

CalEEMod Emission Summary

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DATE: November 15, 2020

SUBJECT: Summary of CalEEMod Model Runs and Output for the Core 5 Commerce Center, Perris, CA

SECTION 1: PROJECT INFORMATION

1.1 - Project Name

Core 5 Commerce Center

1.2 - Project Location

The proposed Core 5 Commerce Center (Project) is located within the northeast portion of the City of Perris, on the south side of East Rider Street, west of Wilson Avenue. Regional access to the project site is provided by Interstate Route (I-215) and the Interstate 215 East Frontage Road exit. Local access to the site is from East Rider Street, which is a secondary arterial roadway. The Project is also located within the Perris Valley Commerce Center Specific Plan (PVCCSP) area.

1.3 - Project Description

The Project would consist of demolishing the existing three single-family residences and pavement on the Project site and constructing a new 248,442 square foot tilt-up speculative industrial building with approximately 5,000 square feet designated for supporting office staff. The Project site would be accessed by two points of ingress and egress, one along Rider Street and one along Wilson Avenue. It is assumed the easterly most driveway off Wilson Avenue will be used for truck access and circulation around the site. Truck loading docks and trailer parking will be easterly facing oriented along Wilson Avenue. A retaining wall is proposed along Wilson Avenue to adequately screen onsite trailers from the public's view. The Project complies with all the City of Perris Municipal Code's standards for Light Industrial (LI). The Project applicant indicates that no refrigeration uses are planned for the Project.

1.4 - Purpose of the Report

This report has been prepared to summarize the estimates of project construction and operational criteria pollutant and greenhouse gas (GHG) emissions and fuel and energy usage using the CalEEMod land-use emission model to prepare CEQA regulatory documentation. The Project emissions, fuel use, and energy consumption were estimated for both construction and operation.

1.5 - PVCCSP EIR Mitigation Measures

Since the Project is located within the PVCCSP, the Project is required to implement applicable mitigation measures from the Perris Valley Commerce Center Specific Plan Environmental Impact Report (EIR)¹. Because these measures are a requirement for implementing projects within the PVCCSP, they are not considered to be project-specific mitigation measures. The PVCCSP EIR mitigation measures applicable to this Project for air quality and GHG emissions are as follows:

MM AIR 1 To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined in conjunction with the South Coast Air Quality Management District (SCAQMