	0
Other Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	48.66	1000sqft	1.12	48,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	504.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2015 SCE Sustainability Report

Land Use - library will be 3 stories tall

Construction Phase - normalized construction schedule, see assumptions file for notes

Off-road Equipment - no additional equipment required for Site Prep Soil Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Grading -

Demolition -

Trips and VMT - BC: accounts for MAC and library construction trips separately, assuming 2 vt/day for water trucks

Architectural Coating - only accounts for library and asphalt areas

Vehicle Trips - no new trips

Area Coating - accounts for all area coatings associated with operations (MACC and Library)

Energy Use -

Water And Wastewater - no increase in student capacity

Solid Waste - no new increase in student capacity

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,400.00	37,650.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	121,200.00	112,950.00
tblArchitecturalCoating	ConstArea_Parking	3,016.00	96.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Parking	3016	96
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	9.00

tblConstructionPhase	NumDays	2.00	9.00
tblConstructionPhase	NumDays	4.00	45.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	200.00	43.00
tblConstructionPhase	NumDays	200.00	328.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	PhaseEndDate	7/14/2021	6/26/2021
tblConstructionPhase	PhaseStartDate	7/13/2021	6/15/2021
tblGrading	MaterialExported	0.00	7,000.00
tblGrading	MaterialExported	0.00	410.00
tblGrading	MaterialImported	0.00	410.00
tblLandUse	LotAcreage	1.73	0.58
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
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	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblSolidWaste	SolidWasteGenerationRate	105.04	0.00

tblTripsAndVMT	HaulingTripNumber	103.00	102.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	55.00	53.00
tblTripsAndVMT	WorkerTripNumber	55.00	2.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	3,963,161.83	0.00
tblWater	OutdoorWaterUseRate	6,198,791.57	0.00

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					
2021	4.3030	62.0245	26.7828	0.1280	13.0843	1.8776	14.5653	6.1147	1.7438	7.4800	0.0000	13,180.6942	13,180.6942	1.6210	0.0000	13,221.2181
2022	38.1617	21.3839	24.3948	0.0482	0.8722	0.9438	1.8160	0.2344	0.8964	1.1307	0.0000	4,587.8052	4,587.8052	0.8148	0.0000	4,608.1748
Maximum	38.1617	62.0245	26.7828	0.1280	13.0843	1.8776	14.5653	6.1147	1.7438	7.4800	0.0000	13,180.6942	13,180.6942	1.6210	0.0000	13,221.2181

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					
2021	4.3030	62.0245	26.7828	0.1280	6.7334	1.8776	8.2144	2.9303	1.7438	4.2956	0.0000	13,180.6942	13,180.6942	1.6210	0.0000	13,221.2180
2022	38.1617	21.3839	24.3948	0.0482	0.8059	0.9438	1.7497	0.2181	0.8964	1.1145	0.0000	4,587.8052	4,587.8052	0.8148	0.0000	4,608.1748
Maximum	38.1617	62.0245	26.7828	0.1280	6.7334	1.8776	8.2144	2.9303	1.7438	4.2956	0.0000	13,180.6942	13,180.6942	1.6210	0.0000	13,221.2180

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	45.98	0.00	39.17	50.41	0.00	37.17	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	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222
Mobile	0.0000	0.0000	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	1.7803	0.3003	0.2655	1.8000e-003	0.0000	0.0229	0.0229	0.0000	0.0229	0.0229		360.2105	360.2105	6.9800e-003	6.6000e-003	362.3527

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
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Category	lb/day										lb/day					
Area	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0231	0.2102	0.1765	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041
Mobile	0.0000	0.0000	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	1.7704	0.2103	0.1899	1.2600e-003	0.0000	0.0160	0.0160	0.0000	0.0160	0.0160		252.2341	252.2341	4.9100e-003	4.6200e-003	253.7347

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.56	29.97	28.47	30.00	0.00	29.92	29.92	0.00	29.92	29.92	0.00	29.98	29.98	29.66	30.00	29.98

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
2	Site Preparation Haul (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
3	Grading (Library)	Grading	6/27/2021	8/27/2021	5	45	
4	Asphalt Demolition (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
5	Asphalt Demolition Haul (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
6	Grading (MACC)	Grading	6/16/2021	6/22/2021	5	5	
7	Utilities Trenching (MACC)	Trenching	6/23/2021	7/6/2021	5	10	
8	Building Construction (MACC)	Building Construction	7/7/2021	9/3/2021	5	43	
9	Finishing and Landscaping (MACC)	Trenching	9/6/2021	9/8/2021	5	3	
10	Utilities Trenching (Library)	Trenching	8/29/2021	9/13/2021	5	11	
11	Building Construction (Library)	Building Construction	9/14/2021	12/15/2022	5	328	
12	Paving (Library)	Paving	10/17/2022	11/8/2022	5	17	
13	Architectural Coating (Library)	Architectural Coating	11/9/2022	12/1/2022	5	17	
14	Finishing and Landscaping (Library)	Trenching	12/2/2022	12/15/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,950; Non-Residential Outdoor: 37,650; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating (Library)	Air Compressors	1	6.00	78	0.48
Paving (Library)	Cement and Mortar Mixers	1	6.00	9	0.56
Asphalt Demolition (MACC)	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition Haul (MACC)	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction (Library)	Cranes	1	6.00	231	0.29
Building Construction (MACC)	Cranes	1	6.00	231	0.29
Site Preparation (Library)	Graders	1	8.00	187	0.41
Building Construction (Library)	Forklifts	1	6.00	89	0.20
Building Construction (MACC)	Forklifts	1	6.00	89	0.20
Building Construction (Library)	Generator Sets	1	8.00	84	0.74
Building Construction (MACC)	Generator Sets	1	8.00	84	0.74
Grading (Library)	Graders	1	6.00	187	0.41
Grading (MACC)	Graders	1	6.00	187	0.41
Site Preparation Haul (Library)	Graders	0	8.00	187	0.41
Paving (Library)	Pavers	1	6.00	130	0.42
Site Preparation (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving (Library)	Paving Equipment	1	8.00	132	0.36
Paving (Library)	Rollers	1	7.00	80	0.38
Site Preparation (Library)	Rubber Tired Dozers	1	7.00	247	0.40
Asphalt Demolition (MACC)	Rubber Tired Dozers	1	8.00	247	0.40
Asphalt Demolition Haul (MACC)	Rubber Tired Dozers	0	8.00	247	0.40
Grading (Library)	Rubber Tired Dozers	1	6.00	247	0.40
Grading (MACC)	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation Haul (Library)	Rubber Tired Dozers	0	7.00	247	0.40
Building Construction (Library)	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Building Construction (MACC)	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Asphalt Demolition (MACC)	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Asphalt Demolition Haul (MACC)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading (Library)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading (MACC)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation Haul (Library)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction (Library)	Welders	3	8.00	46	0.45
Building Construction (MACC)	Welders	3	8.00	46	0.45
Utilities Trenching (MACC)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (MACC)	Excavators	1	8.00	158	0.38
Utilities Trenching (Library)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (Library)	Excavators	1	8.00	158	0.38

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
Architectural Coating (Library)	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Library)	7	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (MACC)	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition (MACC)	5	13.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Haul (MACC)	0	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (MACC)	3	8.00	2.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Library)	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Haul (Library)	0	0.00	0.00	875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching (Library)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping (Library)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching (MACC)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping (MACC)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation (Library) - 2021

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578		1,666.5174	1,666.5174	0.5390		1,679.9920

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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0128	3.3000e-004	0.0131	3.6900e-003	3.2000e-004	4.0000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		87.5264	87.5264	2.4900e-003		87.5887
Total	0.0458	0.2180	0.3675	1.4200e-003	0.1022	9.0000e-004	0.1031	0.0274	8.5000e-004	0.0282		144.4443	144.4443	6.0900e-003		144.5965

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					2.4793	0.0000	2.4793	1.2627	0.0000	1.2627			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	2.4793	0.7654	3.2447	1.2627	0.7041	1.9669	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920

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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0120	3.3000e-004	0.0123	3.4900e-003	3.2000e-004	3.8000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		87.5264	87.5264	2.4900e-003		87.5887
Total	0.0458	0.2180	0.3675	1.4200e-003	0.0944	9.0000e-004	0.0953	0.0255	8.5000e-004	0.0263		144.4443	144.4443	6.0900e-003		144.5965

3.3 Site Preparation Haul (Library) - 2021

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
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Category	lb/day										lb/day					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133			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	0.0880	0.0000	0.0880	0.0133	0.0000	0.0133		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	0.5777	22.1751	3.4345	0.0755	1.7014	0.0627	1.7641	0.4665	0.0600	0.5265		8,022.6775	8,022.6775	0.4301		8,033.4288
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	0.5777	22.1751	3.4345	0.0755	1.7014	0.0627	1.7641	0.4665	0.0600	0.5265		8,022.6775	8,022.6775	0.4301		8,033.4288

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					0.0376	0.0000	0.0376	5.6900e-003	0.0000	5.6900e-003			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	0.0376	0.0000	0.0376	5.6900e-003	0.0000	5.6900e-003	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	0.5777	22.1751	3.4345	0.0755	1.5857	0.0627	1.6485	0.4381	0.0600	0.4981		8,022.6775	8,022.6775	0.4301		8,033.4288
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	0.5777	22.1751	3.4345	0.0755	1.5857	0.0627	1.6485	0.4381	0.0600	0.4981		8,022.6775	8,022.6775	0.4301		8,033.4288

3.4 Grading (Library) - 2021

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					4.9144	0.0000	4.9144	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	4.9144	0.6379	5.5523	2.5256	0.5869	3.1125		1,365.0648	1,365.0648	0.4415		1,376.1020

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
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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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0128	3.3000e-004	0.0131	3.6900e-003	3.2000e-004	4.0000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		87.5264	87.5264	2.4900e-003		87.5887
Total	0.0458	0.2180	0.3675	1.4200e-003	0.1022	9.0000e-004	0.1031	0.0274	8.5000e-004	0.0282		144.4443	144.4443	6.0900e-003		144.5965

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					2.1009	0.0000	2.1009	1.0797	0.0000	1.0797			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	2.1009	0.6379	2.7388	1.0797	0.5869	1.6666	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0120	3.3000e-004	0.0123	3.4900e-003	3.2000e-004	3.8000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		87.5264	87.5264	2.4900e-003		87.5887

Total	0.0458	0.2180	0.3675	1.4200e-003	0.0944	9.0000e-004	0.0953	0.0255	8.5000e-004	0.0263		144.4443	144.4443	6.0900e-003		144.5965
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3.5 Asphalt Demolition (MACC) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658

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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0128	3.3000e-004	0.0131	3.6900e-003	3.2000e-004	4.0000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0661	0.0408	0.5382	1.4300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		142.2305	142.2305	4.0500e-003		142.3317
Total	0.0712	0.2337	0.5745	1.9700e-003	0.1581	1.2600e-003	0.1594	0.0422	1.1800e-003	0.0434		199.1483	199.1483	7.6500e-003		199.3395

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

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	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0120	3.3000e-004	0.0123	3.4900e-003	3.2000e-004	3.8000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0661	0.0408	0.5382	1.4300e-003	0.1339	9.3000e-004	0.1349	0.0358	8.6000e-004	0.0366		142.2305	142.2305	4.0500e-003		142.3317
Total	0.0712	0.2337	0.5745	1.9700e-003	0.1459	1.2600e-003	0.1472	0.0392	1.1800e-003	0.0404		199.1483	199.1483	7.6500e-003		199.3395

3.6 Asphalt Demolition Haul (MACC) - 2021

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					2.1613	0.0000	2.1613	0.3272	0.0000	0.3272			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	2.1613	0.0000	2.1613	0.3272	0.0000	0.3272		0.0000	0.0000	0.0000		0.0000
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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	0.0594	2.2809	0.3533	7.7700e-003	0.1750	6.4500e-003	0.1815	0.0480	6.1700e-003	0.0542		825.1897	825.1897	0.0442		826.2955
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	0.0594	2.2809	0.3533	7.7700e-003	0.1750	6.4500e-003	0.1815	0.0480	6.1700e-003	0.0542		825.1897	825.1897	0.0442		826.2955

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					0.9240	0.0000	0.9240	0.1399	0.0000	0.1399			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	0.9240	0.0000	0.9240	0.1399	0.0000	0.1399	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	0.0594	2.2809	0.3533	7.7700e-003	0.1631	6.4500e-003	0.1696	0.0451	6.1700e-003	0.0512		825.1897	825.1897	0.0442		826.2955
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	0.0594	2.2809	0.3533	7.7700e-003	0.1631	6.4500e-003	0.1696	0.0451	6.1700e-003	0.0512		825.1897	825.1897	0.0442		826.2955

3.7 Grading (MACC) - 2021

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					4.9339	0.0000	4.9339	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	4.9339	0.6379	5.5718	2.5285	0.5869	3.1154		1,365.0648	1,365.0648	0.4415		1,376.1020

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	0.1212	4.6530	0.7207	0.0159	0.3570	0.0132	0.3702	0.0979	0.0126	0.1105		1,683.3870	1,683.3870	0.0902		1,685.6429
Vendor	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0128	3.3000e-004	0.0131	3.6900e-003	3.2000e-004	4.0000e-003		56.9179	56.9179	3.6000e-003		57.0078

Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		87.5264	87.5264	2.4900e-003		87.5887
Total	0.1671	4.8710	1.0881	0.0173	0.4592	0.0141	0.4733	0.1253	0.0134	0.1387		1,827.8313	1,827.8313	0.0963		1,830.2394

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					2.1092	0.0000	2.1092	1.0810	0.0000	1.0810			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	2.1092	0.6379	2.7471	1.0810	0.5869	1.6678	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

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	0.1212	4.6530	0.7207	0.0159	0.3327	0.0132	0.3459	0.0919	0.0126	0.1045		1,683.3870	1,683.3870	0.0902		1,685.6429
Vendor	5.1800e-003	0.1929	0.0363	5.4000e-004	0.0120	3.3000e-004	0.0123	3.4900e-003	3.2000e-004	3.8000e-003		56.9179	56.9179	3.6000e-003		57.0078
Worker	0.0407	0.0251	0.3312	8.8000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		87.5264	87.5264	2.4900e-003		87.5887
Total	0.1671	4.8710	1.0881	0.0173	0.4271	0.0141	0.4412	0.1174	0.0134	0.1308		1,827.8313	1,827.8313	0.0963		1,830.2394

3.8 Utilities Trenching (MACC) - 2021

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575

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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
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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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458

3.9 Building Construction (MACC) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

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	2.5900e-003	0.0964	0.0182	2.7000e-004	6.4000e-003	1.7000e-004	6.5700e-003	1.8400e-003	1.6000e-004	2.0000e-003		28.4589	28.4589	1.8000e-003		28.5039
Worker	0.0102	6.2800e-003	0.0828	2.2000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.8816	21.8816	6.2000e-004		21.8972
Total	0.0128	0.1027	0.1010	4.9000e-004	0.0288	3.1000e-004	0.0291	7.7700e-003	2.9000e-004	8.0600e-003		50.3405	50.3405	2.4200e-003		50.4011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

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	2.5900e-003	0.0964	0.0182	2.7000e-004	5.9900e-003	1.7000e-004	6.1600e-003	1.7400e-003	1.6000e-004	1.9000e-003		28.4589	28.4589	1.8000e-003		28.5039
Worker	0.0102	6.2800e-003	0.0828	2.2000e-004	0.0206	1.4000e-004	0.0208	5.5000e-003	1.3000e-004	5.6300e-003		21.8816	21.8816	6.2000e-004		21.8972
Total	0.0128	0.1027	0.1010	4.9000e-004	0.0266	3.1000e-004	0.0269	7.2400e-003	2.9000e-004	7.5300e-003		50.3405	50.3405	2.4200e-003		50.4011

3.10 Finishing and Landscaping (MACC) - 2021

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575

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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458

3.11 Utilities Trenching (Library) - 2021

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575

Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
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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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		32.8224	32.8224	9.3000e-004		32.8458

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

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	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458
Total	0.0152	9.4200e-003	0.1242	3.3000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		32.8224	32.8224	9.3000e-004		32.8458

3.12 Building Construction (Library) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

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	0.0543	2.0252	0.3811	5.6700e-003	0.1345	3.4700e-003	0.1380	0.0387	3.3200e-003	0.0421		597.6376	597.6376	0.0378		598.5817
Worker	0.2693	0.1665	2.1941	5.8200e-003	0.5924	3.7900e-003	0.5962	0.1571	3.4900e-003	0.1606		579.8627	579.8627	0.0165		580.2753
Total	0.3236	2.1916	2.5752	0.0115	0.7269	7.2600e-003	0.7342	0.1958	6.8100e-003	0.2027		1,177.5002	1,177.5002	0.0543		1,178.8570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

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	0.0543	2.0252	0.3811	5.6700e-003	0.1259	3.4700e-003	0.1294	0.0366	3.3200e-003	0.0399		597.6376	597.6376	0.0378		598.5817
Worker	0.2693	0.1665	2.1941	5.8200e-003	0.5461	3.7900e-003	0.5499	0.1457	3.4900e-003	0.1492		579.8627	579.8627	0.0165		580.2753
Total	0.3236	2.1916	2.5752	0.0115	0.6719	7.2600e-003	0.6792	0.1823	6.8100e-003	0.1892		1,177.5002	1,177.5002	0.0543		1,178.8570

3.12 Building Construction (Library) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581

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	0.0506	1.9207	0.3523	5.6200e-003	0.1345	2.9200e-003	0.1374	0.0387	2.7900e-003	0.0415		592.8459	592.8459	0.0365		593.7574
Worker	0.2515	0.1497	2.0156	5.6100e-003	0.5924	3.6800e-003	0.5961	0.1571	3.3900e-003	0.1605		558.9393	558.9393	0.0148		559.3094
Total	0.3021	2.0704	2.3680	0.0112	0.7269	6.6000e-003	0.7335	0.1958	6.1800e-003	0.2020		1,151.7852	1,151.7852	0.0513		1,153.0668

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
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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	0.0506	1.9207	0.3523	5.6200e-003	0.1259	2.9200e-003	0.1288	0.0366	2.7900e-003	0.0394		592.8459	592.8459	0.0365		593.7574
Worker	0.2515	0.1497	2.0156	5.6100e-003	0.5461	3.6800e-003	0.5497	0.1457	3.3900e-003	0.1491		558.9393	558.9393	0.0148		559.3094
Total	0.3021	2.0704	2.3680	0.0112	0.6719	6.6000e-003	0.6785	0.1823	6.1800e-003	0.1885		1,151.7852	1,151.7852	0.0513		1,153.0668

3.13 Paving (Library) - 2022

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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	6.1600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6938	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

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	0.0617	0.0367	0.4944	1.3800e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		137.0983	137.0983	3.6300e-003		137.1891
Total	0.0617	0.0367	0.4944	1.3800e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		137.0983	137.0983	3.6300e-003		137.1891

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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	6.1600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6938	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

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	0.0617	0.0367	0.4944	1.3800e-003	0.1339	9.0000e-004	0.1348	0.0358	8.3000e-004	0.0366		137.0983	137.0983	3.6300e-003		137.1891
Total	0.0617	0.0367	0.4944	1.3800e-003	0.1339	9.0000e-004	0.1348	0.0358	8.3000e-004	0.0366		137.0983	137.0983	3.6300e-003		137.1891

3.14 Architectural Coating (Library) - 2022

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	35.9542					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	36.1588	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	0.0522	0.0311	0.4183	1.1600e-003	0.1230	7.6000e-004	0.1237	0.0326	7.0000e-004	0.0333		116.0063	116.0063	3.0700e-003		116.0831
Total	0.0522	0.0311	0.4183	1.1600e-003	0.1230	7.6000e-004	0.1237	0.0326	7.0000e-004	0.0333		116.0063	116.0063	3.0700e-003		116.0831

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	35.9542					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	36.1588	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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	0.0522	0.0311	0.4183	1.1600e-003	0.1133	7.6000e-004	0.1141	0.0303	7.0000e-004	0.0310		116.0063	116.0063	3.0700e-003		116.0831
Total	0.0522	0.0311	0.4183	1.1600e-003	0.1133	7.6000e-004	0.1141	0.0303	7.0000e-004	0.0310		116.0063	116.0063	3.0700e-003		116.0831

3.15 Finishing and Landscaping (Library) - 2022

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	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794		502.5154	502.5154	0.1625		506.5784

Total	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794		502.5154	502.5154	0.1625		506.5784
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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	0.0142	8.4700e-003	0.1141	3.2000e-004	0.0335	2.1000e-004	0.0337	8.8900e-003	1.9000e-004	9.0800e-003		31.6381	31.6381	8.4000e-004		31.6590
Total	0.0142	8.4700e-003	0.1141	3.2000e-004	0.0335	2.1000e-004	0.0337	8.8900e-003	1.9000e-004	9.0800e-003		31.6381	31.6381	8.4000e-004		31.6590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794	0.0000	502.5154	502.5154	0.1625		506.5784
Total	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794	0.0000	502.5154	502.5154	0.1625		506.5784

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	0.0142	8.4700e-003	0.1141	3.2000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	1.9000e-004	8.4400e-003		31.6381	31.6381	8.4000e-004		31.6590
Total	0.0142	8.4700e-003	0.1141	3.2000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	1.9000e-004	8.4400e-003		31.6381	31.6381	8.4000e-004		31.6590

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Other Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Other Non-Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive 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	0.0231	0.2102	0.1765	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041
NaturalGas Unmitigated	0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222

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)	208.397	2.2500e-003	0.0204	0.0172	1.2000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003		24.5173	24.5173	4.7000e-004	4.5000e-004	24.6630
Junior College (2Yr)	2853.15	0.0308	0.2797	0.2350	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.6645	335.6645	6.4300e-003	6.1500e-003	337.6592
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222

Mitigated

	Natural Gas 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)	1.99782	0.0216	0.1959	0.1645	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.0379	235.0379	4.5000e-003	4.3100e-003	236.4347
Junior College (2Yr)	0.145923	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1675	17.1675	3.3000e-004	3.1000e-004	17.2695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0231	0.2102	0.1766	1.2700e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041

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
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Category	lb/day										lb/day				
Mitigated	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005	0.0306
Unmitigated	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005	0.0306

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

Total	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
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7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
 Install Low Flow Kitchen Faucet
 Install Low Flow Toilet
 Install Low Flow Shower
 Use Water Efficient Irrigation System

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chaffey College Modernization - San Bernardino-South Coast County, Winter

Chaffey College Modernization

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	75.30	1000sqft	0.58	75,300.00	0
Junior College (2Yr)	5.50	1000sqft	0.13	5,500.00	0
Other Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	48.66	1000sqft	1.12	48,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	504.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2015 SCE Sustainability Report

Land Use - library will be 3 stories tall

Construction Phase - normalized construction schedule, see assumptions file for notes

Off-road Equipment - no additional equipment required for Site Prep Soil Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Grading -

Demolition -

Trips and VMT - BC: accounts for MAC and library construction trips separately, assuming 2 vt/day for water trucks

Architectural Coating - only accounts for library and asphalt areas

Vehicle Trips - no new trips

Area Coating - accounts for all area coatings associated with operations (MACC and Library)

Energy Use -

Water And Wastewater - no increase in student capacity

Solid Waste - no new increase in student capacity

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,400.00	37,650.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	121,200.00	112,950.00
tblArchitecturalCoating	ConstArea_Parking	3,016.00	96.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Parking	3016	96
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	9.00
tblConstructionPhase	NumDays	2.00	9.00
tblConstructionPhase	NumDays	4.00	45.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	200.00	43.00
tblConstructionPhase	NumDays	200.00	328.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	PhaseEndDate	7/14/2021	6/26/2021
tblConstructionPhase	PhaseStartDate	7/13/2021	6/15/2021
tblGrading	MaterialExported	0.00	7,000.00
tblGrading	MaterialExported	0.00	410.00
tblGrading	MaterialImported	0.00	410.00
tblLandUse	LotAcreage	1.73	0.58
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
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	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblSolidWaste	SolidWasteGenerationRate	105.04	0.00
tblTripsAndVMT	HaulingTripNumber	103.00	102.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	55.00	53.00
tblTripsAndVMT	WorkerTripNumber	55.00	2.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	3,963,161.83	0.00
tblWater	OutdoorWaterUseRate	6,198,791.57	0.00

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					
2021	4.3326	62.1157	27.1769	0.1256	13.0843	1.8786	14.5663	6.1147	1.7448	7.4810	0.0000	12,920.7520	12,920.7520	1.6617	0.0000	12,962.2948
2022	38.1663	21.3709	24.0016	0.0473	0.8722	0.9439	1.8161	0.2344	0.8964	1.1308	0.0000	4,493.0162	4,493.0162	0.8166	0.0000	4,513.4298
Maximum	38.1663	62.1157	27.1769	0.1256	13.0843	1.8786	14.5663	6.1147	1.7448	7.4810	0.0000	12,920.7520	12,920.7520	1.6617	0.0000	12,962.2948

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					
2021	4.3326	62.1157	27.1769	0.1256	6.7334	1.8786	8.2155	2.9303	1.7448	4.2966	0.0000	12,920.7520	12,920.7520	1.6617	0.0000	12,962.2948
2022	38.1663	21.3709	24.0016	0.0473	0.8059	0.9439	1.7498	0.2181	0.8964	1.1145	0.0000	4,493.0162	4,493.0162	0.8166	0.0000	4,513.4298
Maximum	38.1663	62.1157	27.1769	0.1256	6.7334	1.8786	8.2155	2.9303	1.7448	4.2966	0.0000	12,920.7520	12,920.7520	1.6617	0.0000	12,962.2948

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	45.98	0.00	39.17	50.41	0.00	37.17	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	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222
Mobile	0.0000	0.0000	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	1.7803	0.3003	0.2655	1.8000e-003	0.0000	0.0229	0.0229	0.0000	0.0229	0.0229		360.2105	360.2105	6.9800e-003	6.6000e-003	362.3527

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	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0231	0.2102	0.1765	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041
Mobile	0.0000	0.0000	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	1.7704	0.2103	0.1899	1.2600e-003	0.0000	0.0160	0.0160	0.0000	0.0160	0.0160		252.2341	252.2341	4.9100e-003	4.6200e-003	253.7347

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.56	29.97	28.47	30.00	0.00	29.92	29.92	0.00	29.92	29.92	0.00	29.98	29.98	29.66	30.00	29.98

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
2	Site Preparation Haul (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
3	Grading (Library)	Grading	6/27/2021	8/27/2021	5	45	
4	Asphalt Demolition (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
5	Asphalt Demolition Haul (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
6	Grading (MACC)	Grading	6/16/2021	6/22/2021	5	5	
7	Utilities Trenching (MACC)	Trenching	6/23/2021	7/6/2021	5	10	
8	Building Construction (MACC)	Building Construction	7/7/2021	9/3/2021	5	43	
9	Finishing and Landscaping (MACC)	Trenching	9/6/2021	9/8/2021	5	3	
10	Utilities Trenching (Library)	Trenching	8/29/2021	9/13/2021	5	11	

11	Building Construction (Library)	Building Construction	9/14/2021	12/15/2022	5	328
12	Paving (Library)	Paving	10/17/2022	11/8/2022	5	17
13	Architectural Coating (Library)	Architectural Coating	11/9/2022	12/1/2022	5	17
14	Finishing and Landscaping (Library)	Trenching	12/2/2022	12/15/2022	5	10

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,950; Non-Residential Outdoor: 37,650; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating (Library)	Air Compressors	1	6.00	78	0.48
Paving (Library)	Cement and Mortar Mixers	1	6.00	9	0.56
Asphalt Demolition (MACC)	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition Haul (MACC)	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction (Library)	Cranes	1	6.00	231	0.29
Building Construction (MACC)	Cranes	1	6.00	231	0.29
Site Preparation (Library)	Graders	1	8.00	187	0.41
Building Construction (Library)	Forklifts	1	6.00	89	0.20
Building Construction (MACC)	Forklifts	1	6.00	89	0.20
Building Construction (Library)	Generator Sets	1	8.00	84	0.74
Building Construction (MACC)	Generator Sets	1	8.00	84	0.74
Grading (Library)	Graders	1	6.00	187	0.41
Grading (MACC)	Graders	1	6.00	187	0.41
Site Preparation Haul (Library)	Graders	0	8.00	187	0.41
Paving (Library)	Pavers	1	6.00	130	0.42
Site Preparation (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving (Library)	Paving Equipment	1	8.00	132	0.36
Paving (Library)	Rollers	1	7.00	80	0.38

Site Preparation (Library)	Rubber Tired Dozers	1	7.00	247	0.40
Asphalt Demolition (MACC)	Rubber Tired Dozers	1	8.00	247	0.40
Asphalt Demolition Haul (MACC)	Rubber Tired Dozers	0	8.00	247	0.40
Grading (Library)	Rubber Tired Dozers	1	6.00	247	0.40
Grading (MACC)	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation Haul (Library)	Rubber Tired Dozers	0	7.00	247	0.40
Building Construction (Library)	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction (MACC)	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Asphalt Demolition (MACC)	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Asphalt Demolition Haul (MACC)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading (Library)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading (MACC)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation Haul (Library)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction (Library)	Welders	3	8.00	46	0.45
Building Construction (MACC)	Welders	3	8.00	46	0.45
Utilities Trenching (MACC)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (MACC)	Excavators	1	8.00	158	0.38
Utilities Trenching (Library)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (Library)	Excavators	1	8.00	158	0.38

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
Architectural Coating (Library)	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Library)	7	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (MACC)	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition (MACC)	5	13.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Haul (MACC)	0	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (MACC)	3	8.00	2.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Library)	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Haul (Library)	0	0.00	0.00	875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching (Library)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping (Library)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching (MACC)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping (MACC)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation (Library) - 2021

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578		1,666.5174	1,666.5174	0.5390		1,679.9920

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0128	3.4000e-004	0.0132	3.6900e-003	3.3000e-004	4.0100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.5198	78.5198	2.1900e-003		78.5745
Total	0.0462	0.2173	0.3141	1.3100e-003	0.1022	9.1000e-004	0.1031	0.0274	8.6000e-004	0.0283		133.2268	133.2268	6.1800e-003		133.3812

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					2.4793	0.0000	2.4793	1.2627	0.0000	1.2627			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	2.4793	0.7654	3.2447	1.2627	0.7041	1.9669	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0120	3.4000e-004	0.0123	3.4900e-003	3.3000e-004	3.8100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		78.5198	78.5198	2.1900e-003		78.5745
Total	0.0462	0.2173	0.3141	1.3100e-003	0.0944	9.1000e-004	0.0953	0.0255	8.6000e-004	0.0263		133.2268	133.2268	6.1800e-003		133.3812

3.3 Site Preparation Haul (Library) - 2021

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					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133			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	0.0880	0.0000	0.0880	0.0133	0.0000	0.0133		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	0.6038	22.2584	3.9225	0.0736	1.7014	0.0636	1.7650	0.4665	0.0608	0.5273		7,812.4253	7,812.4253	0.4670		7,824.1010
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	0.6038	22.2584	3.9225	0.0736	1.7014	0.0636	1.7650	0.4665	0.0608	0.5273		7,812.4253	7,812.4253	0.4670		7,824.1010
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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					0.0376	0.0000	0.0376	5.6900e-003	0.0000	5.6900e-003			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	0.0376	0.0000	0.0376	5.6900e-003	0.0000	5.6900e-003	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	0.6038	22.2584	3.9225	0.0736	1.5857	0.0636	1.6493	0.4381	0.0608	0.4989		7,812.4253	7,812.4253	0.4670		7,824.1010
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	0.6038	22.2584	3.9225	0.0736	1.5857	0.0636	1.6493	0.4381	0.0608	0.4989		7,812.4253	7,812.4253	0.4670		7,824.1010

3.4 Grading (Library) - 2021

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					4.9144	0.0000	4.9144	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	4.9144	0.6379	5.5523	2.5256	0.5869	3.1125		1,365.0648	1,365.0648	0.4415		1,376.1020

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0128	3.4000e-004	0.0132	3.6900e-003	3.3000e-004	4.0100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.5198	78.5198	2.1900e-003		78.5745
Total	0.0462	0.2173	0.3141	1.3100e-003	0.1022	9.1000e-004	0.1031	0.0274	8.6000e-004	0.0283		133.2268	133.2268	6.1800e-003		133.3812

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					2.1009	0.0000	2.1009	1.0797	0.0000	1.0797			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	2.1009	0.6379	2.7388	1.0797	0.5869	1.6666	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0120	3.4000e-004	0.0123	3.4900e-003	3.3000e-004	3.8100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		78.5198	78.5198	2.1900e-003		78.5745
Total	0.0462	0.2173	0.3141	1.3100e-003	0.0944	9.1000e-004	0.0953	0.0255	8.6000e-004	0.0263		133.2268	133.2268	6.1800e-003		133.3812

3.5 Asphalt Demolition (MACC) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0128	3.4000e-004	0.0132	3.6900e-003	3.3000e-004	4.0100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0662	0.0429	0.4414	1.2800e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		127.5947	127.5947	3.5500e-003		127.6835
Total	0.0717	0.2338	0.4839	1.8000e-003	0.1581	1.2700e-003	0.1594	0.0422	1.1900e-003	0.0434		182.3017	182.3017	7.5400e-003		182.4902

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

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	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0120	3.4000e-004	0.0123	3.4900e-003	3.3000e-004	3.8100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0662	0.0429	0.4414	1.2800e-003	0.1339	9.3000e-004	0.1349	0.0358	8.6000e-004	0.0366		127.5947	127.5947	3.5500e-003		127.6835
Total	0.0717	0.2338	0.4839	1.8000e-003	0.1459	1.2700e-003	0.1472	0.0392	1.1900e-003	0.0404		182.3017	182.3017	7.5400e-003		182.4902

3.6 Asphalt Demolition Haul (MACC) - 2021

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					2.1613	0.0000	2.1613	0.3272	0.0000	0.3272			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	2.1613	0.0000	2.1613	0.3272	0.0000	0.3272		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	0.0621	2.2894	0.4035	7.5700e-003	0.1750	6.5400e-003	0.1815	0.0480	6.2600e-003	0.0542		803.5637	803.5637	0.0480		804.7647

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	0.0621	2.2894	0.4035	7.5700e-003	0.1750	6.5400e-003	0.1815	0.0480	6.2600e-003	0.0542		803.5637	803.5637	0.0480		804.7647

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					0.9240	0.0000	0.9240	0.1399	0.0000	0.1399			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	0.9240	0.0000	0.9240	0.1399	0.0000	0.1399	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	0.0621	2.2894	0.4035	7.5700e-003	0.1631	6.5400e-003	0.1696	0.0451	6.2600e-003	0.0513		803.5637	803.5637	0.0480		804.7647
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	0.0621	2.2894	0.4035	7.5700e-003	0.1631	6.5400e-003	0.1696	0.0451	6.2600e-003	0.0513		803.5637	803.5637	0.0480		804.7647

3.7 Grading (MACC) - 2021

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					4.9339	0.0000	4.9339	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	4.9339	0.6379	5.5718	2.5285	0.5869	3.1154		1,365.0648	1,365.0648	0.4415		1,376.1020

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	0.1267	4.6705	0.8231	0.0154	0.3570	0.0133	0.3704	0.0979	0.0128	0.1106		1,639.2700	1,639.2700	0.0980		1,641.7199
Vendor	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0128	3.4000e-004	0.0132	3.6900e-003	3.3000e-004	4.0100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.5198	78.5198	2.1900e-003		78.5745
Total	0.1729	4.8877	1.1372	0.0167	0.4592	0.0143	0.4735	0.1253	0.0136	0.1389		1,772.4969	1,772.4969	0.1042		1,775.1011

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					2.1092	0.0000	2.1092	1.0810	0.0000	1.0810			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	2.1092	0.6379	2.7471	1.0810	0.5869	1.6678	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

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	0.1267	4.6705	0.8231	0.0154	0.3327	0.0133	0.3461	0.0919	0.0128	0.1047		1,639.2700	1,639.2700	0.0980		1,641.7199
Vendor	5.4900e-003	0.1908	0.0425	5.2000e-004	0.0120	3.4000e-004	0.0123	3.4900e-003	3.3000e-004	3.8100e-003		54.7070	54.7070	3.9900e-003		54.8067
Worker	0.0407	0.0264	0.2717	7.9000e-004	0.0824	5.7000e-004	0.0830	0.0220	5.3000e-004	0.0225		78.5198	78.5198	2.1900e-003		78.5745
Total	0.1729	4.8877	1.1372	0.0167	0.4271	0.0143	0.4414	0.1174	0.0136	0.1310		1,772.4969	1,772.4969	0.1042		1,775.1011

3.8 Utilities Trenching (MACC) - 2021

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575

Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
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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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654

3.9 Building Construction (MACC) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

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
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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	0.0000
Vendor	2.7400e-003	0.0954	0.0212	2.6000e-004	6.4000e-003	1.7000e-004	6.5700e-003	1.8400e-003	1.6000e-004	2.0100e-003	27.3535	27.3535	1.9900e-003		27.4034
Worker	0.0102	6.6100e-003	0.0679	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003	19.6300	19.6300	5.5000e-004		19.6436
Total	0.0129	0.1020	0.0891	4.6000e-004	0.0288	3.1000e-004	0.0291	7.7700e-003	2.9000e-004	8.0700e-003	46.9835	46.9835	2.5400e-003		47.0470

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

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	2.7400e-003	0.0954	0.0212	2.6000e-004	5.9900e-003	1.7000e-004	6.1600e-003	1.7400e-003	1.6000e-004	1.9100e-003		27.3535	27.3535	1.9900e-003		27.4034

Worker	0.0102	6.6100e-003	0.0679	2.0000e-004	0.0206	1.4000e-004	0.0208	5.5000e-003	1.3000e-004	5.6300e-003		19.6300	19.6300	5.5000e-004		19.6436
Total	0.0129	0.1020	0.0891	4.6000e-004	0.0266	3.1000e-004	0.0269	7.2400e-003	2.9000e-004	7.5400e-003		46.9835	46.9835	2.5400e-003		47.0470

3.10 Finishing and Landscaping (MACC) - 2021

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575

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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654

3.11 Utilities Trenching (Library) - 2021

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
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Category	lb/day										lb/day				
Off-Road	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626	506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626	506.7575

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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.4449	29.4449	8.2000e-004		29.4654

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	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575

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	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654
Total	0.0153	9.9100e-003	0.1019	3.0000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	2.0000e-004	8.4500e-003		29.4449	29.4449	8.2000e-004		29.4654

3.12 Building Construction (Library) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

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	0.0576	2.0036	0.4458	5.4500e-003	0.1345	3.5700e-003	0.1381	0.0387	3.4100e-003	0.0421		574.4238	574.4238	0.0419		575.4703
Worker	0.2699	0.1751	1.7997	5.2200e-003	0.5924	3.7900e-003	0.5962	0.1571	3.4900e-003	0.1606		520.1938	520.1938	0.0145		520.5558
Total	0.3275	2.1787	2.2454	0.0107	0.7269	7.3600e-003	0.7343	0.1958	6.9000e-003	0.2027		1,094.6175	1,094.6175	0.0563		1,096.0261

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

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	0.0576	2.0036	0.4458	5.4500e-003	0.1259	3.5700e-003	0.1295	0.0366	3.4100e-003	0.0400		574.4238	574.4238	0.0419		575.4703
Worker	0.2699	0.1751	1.7997	5.2200e-003	0.5461	3.7900e-003	0.5499	0.1457	3.4900e-003	0.1492		520.1938	520.1938	0.0145		520.5558
Total	0.3275	2.1787	2.2454	0.0107	0.6719	7.3600e-003	0.6793	0.1823	6.9000e-003	0.1892		1,094.6175	1,094.6175	0.0563		1,096.0261

3.12 Building Construction (Library) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581

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	0.0538	1.8981	0.4138	5.4000e-003	0.1345	3.0000e-003	0.1375	0.0387	2.8700e-003	0.0416		569.6381	569.6381	0.0405		570.6500
Worker	0.2527	0.1573	1.6505	5.0300e-003	0.5924	3.6800e-003	0.5961	0.1571	3.3900e-003	0.1605		501.4574	501.4574	0.0130		501.7823

Total	0.3065	2.0555	2.0643	0.0104	0.7269	6.6800e-003	0.7336	0.1958	6.2600e-003	0.2021		1,071.0955	1,071.0955	0.0535		1,072.4323
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

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	0.0538	1.8981	0.4138	5.4000e-003	0.1259	3.0000e-003	0.1289	0.0366	2.8700e-003	0.0395		569.6381	569.6381	0.0405		570.6500
Worker	0.2527	0.1573	1.6505	5.0300e-003	0.5461	3.6800e-003	0.5497	0.1457	3.3900e-003	0.1491		501.4574	501.4574	0.0130		501.7823
Total	0.3065	2.0555	2.0643	0.0104	0.6719	6.6800e-003	0.6786	0.1823	6.2600e-003	0.1886		1,071.0955	1,071.0955	0.0535		1,072.4323

3.13 Paving (Library) - 2022

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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	6.1600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6938	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

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	0.0620	0.0386	0.4048	1.2300e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		122.9990	122.9990	3.1900e-003		123.0787
Total	0.0620	0.0386	0.4048	1.2300e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		122.9990	122.9990	3.1900e-003		123.0787

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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	6.1600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6938	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

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	0.0620	0.0386	0.4048	1.2300e-003	0.1339	9.0000e-004	0.1348	0.0358	8.3000e-004	0.0366		122.9990	122.9990	3.1900e-003		123.0787
Total	0.0620	0.0386	0.4048	1.2300e-003	0.1339	9.0000e-004	0.1348	0.0358	8.3000e-004	0.0366		122.9990	122.9990	3.1900e-003		123.0787

3.14 Architectural Coating (Library) - 2022

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	35.9542					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	36.1588	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	0.0524	0.0327	0.3426	1.0400e-003	0.1230	7.6000e-004	0.1237	0.0326	7.0000e-004	0.0333		104.0761	104.0761	2.7000e-003		104.1435
Total	0.0524	0.0327	0.3426	1.0400e-003	0.1230	7.6000e-004	0.1237	0.0326	7.0000e-004	0.0333		104.0761	104.0761	2.7000e-003		104.1435

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	35.9542					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	36.1588	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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	0.0524	0.0327	0.3426	1.0400e-003	0.1133	7.6000e-004	0.1141	0.0303	7.0000e-004	0.0310		104.0761	104.0761	2.7000e-003		104.1435
Total	0.0524	0.0327	0.3426	1.0400e-003	0.1133	7.6000e-004	0.1141	0.0303	7.0000e-004	0.0310		104.0761	104.0761	2.7000e-003		104.1435

3.15 Finishing and Landscaping (Library) - 2022

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	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794		502.5154	502.5154	0.1625		506.5784
Total	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794		502.5154	502.5154	0.1625		506.5784

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	0.0143	8.9100e-003	0.0934	2.8000e-004	0.0335	2.1000e-004	0.0337	8.8900e-003	1.9000e-004	9.0800e-003		28.3844	28.3844	7.4000e-004		28.4028
Total	0.0143	8.9100e-003	0.0934	2.8000e-004	0.0335	2.1000e-004	0.0337	8.8900e-003	1.9000e-004	9.0800e-003		28.3844	28.3844	7.4000e-004		28.4028

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	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794	0.0000	502.5154	502.5154	0.1625		506.5784
Total	0.2034	1.7859	3.2714	5.1900e-003		0.0864	0.0864		0.0794	0.0794	0.0000	502.5154	502.5154	0.1625		506.5784

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	0.0143	8.9100e-003	0.0934	2.8000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	1.9000e-004	8.4400e-003		28.3844	28.3844	7.4000e-004		28.4028
Total	0.0143	8.9100e-003	0.0934	2.8000e-004	0.0309	2.1000e-004	0.0311	8.2500e-003	1.9000e-004	8.4400e-003		28.3844	28.3844	7.4000e-004		28.4028

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	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Other Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

Other Non-Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive 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	0.0231	0.2102	0.1765	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041
NaturalGas Unmitigated	0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222

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)	208.397	2.2500e-003	0.0204	0.0172	1.2000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003		24.5173	24.5173	4.7000e-004	4.5000e-004	24.6630
Junior College (2Yr)	2853.15	0.0308	0.2797	0.2350	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.6645	335.6645	6.4300e-003	6.1500e-003	337.6592
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0330	0.3002	0.2521	1.8000e-003		0.0228	0.0228		0.0228	0.0228		360.1818	360.1818	6.9000e-003	6.6000e-003	362.3222

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)	1.99782	0.0216	0.1959	0.1645	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.0379	235.0379	4.5000e-003	4.3100e-003	236.4347
Junior College (2Yr)	0.145923	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1675	17.1675	3.3000e-004	3.1000e-004	17.2695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0231	0.2102	0.1766	1.2700e-003		0.0160	0.0160		0.0160	0.0160		252.2054	252.2054	4.8300e-003	4.6200e-003	253.7041

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	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Unmitigated	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

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
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SubCategory	lb/day										lb/day				
Architectural Coating	0.1284					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000
Consumer Products	1.6176					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005	0.0306
Total	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005	0.0306

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	1.7473	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chaffey College Modernization - San Bernardino-South Coast County, Annual

Chaffey College Modernization

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	75.30	1000sqft	0.58	75,300.00	0
Junior College (2Yr)	5.50	1000sqft	0.13	5,500.00	0
Other Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	48.66	1000sqft	1.12	48,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	504.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2015 SCE Sustainability Report

Land Use - library will be 3 stories tall

Construction Phase - normalized construction schedule, see assumptions file for notes

Off-road Equipment - no additional equipment required for Site Prep Soil Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment - assuming 1 excavator for trenching

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Grading -

Demolition -

Trips and VMT - BC: accounts for MAC and library construction trips separately, assuming 2 vt/day for water trucks

Architectural Coating - only accounts for library and asphalt areas

Vehicle Trips - no new trips

Area Coating - accounts for all area coatings associated with operations (MACC and Library)

Energy Use -

Water And Wastewater - no increase in student capacity

Solid Waste - no new increase in student capacity

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,400.00	37,650.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	121,200.00	112,950.00
tblArchitecturalCoating	ConstArea_Parking	3,016.00	96.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Parking	3016	96
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	9.00

tblConstructionPhase	NumDays	2.00	9.00
tblConstructionPhase	NumDays	4.00	45.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	200.00	43.00
tblConstructionPhase	NumDays	200.00	328.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	NumDays	10.00	17.00
tblConstructionPhase	PhaseEndDate	7/14/2021	6/26/2021
tblConstructionPhase	PhaseStartDate	7/13/2021	6/15/2021
tblGrading	MaterialExported	0.00	7,000.00
tblGrading	MaterialExported	0.00	410.00
tblGrading	MaterialImported	0.00	410.00
tblLandUse	LotAcreage	1.73	0.58
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
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	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblSolidWaste	SolidWasteGenerationRate	105.04	0.00

tblTripsAndVMT	HaulingTripNumber	103.00	102.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	55.00	53.00
tblTripsAndVMT	WorkerTripNumber	55.00	2.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	3,963,161.83	0.00
tblWater	OutdoorWaterUseRate	6,198,791.57	0.00

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					
2021	0.1701	1.5166	1.1485	2.7100e-003	0.1912	0.0636	0.2548	0.0877	0.0604	0.1481	0.0000	236.6794	236.6794	0.0383	0.0000	237.6357
2022	0.5553	1.8973	1.9618	4.2600e-003	0.0912	0.0782	0.1695	0.0246	0.0754	0.1000	0.0000	366.1721	366.1721	0.0493	0.0000	367.4047
Maximum	0.5553	1.8973	1.9618	4.2600e-003	0.1912	0.0782	0.2548	0.0877	0.0754	0.1481	0.0000	366.1721	366.1721	0.0493	0.0000	367.4047

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					
2021	0.1701	1.5166	1.1485	2.7100e-003	0.1020	0.0636	0.1656	0.0431	0.0604	0.1035	0.0000	236.6792	236.6792	0.0383	0.0000	237.6355
2022	0.5553	1.8973	1.9618	4.2600e-003	0.0844	0.0782	0.1626	0.0229	0.0754	0.0984	0.0000	366.1718	366.1718	0.0493	0.0000	367.4044

Maximum	0.5553	1.8973	1.9618	4.2600e-003	0.1020	0.0782	0.1656	0.0431	0.0754	0.1035	0.0000	366.1718	366.1718	0.0493	0.0000	367.4044
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	34.01	0.00	22.64	41.25	0.00	18.67	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-15-2021	9-14-2021	0.9549	0.9549
2	9-15-2021	12-14-2021	0.5836	0.5836
3	12-15-2021	3-14-2022	0.5395	0.5395
4	3-15-2022	6-14-2022	0.5429	0.5429
5	6-15-2022	9-14-2022	0.5429	0.5429
6	9-15-2022	9-30-2022	0.0944	0.0944
		Highest	0.9549	0.9549

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	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003
Energy	6.0300e-003	0.0548	0.0460	3.3000e-004		4.1600e-003	4.1600e-003		4.1600e-003	4.1600e-003	0.0000	205.3165	205.3165	9.5200e-003	2.8300e-003	206.3966
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3248	0.0548	0.0477	3.3000e-004	0.0000	4.1700e-003	4.1700e-003	0.0000	4.1700e-003	4.1700e-003	0.0000	205.3197	205.3197	9.5300e-003	2.8300e-003	206.4001

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
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Category	tons/yr										MT/yr					
Area	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003
Energy	4.2200e-003	0.0384	0.0322	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003	0.0000	176.5134	176.5134	8.5500e-003	2.3700e-003	177.4329
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3230	0.0384	0.0339	2.3000e-004	0.0000	2.9300e-003	2.9300e-003	0.0000	2.9300e-003	2.9300e-003	0.0000	176.5167	176.5167	8.5600e-003	2.3700e-003	177.4364

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.56	29.96	28.92	30.30	0.00	29.74	29.74	0.00	29.74	29.74	0.00	14.03	14.03	10.18	16.25	14.03

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
2	Site Preparation Haul (Library)	Site Preparation	6/15/2021	6/26/2021	5	9	
3	Grading (Library)	Grading	6/27/2021	8/27/2021	5	45	
4	Asphalt Demolition (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
5	Asphalt Demolition Haul (MACC)	Demolition	6/15/2021	6/15/2021	5	1	
6	Grading (MACC)	Grading	6/16/2021	6/22/2021	5	5	
7	Utilities Trenching (MACC)	Trenching	6/23/2021	7/6/2021	5	10	
8	Building Construction (MACC)	Building Construction	7/7/2021	9/3/2021	5	43	
9	Finishing and Landscaping (MACC)	Trenching	9/6/2021	9/8/2021	5	3	
10	Utilities Trenching (Library)	Trenching	8/29/2021	9/13/2021	5	11	
11	Building Construction (Library)	Building Construction	9/14/2021	12/15/2022	5	328	
12	Paving (Library)	Paving	10/17/2022	11/8/2022	5	17	
13	Architectural Coating (Library)	Architectural Coating	11/9/2022	12/1/2022	5	17	

14	Finishing and Landscaping (Library)	Trenching	12/2/2022	12/15/2022	5	10
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,950; Non-Residential Outdoor: 37,650; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating (Library)	Air Compressors	1	6.00	78	0.48
Paving (Library)	Cement and Mortar Mixers	1	6.00	9	0.56
Asphalt Demolition (MACC)	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition Haul (MACC)	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction (Library)	Cranes	1	6.00	231	0.29
Building Construction (MACC)	Cranes	1	6.00	231	0.29
Site Preparation (Library)	Graders	1	8.00	187	0.41
Building Construction (Library)	Forklifts	1	6.00	89	0.20
Building Construction (MACC)	Forklifts	1	6.00	89	0.20
Building Construction (Library)	Generator Sets	1	8.00	84	0.74
Building Construction (MACC)	Generator Sets	1	8.00	84	0.74
Grading (Library)	Graders	1	6.00	187	0.41
Grading (MACC)	Graders	1	6.00	187	0.41
Site Preparation Haul (Library)	Graders	0	8.00	187	0.41
Paving (Library)	Pavers	1	6.00	130	0.42
Site Preparation (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving (Library)	Paving Equipment	1	8.00	132	0.36
Paving (Library)	Rollers	1	7.00	80	0.38
Site Preparation (Library)	Rubber Tired Dozers	1	7.00	247	0.40
Asphalt Demolition (MACC)	Rubber Tired Dozers	1	8.00	247	0.40
Asphalt Demolition Haul (MACC)	Rubber Tired Dozers	0	8.00	247	0.40
Grading (Library)	Rubber Tired Dozers	1	6.00	247	0.40

Grading (MACC)	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation Haul (Library)	Rubber Tired Dozers	0	7.00	247	0.40
Building Construction (Library)	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction (MACC)	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Asphalt Demolition (MACC)	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Asphalt Demolition Haul (MACC)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading (Library)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading (MACC)	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving (Library)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation Haul (Library)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction (Library)	Welders	3	8.00	46	0.45
Building Construction (MACC)	Welders	3	8.00	46	0.45
Utilities Trenching (MACC)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (MACC)	Excavators	1	8.00	158	0.38
Utilities Trenching (Library)	Excavators	1	8.00	158	0.38
Finishing and Landscaping (Library)	Excavators	1	8.00	158	0.38

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
Architectural Coating (Library)	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Library)	7	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (MACC)	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition (MACC)	5	13.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Haul (MACC)	0	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Library)	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (MACC)	3	8.00	2.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Library)	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Haul (Library)	0	0.00	0.00	875.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching (Library)	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Vendor	2.0000e-005	8.8000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2286	0.2286	2.0000e-005	0.0000	0.2290
Worker	1.7000e-004	1.3000e-004	1.2800e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3276	0.3276	1.0000e-005	0.0000	0.3278
Total	1.9000e-004	1.0100e-003	1.4600e-003	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.5561	0.5561	3.0000e-005	0.0000	0.5567

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					0.0112	0.0000	0.0112	5.6800e-003	0.0000	5.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-003	0.0784	0.0340	8.0000e-005		3.4400e-003	3.4400e-003		3.1700e-003	3.1700e-003	0.0000	6.8033	6.8033	2.2000e-003	0.0000	6.8583
Total	7.0000e-003	0.0784	0.0340	8.0000e-005	0.0112	3.4400e-003	0.0146	5.6800e-003	3.1700e-003	8.8500e-003	0.0000	6.8033	6.8033	2.2000e-003	0.0000	6.8583

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	2.0000e-005	8.8000e-004	1.8000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2286	0.2286	2.0000e-005	0.0000	0.2290
Worker	1.7000e-004	1.3000e-004	1.2800e-003	0.0000	3.6000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3276	0.3276	1.0000e-005	0.0000	0.3278
Total	1.9000e-004	1.0100e-003	1.4600e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.5561	0.5561	3.0000e-005	0.0000	0.5567

3.3 Site Preparation Haul (Library) - 2021

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					4.0000e-004	0.0000	4.0000e-004	6.0000e-005	0.0000	6.0000e-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	4.0000e-004	0.0000	4.0000e-004	6.0000e-005	0.0000	6.0000e-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	2.6500e-003	0.1022	0.0164	3.4000e-004	7.5300e-003	2.8000e-004	7.8100e-003	2.0700e-003	2.7000e-004	2.3400e-003	0.0000	32.3907	32.3907	1.8200e-003	0.0000	32.4363
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	2.6500e-003	0.1022	0.0164	3.4000e-004	7.5300e-003	2.8000e-004	7.8100e-003	2.0700e-003	2.7000e-004	2.3400e-003	0.0000	32.3907	32.3907	1.8200e-003	0.0000	32.4363

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					1.7000e-004	0.0000	1.7000e-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	1.7000e-004	0.0000	1.7000e-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	2.6500e-003	0.1022	0.0164	3.4000e-004	7.0200e-003	2.8000e-004	7.3000e-003	1.9400e-003	2.7000e-004	2.2100e-003	0.0000	32.3907	32.3907	1.8200e-003	0.0000	32.4363
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	2.6500e-003	0.1022	0.0164	3.4000e-004	7.0200e-003	2.8000e-004	7.3000e-003	1.9400e-003	2.7000e-004	2.2100e-003	0.0000	32.3907	32.3907	1.8200e-003	0.0000	32.4363

3.4 Grading (Library) - 2021

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					0.1106	0.0000	0.1106	0.0568	0.0000	0.0568	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.3224	0.1425	3.2000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	27.8632	27.8632	9.0100e-003	0.0000	28.0885
Total	0.0290	0.3224	0.1425	3.2000e-004	0.1106	0.0144	0.1249	0.0568	0.0132	0.0700	0.0000	27.8632	27.8632	9.0100e-003	0.0000	28.0885

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	1.2000e-004	4.3800e-003	8.9000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.1428	1.1428	8.0000e-005	0.0000	1.1448
Worker	8.3000e-004	6.3000e-004	6.4100e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6378	1.6378	5.0000e-005	0.0000	1.6390
Total	9.5000e-004	5.0100e-003	7.3000e-003	3.0000e-005	2.2500e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.3000e-004	0.0000	2.7807	2.7807	1.3000e-004	0.0000	2.7837

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					0.0473	0.0000	0.0473	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.3224	0.1425	3.2000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	27.8632	27.8632	9.0100e-003	0.0000	28.0885
Total	0.0290	0.3224	0.1425	3.2000e-004	0.0473	0.0144	0.0616	0.0243	0.0132	0.0375	0.0000	27.8632	27.8632	9.0100e-003	0.0000	28.0885

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	1.2000e-004	4.3800e-003	8.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	8.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.1428	1.1428	8.0000e-005	0.0000	1.1448
Worker	8.3000e-004	6.3000e-004	6.4100e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6378	1.6378	5.0000e-005	0.0000	1.6390
Total	9.5000e-004	5.0100e-003	7.3000e-003	3.0000e-005	2.0900e-003	2.0000e-005	2.1000e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	2.7807	2.7807	1.3000e-004	0.0000	2.7837

3.5 Asphalt Demolition (MACC) - 2021

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	1.0000e-003	9.8500e-003	7.2500e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.9000e-004	4.9000e-004	0.0000	1.0536	1.0536	2.7000e-004	0.0000	1.0603
Total	1.0000e-003	9.8500e-003	7.2500e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.9000e-004	4.9000e-004	0.0000	1.0536	1.0536	2.7000e-004	0.0000	1.0603

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	1.0000e-004	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0254	0.0254	0.0000	0.0000	0.0254
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0591	0.0591	0.0000	0.0000	0.0592
Total	3.0000e-005	1.2000e-004	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0845	0.0845	0.0000	0.0000	0.0846

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	1.0000e-003	9.8500e-003	7.2500e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.9000e-004	4.9000e-004	0.0000	1.0536	1.0536	2.7000e-004	0.0000	1.0603
Total	1.0000e-003	9.8500e-003	7.2500e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.9000e-004	4.9000e-004	0.0000	1.0536	1.0536	2.7000e-004	0.0000	1.0603

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	1.0000e-004	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0254	0.0254	0.0000	0.0000	0.0254
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0591	0.0591	0.0000	0.0000	0.0592
Total	3.0000e-005	1.2000e-004	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0845	0.0845	0.0000	0.0000	0.0846

3.6 Asphalt Demolition Haul (MACC) - 2021

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
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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	3.0000e-005	1.1700e-003	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3702	0.3702	2.0000e-005	0.0000	0.3707
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	3.0000e-005	1.1700e-003	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3702	0.3702	2.0000e-005	0.0000	0.3707

3.7 Grading (MACC) - 2021

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					0.0123	0.0000	0.0123	6.3200e-003	0.0000	6.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0358	0.0158	4.0000e-005		1.5900e-003	1.5900e-003		1.4700e-003	1.4700e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1210
Total	3.2200e-003	0.0358	0.0158	4.0000e-005	0.0123	1.5900e-003	0.0139	6.3200e-003	1.4700e-003	7.7900e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1210

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
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Category	tons/yr										MT/yr					
Hauling	3.1000e-004	0.0119	1.9100e-003	4.0000e-005	8.8000e-004	3.0000e-005	9.1000e-004	2.4000e-004	3.0000e-005	2.7000e-004	0.0000	3.7758	3.7758	2.1000e-004	0.0000	3.7811
Vendor	1.0000e-005	4.9000e-004	1.0000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1270	0.1270	1.0000e-005	0.0000	0.1272
Worker	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1820	0.1820	1.0000e-005	0.0000	0.1821
Total	4.1000e-004	0.0125	2.7200e-003	4.0000e-005	1.1300e-003	3.0000e-005	1.1600e-003	3.1000e-004	3.0000e-005	3.4000e-004	0.0000	4.0848	4.0848	2.3000e-004	0.0000	4.0905

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					5.2700e-003	0.0000	5.2700e-003	2.7000e-003	0.0000	2.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0358	0.0158	4.0000e-005		1.5900e-003	1.5900e-003		1.4700e-003	1.4700e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1209
Total	3.2200e-003	0.0358	0.0158	4.0000e-005	5.2700e-003	1.5900e-003	6.8600e-003	2.7000e-003	1.4700e-003	4.1700e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1209

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	3.1000e-004	0.0119	1.9100e-003	4.0000e-005	8.2000e-004	3.0000e-005	8.5000e-004	2.3000e-004	3.0000e-005	2.6000e-004	0.0000	3.7758	3.7758	2.1000e-004	0.0000	3.7811
Vendor	1.0000e-005	4.9000e-004	1.0000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1270	0.1270	1.0000e-005	0.0000	0.1272
Worker	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1820	0.1820	1.0000e-005	0.0000	0.1821

Total	4.1000e-004	0.0125	2.7200e-003	4.0000e-005	1.0500e-003	3.0000e-005	1.0800e-003	2.9000e-004	3.0000e-005	3.3000e-004	0.0000	4.0848	4.0848	2.3000e-004	0.0000	4.0905
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3.8 Utilities Trenching (MACC) - 2021

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	1.1500e-003	0.0108	0.0164	3.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	2.2802	2.2802	7.4000e-004	0.0000	2.2986
Total	1.1500e-003	0.0108	0.0164	3.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	2.2802	2.2802	7.4000e-004	0.0000	2.2986

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	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1365	0.1365	0.0000	0.0000	0.1366
Total	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1365	0.1365	0.0000	0.0000	0.1366

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	1.1500e-003	0.0108	0.0164	3.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	2.2802	2.2802	7.4000e-004	0.0000	2.2986
Total	1.1500e-003	0.0108	0.0164	3.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	2.2802	2.2802	7.4000e-004	0.0000	2.2986

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	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1365	0.1365	0.0000	0.0000	0.1366
Total	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1365	0.1365	0.0000	0.0000	0.1366

3.9 Building Construction (MACC) - 2021

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	0.0390	0.2932	0.2773	4.7000e-004		0.0147	0.0147		0.0142	0.0142	0.0000	39.0327	39.0327	6.9700e-003	0.0000	39.2070
Total	0.0390	0.2932	0.2773	4.7000e-004		0.0147	0.0147		0.0142	0.0142	0.0000	39.0327	39.0327	6.9700e-003	0.0000	39.2070

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	6.0000e-005	2.0900e-003	4.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5460	0.5460	4.0000e-005	0.0000	0.5469
Worker	2.0000e-004	1.5000e-004	1.5300e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3913	0.3913	1.0000e-005	0.0000	0.3915
Total	2.6000e-004	2.2400e-003	1.9600e-003	1.0000e-005	6.1000e-004	0.0000	6.1000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.9373	0.9373	5.0000e-005	0.0000	0.9385

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	0.0390	0.2932	0.2773	4.7000e-004		0.0147	0.0147		0.0142	0.0142	0.0000	39.0327	39.0327	6.9700e-003	0.0000	39.2069
Total	0.0390	0.2932	0.2773	4.7000e-004		0.0147	0.0147		0.0142	0.0142	0.0000	39.0327	39.0327	6.9700e-003	0.0000	39.2069

Mitigated Construction Off-Site

Worker	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410
Total	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410

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	3.5000e-004	3.2500e-003	4.9300e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.4000e-004	1.4000e-004	0.0000	0.6841	0.6841	2.2000e-004	0.0000	0.6896
Total	3.5000e-004	3.2500e-003	4.9300e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.4000e-004	1.4000e-004	0.0000	0.6841	0.6841	2.2000e-004	0.0000	0.6896

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	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410
Total	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410

3.11 Utilities Trenching (Library) - 2021

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	1.2700e-003	0.0119	0.0181	3.0000e-005		5.8000e-004	5.8000e-004		5.3000e-004	5.3000e-004	0.0000	2.5082	2.5082	8.1000e-004	0.0000	2.5285
Total	1.2700e-003	0.0119	0.0181	3.0000e-005		5.8000e-004	5.8000e-004		5.3000e-004	5.3000e-004	0.0000	2.5082	2.5082	8.1000e-004	0.0000	2.5285

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	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1501	0.1501	0.0000	0.0000	0.1502
Total	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1501	0.1501	0.0000	0.0000	0.1502

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	1.2700e-003	0.0119	0.0181	3.0000e-005		5.8000e-004	5.8000e-004		5.3000e-004	5.3000e-004	0.0000	2.5082	2.5082	8.1000e-004	0.0000	2.5285

Total	1.2700e-003	0.0119	0.0181	3.0000e-005		5.8000e-004	5.8000e-004		5.3000e-004	5.3000e-004	0.0000	2.5082	2.5082	8.1000e-004	0.0000	2.5285
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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	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1501	0.1501	0.0000	0.0000	0.1502
Total	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1501	0.1501	0.0000	0.0000	0.1502

3.12 Building Construction (Library) - 2021

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	0.0716	0.5386	0.5095	8.7000e-004		0.0270	0.0270		0.0261	0.0261	0.0000	71.7113	71.7113	0.0128	0.0000	72.0314
Total	0.0716	0.5386	0.5095	8.7000e-004		0.0270	0.0270		0.0261	0.0261	0.0000	71.7113	71.7113	0.0128	0.0000	72.0314

Unmitigated Construction Off-Site

Vendor	2.2000e-003	0.0807	0.0164	2.2000e-004	4.9000e-003	1.4000e-004	5.0400e-003	1.4300e-003	1.3000e-004	1.5600e-003	0.0000	21.0663	21.0663	1.4200e-003	0.0000	21.1017
Worker	9.6400e-003	7.2800e-003	0.0746	2.1000e-004	0.0212	1.5000e-004	0.0213	5.6600e-003	1.4000e-004	5.7900e-003	0.0000	19.0488	19.0488	5.3000e-004	0.0000	19.0621
Total	0.0118	0.0880	0.0910	4.3000e-004	0.0261	2.9000e-004	0.0264	7.0900e-003	2.7000e-004	7.3500e-003	0.0000	40.1150	40.1150	1.9500e-003	0.0000	40.1638

3.12 Building Construction (Library) - 2022

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	0.2053	1.5566	1.5844	2.7500e-003		0.0733	0.0733		0.0708	0.0708	0.0000	226.0633	226.0633	0.0394	0.0000	227.0476
Total	0.2053	1.5566	1.5844	2.7500e-003		0.0733	0.0733		0.0708	0.0708	0.0000	226.0633	226.0633	0.0394	0.0000	227.0476

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	6.4600e-003	0.2409	0.0479	6.9000e-004	0.0165	3.7000e-004	0.0169	4.7600e-003	3.5000e-004	5.1100e-003	0.0000	65.8578	65.8578	4.3200e-003	0.0000	65.9658
Worker	0.0284	0.0206	0.2156	6.4000e-004	0.0724	4.6000e-004	0.0728	0.0192	4.2000e-004	0.0196	0.0000	57.8764	57.8764	1.5100e-003	0.0000	57.9141
Total	0.0349	0.2615	0.2635	1.3300e-003	0.0888	8.3000e-004	0.0897	0.0240	7.7000e-004	0.0248	0.0000	123.7342	123.7342	5.8300e-003	0.0000	123.8799

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	0.2053	1.5566	1.5844	2.7500e-003		0.0733	0.0733		0.0708	0.0708	0.0000	226.0630	226.0630	0.0394	0.0000	227.0473
Total	0.2053	1.5566	1.5844	2.7500e-003		0.0733	0.0733		0.0708	0.0708	0.0000	226.0630	226.0630	0.0394	0.0000	227.0473

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	6.4600e-003	0.2409	0.0479	6.9000e-004	0.0154	3.7000e-004	0.0158	4.5000e-003	3.5000e-004	4.8500e-003	0.0000	65.8578	65.8578	4.3200e-003	0.0000	65.9658
Worker	0.0284	0.0206	0.2156	6.4000e-004	0.0667	4.6000e-004	0.0672	0.0178	4.2000e-004	0.0183	0.0000	57.8764	57.8764	1.5100e-003	0.0000	57.9141
Total	0.0349	0.2615	0.2635	1.3300e-003	0.0821	8.3000e-004	0.0830	0.0223	7.7000e-004	0.0231	0.0000	123.7342	123.7342	5.8300e-003	0.0000	123.8799

3.13 Paving (Library) - 2022

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	5.8500e-003	0.0576	0.0749	1.2000e-004		2.9500e-003	2.9500e-003		2.7200e-003	2.7200e-003	0.0000	10.0042	10.0042	3.1700e-003	0.0000	10.0835
Paving	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.9000e-003	0.0576	0.0749	1.2000e-004		2.9500e-003	2.9500e-003		2.7200e-003	2.7200e-003	0.0000	10.0042	10.0042	3.1700e-003	0.0000	10.0835

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	4.8000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9692	0.9692	3.0000e-005	0.0000	0.9698
Total	4.8000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9692	0.9692	3.0000e-005	0.0000	0.9698

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	5.8500e-003	0.0576	0.0749	1.2000e-004		2.9500e-003	2.9500e-003		2.7200e-003	2.7200e-003	0.0000	10.0042	10.0042	3.1700e-003	0.0000	10.0835
Paving	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.9000e-003	0.0576	0.0749	1.2000e-004		2.9500e-003	2.9500e-003		2.7200e-003	2.7200e-003	0.0000	10.0042	10.0042	3.1700e-003	0.0000	10.0835

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	4.8000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9692	0.9692	3.0000e-005	0.0000	0.9698
Total	4.8000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9692	0.9692	3.0000e-005	0.0000	0.9698

3.14 Architectural Coating (Library) - 2022

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	0.3056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738
Total	0.3074	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738

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	4.0000e-004	2.9000e-004	3.0600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8201	0.8201	2.0000e-005	0.0000	0.8206
Total	4.0000e-004	2.9000e-004	3.0600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8201	0.8201	2.0000e-005	0.0000	0.8206

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	0.3056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738
Total	0.3074	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738

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	4.0000e-004	2.9000e-004	3.0600e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8201	0.8201	2.0000e-005	0.0000	0.8206
Total	4.0000e-004	2.9000e-004	3.0600e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8201	0.8201	2.0000e-005	0.0000	0.8206

3.15 Finishing and Landscaping (Library) - 2022

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	1.0200e-003	8.9300e-003	0.0164	3.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	2.2794	2.2794	7.4000e-004	0.0000	2.2978
Total	1.0200e-003	8.9300e-003	0.0164	3.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	2.2794	2.2794	7.4000e-004	0.0000	2.2978

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1316	0.1316	0.0000	0.0000	0.1317
Total	6.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1316	0.1316	0.0000	0.0000	0.1317

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	1.0200e-003	8.9300e-003	0.0164	3.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	2.2794	2.2794	7.4000e-004	0.0000	2.2978
Total	1.0200e-003	8.9300e-003	0.0164	3.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	2.2794	2.2794	7.4000e-004	0.0000	2.2978

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	6.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1316	0.1316	0.0000	0.0000	0.1317
Total	6.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1316	0.1316	0.0000	0.0000	0.1317

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	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Other Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Other Non-Asphalt Surfaces	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive 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	134.7580	134.7580	7.7500e-003	1.6000e-003	135.4293
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	145.6843	145.6843	8.3800e-003	1.7300e-003	146.4101
NaturalGas Mitigated	4.2200e-003	0.0384	0.0322	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003	0.0000	41.7554	41.7554	8.0000e-004	7.7000e-004	42.0036
NaturalGas Unmitigated	6.0300e-003	0.0548	0.0460	3.3000e-004		4.1600e-003	4.1600e-003		4.1600e-003	4.1600e-003	0.0000	59.6321	59.6321	1.1400e-003	1.0900e-003	59.9865

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)	1.0414e+06	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.5730	55.5730	1.0700e-003	1.0200e-003	55.9033
Junior College (2Yr)	76065	4.1000e-004	3.7300e-003	3.1300e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0591	4.0591	8.0000e-005	7.0000e-005	4.0832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.0300e-003	0.0548	0.0460	3.3000e-004		4.1600e-003	4.1600e-003		4.1600e-003	4.1600e-003	0.0000	59.6321	59.6321	1.1500e-003	1.0900e-003	59.9865

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)	53262	2.9000e-004	2.6100e-003	2.1900e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8423	2.8423	5.0000e-005	5.0000e-005	2.8592
Junior College (2Yr)	729205	3.9300e-003	0.0358	0.0300	2.1000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	38.9132	38.9132	7.5000e-004	7.1000e-004	39.1444
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.2200e-003	0.0384	0.0322	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003	0.0000	41.7554	41.7554	8.0000e-004	7.6000e-004	42.0036

5.3 Energy by Land Use - Electricity

Unmitigated

Category	tons/yr										MT/yr					
Mitigated	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003
Unmitigated	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-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	tons/yr										MT/yr					
Architectural Coating	0.0234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2952					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003
Total	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-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	tons/yr										MT/yr					
Architectural Coating	0.0234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2952					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003
Total	0.3188	2.0000e-005	1.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chaffey College MACC Architectural Coating - San Bernardino-South Coast County, Summer

Chaffey College MACC Architectural Coating San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	5.50	1000sqft	0.13	5,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	504.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 SCE Sustainability Report

Land Use -

Construction Phase - MACC construction activity default durations have been based on reasonable estimates to fit a 3 month schedule.

Architectural Coating - SCAQMD rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblConstructionPhase	NumDays	5.00	3.00

tblConstructionPhase	PhaseEndDate	2/23/2022	9/8/2021
tblConstructionPhase	PhaseStartDate	2/17/2022	9/6/2021
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	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					
2021	10.8408	1.5268	1.8176	2.9700e-003	0.0000	0.0941	0.0941	0.0000	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193	0.0000	281.9309
Maximum	10.8408	1.5268	1.8176	2.9700e-003	0.0000	0.0941	0.0941	0.0000	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193	0.0000	281.9309

	ROG	NOx	CO	SO2	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					
2021	10.8408	1.5268	1.8176	2.9700e-003	0.0000	0.0941	0.0941	0.0000	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193	0.0000	281.9309
Maximum	10.8408	1.5268	1.8176	2.9700e-003	0.0000	0.0941	0.0941	0.0000	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193	0.0000	281.9309

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/6/2021	9/8/2021	5	3	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,250; Non-Residential Outdoor: 2,750; Striped Parking Area: 0

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment 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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Architectural Coating - 2021

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	10.6219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	10.8408	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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

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	10.6219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	10.8408	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chaffey College MACC Architectural Coating - San Bernardino-South Coast County, Winter

Chaffey College MACC Architectural Coating San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	5.50	1000sqft	0.13	5,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	504.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 SCE Sustainability Report

Land Use -

Construction Phase - MACC construction activity default durations have been based on reasonable estimates to fit a 3 month schedule.

Architectural Coating - SCAQMD rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblConstructionPhase	NumDays	5.00	3.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/6/2021	9/8/2021	5	3	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,250; Non-Residential Outdoor: 2,750; Striped Parking Area: 0

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment 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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Architectural Coating - 2021

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	10.6219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	10.8408	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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

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	10.6219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	10.8408	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Asphalt Demolition and Haul (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.86	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	25	Tractors	0.5	0.0625	4	2
CO	163	Graders	0.5	0.0625	1	0.5
PM10	1,180	Dozers	0.5	0.0625	1	0.4375
PM2.5	5.86	Dozers	0.5	0.0625	1	0.5
	4.86	Scrapers	1	0.125		0
					Acres	3.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		163	193	256	372	680
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1180	1800	3107	6626	24530
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	18	35	71	177
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	8	14	35	149
Northwest San Bernardino Valley						
	1.86 Acres					
	25	50	100	200	500	
NOx	163	193	256	372	680	
CO	1180	1800	3107	6626	24530	
PM10	6	18	35	71	177	
PM2.5	5	8	14	35	149	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Grading (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.86	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	25	Tractors	0.5	0.0625	1	0.5
CO	163	Tractors	0.5	0.0625	1	0.4375
PM10	1,180	Graders	0.5	0.0625	1	0.5
PM2.5	5.86	Dozers	0.5	0.0625	1	0.4375
	4.86	Dozers	0.5	0.0625	1	0.375
		Scrapers	1	0.125		0
					Acres	2.25

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		163	193	256	372	680
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1180	1800	3107	6626	24530
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	18	35	71	177
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	8	14	35	149

Northwest San Bernardino Valley						
1.86 Acres						
	25	50	100	200	500	
NOx	163	193	256	372	680	
CO	1180	1800	3107	6626	24530	
PM10	6	18	35	71	177	
PM2.5	5	8	14	35	149	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Utilities Trenching (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.44	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
25		Tractors	0.5	0.0625	1	0.5
NOx	141	Graders	0.5	0.0625	1	0.5
CO	1,024	Dozers	0.5	0.0625	1	0.4375
PM10	5.43	Scrapers	1	0.125		0
PM2.5	4.44				Acres	1.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		141	171	234	353	666
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1024	1568	2771	6167	23810
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	16	40	87	228
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	7	13	34	145
Northwest San Bernardino Valley						
	1.44 Acres					
	25	50	100	200	500	
NOx	141	171	234	353	666	
CO	1024	1568	2771	6167	23810	
PM10	5	16	40	87	228	
PM2.5	4	7	13	34	145	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading (Library) and Utilities Trenching (MACC)
Trenching (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed				
32	1.19	25	82	1.86				
Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres	
	25	Tractors	0.5	0.0625	7	1	0.4375	
NOx	128	Graders	0.5	0.0625	6	1	0.375	
CO	932	Dozers	0.5	0.0625	6	1	0.375	
PM10	5.19	Scrapers	1	0.125			0	
PM2.5	4.19					Acres	1.19	
	Acres	25	50	100		200	500	
NOx	1	118	148	211		334	652	
	2	170	200	263		378	684	
		128	158	221		342	658	
CO	1	863	1328	2423		5691	23065	
	2	1232	1877	3218		6778	24768	
		932	1431	2572		5895	23384	
PM10	1	5	14	44		103	280	
	2	6	19	34		66	160	
		5	15	42		96	258	
PM2.5	1	4	6	12		32	141	
	2	5	8	14		36	150	
		4	6	12		33	143	
Northwest San Bernardino Valley	1.19 Acres							
	25	50	100	200		500		
NOx	128	158	221	342		658		
CO	932	1431	2572	5895		23384		
PM10	5	15	42	96		258		
PM2.5	4	6	12	33		143		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading (Library) and Building Construction (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.56	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
25		Tractors	0.5	0.0625	7	1	0.4375
NOx	147	Tractors	0.5	0.0625	6	1	0.375
CO	1,070	Graders	0.5	0.0625	6	1	0.375
PM10	5.56	Dozers	0.5	0.0625	6	1	0.375
PM2.5	4.56	Scrapers	1	0.125			0
					Acres		1.56

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		147	177	240	359	670
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1071	1637	2870	6302	24023
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	17	38	82	213
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	7	13	34	146

Northwest San Bernardino Valley						
1.56 Acres						
	25	50	100	200	500	
NOx	147	177	240	359	670	
CO	1071	1637	2870	6302	24023	
PM10	6	17	38	82	213	
PM2.5	5	7	13	34	146	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Building Construction (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed				
32	0.38	25	82	1.86				
Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres	
	25	Tractors	0.5	0.0625	6	1	0.375	
NOx	118	Tractors	0.5	0.0625			0	
CO	863	Graders	0.5	0.0625			0	
PM10	5.00	Dozers	0.5	0.0625			0	
PM2.5	4.00	Scrapers	1	0.125			0	
						Acres	0.38	
	Acres	25	50	100		200	500	
NOx	1	118	148	211		334	652	
	1	118	148	211		334	652	
		118	148	211		334	652	
CO	1	863	1328	2423		5691	23065	
	1	863	1328	2423		5691	23065	
		863	1328	2423		5691	23065	
PM10	1	5	14	44		103	280	
	1	5	14	44		103	280	
		5	14	44		103	280	
PM2.5	1	4	6	12		32	141	
	1	4	6	12		32	141	
		4	6	12		32	141	
Northwest San Bernardino Valley								
0.38 Acres								
	25	50	100	200		500		
NOx	118	148	211	334		652		
CO	863	1328	2423	5691		23065		
PM10	5	14	44	103		280		
PM2.5	4	6	12	32		141		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Architectural Coating (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.00	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	25	Tractors	0.5	0.0625		0
CO	118	Tractors	0.5	0.0625		0
PM10	863	Graders	0.5	0.0625		0
PM2.5	5.00	Dozers	0.5	0.0625		0
	4.00	Scrapers	1	0.125		0
					Acres	0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley

0.00 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Finishing and Landscaping (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.00	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	25	Tractors	0.5	0.0625		0
CO	118	Tractors	0.5	0.0625		0
PM10	863	Graders	0.5	0.0625		0
PM2.5	5.00	Dozers	0.5	0.0625		0
	4.00	Scrapers	1	0.125		0
					Acres	0.00
	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
	0.00 Acres					
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	25	82	1.86

Source Receptor	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	1	0.375
NOx	118	Tractors	0.5	0.0625		0
CO	863	Graders	0.5	0.0625		0
PM10	5.00	Dozers	0.5	0.0625		0
PM2.5	4.00	Scrapers	1	0.125		0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley

0.38 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction (Library) and Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.88	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley Acres	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	118	Tractors	0.5	0.0625	1	0.375
CO	863	Tractors	0.5	0.0625	1	0.5
PM10	5.00	Graders	0.5	0.0625		0
PM2.5	4.00	Dozers	0.5	0.0625		0
		Scrapers	1	0.125		0
					Acres	0.88

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

0.88 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction and Architectural Coating (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	6	1	0.375
NOx	118	Tractors	0.5			0
CO	863	Graders	0.5			0
PM10	5.00	Dozers	0.5			0
PM2.5	4.00	Scrapers	1			0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley						
0.38 Acres						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction and Architectural Coating (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	25	82	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	6	1	0.375
NOx	118	Tractors	0.5			0
CO	863	Graders	0.5			0
PM10	5.00	Dozers	0.5			0
PM2.5	4.00	Scrapers	1			0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley						
0.38 Acres						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Asphalt Demolition and Haul (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.86	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	61	Tractors	0.5	0.0625	4	2
CO	207	Graders	0.5	0.0625	1	0.5
PM10	2,087	Dozers	0.5	0.0625	1	0.4375
PM2.5	22.05	Dozers	0.5	0.0625	1	0.5
	9.04	Scrapers	1	0.125		0
					Acres	3.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		163	193	256	372	680
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1180	1800	3107	6626	24530
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	18	35	71	177
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	8	14	35	149
Northwest San Bernardino Valley						
1.86 Acres						
	25	50	100	200	500	
NOx	163	193	256	372	680	
CO	1180	1800	3107	6626	24530	
PM10	6	18	35	71	177	
PM2.5	5	8	14	35	149	

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	2
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Grading (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.86	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	61	Tractors	0.5	0.0625	8	1	0.5
NOx	207	Tractors	0.5	0.0625	7	1	0.4375
CO	2,087	Graders	0.5	0.0625	8	1	0.5
PM10	22.05	Dozers	0.5	0.0625	7	1	0.4375
PM2.5	9.04	Dozers	0.5	0.0625	6	1	0.375
		Scrapers	1	0.125			0
						Acres	2.25

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		163	193	256	372	680
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1180	1800	3107	6626	24530
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	18	35	71	177
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	8	14	35	149

Northwest San Bernardino Valley						
1.86 Acres						
	25	50	100	200	500	
NOx	163	193	256	372	680	
CO	1180	1800	3107	6626	24530	
PM10	6	18	35	71	177	
PM2.5	5	8	14	35	149	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Soil Haul (Library) and Utilities Trenching (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.44	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	61	Tractors	0.5	0.0625	1	0.5
CO	185	Graders	0.5	0.0625	1	0.5
PM10	1,832	Dozers	0.5	0.0625	1	0.4375
PM2.5	21.33	Scrapers	1	0.125		0
	8.19				Acres	1.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		141	171	234	353	666
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1024	1568	2771	6167	23810
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	16	40	87	228
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	7	13	34	145
Northwest San Bernardino Valley						
1.44 Acres						
	25	50	100	200	500	
NOx	141	171	234	353	666	
CO	1024	1568	2771	6167	23810	
PM10	5	16	40	87	228	
PM2.5	4	7	13	34	145	

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	2
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading (Library) and Utilities Trenching (MACC) Trenching (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.19	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	61	Tractors	0.5	0.0625	1	0.4375
CO	172	Graders	0.5	0.0625	1	0.375
PM10	1,681	Dozers	0.5	0.0625	1	0.375
PM2.5	20.90	Scrapers	1	0.125		0
	7.69				Acres	1.19

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		128	158	221	342	658
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		932	1431	2572	5895	23384
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	15	42	96	258
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	6	12	33	143
Northwest San Bernardino Valley						
1.19 Acres						
	25	50	100	200	500	
NOx	128	158	221	342	658	
CO	932	1431	2572	5895	23384	
PM10	5	15	42	96	258	
PM2.5	4	6	12	33	143	

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	2
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading (Library) and Building Construction (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	1.56	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
61		Tractors	0.5	0.0625	7	1	0.4375
NOx	191	Tractors	0.5	0.0625	6	1	0.375
CO	1,907	Graders	0.5	0.0625	6	1	0.375
PM10	21.54	Dozers	0.5	0.0625	6	1	0.375
PM2.5	8.44	Scrapers	1	0.125			0
					Acres		1.56

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		147	177	240	359	670
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		1071	1637	2870	6302	24023
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		6	17	38	82	213
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		5	7	13	34	146

Northwest San Bernardino Valley						
	1.56 Acres					
	25	50	100	200	500	
NOx	147	177	240	359	670	
CO	1071	1637	2870	6302	24023	
PM10	6	17	38	82	213	
PM2.5	5	7	13	34	146	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Building Construction (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	61	Tractors	0.5	6	1	0.375
NOx	162	Tractors	0.5			0
CO	1,568	Graders	0.5			0
PM10	20.58	Dozers	0.5			0
PM2.5	7.32	Scrapers	1			0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

0.38 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Architectural Coating (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.00	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	61	Tractors	0.5	0.0625		0
NOx	162	Tractors	0.5	0.0625		0
CO	1,568	Graders	0.5	0.0625		0
PM10	20.58	Dozers	0.5	0.0625		0
PM2.5	7.32	Scrapers	1	0.125		0
					Acres	0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

0.00 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching (Library) and Finishing and Landscaping (MACC)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.00	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	61	Tractors	0.5	0.0625		0
CO	162	Tractors	0.5	0.0625		0
PM10	1,568	Graders	0.5	0.0625		0
PM2.5	20.58	Dozers	0.5	0.0625		0
	7.32	Scrapers	1	0.125		0
					Acres	0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

0.00 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	61	Tractors	0.5	0.0625	1	0.375
NOx	162	Tractors	0.5	0.0625		0
CO	1,568	Graders	0.5	0.0625		0
PM10	20.58	Dozers	0.5	0.0625		0
PM2.5	7.32	Scrapers	1	0.125		0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

0.38 Acres

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction (Library) and Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.88	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley Acres	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	162	Tractors	0.5	0.0625	1	0.375
CO	1,568	Tractors	0.5	0.0625	1	0.5
PM10	20.58	Graders	0.5	0.0625		0
PM2.5	7.32	Dozers	0.5	0.0625		0
		Scrapers	1	0.125		0
					Acres	0.88

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141
Northwest San Bernardino Valley 0.88 Acres						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below	Acres	Acre Above	Acres
SRA No.		SRA No.	
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction and Architectural Coating (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	61	Tractors	0.5	6	1	0.375
NOx	162	Tractors	0.5			0
CO	1,568	Graders	0.5			0
PM10	20.58	Dozers	0.5			0
PM2.5	7.32	Scrapers	1			0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley						
0.38 Acres						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction and Architectural Coating (Library)

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
32	0.38	61	200	1.86

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	61	Tractors	0.5	6	1	0.375
NOx	162	Tractors	0.5			0
CO	1,568	Graders	0.5			0
PM10	20.58	Dozers	0.5			0
PM2.5	7.32	Scrapers	1			0
					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141

Northwest San Bernardino Valley						
0.38 Acres						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
Distance Increment Below			
50			
Distance Increment Above			
100			

Updated: 10/21/2009 - Table C-1. 2006 – 2008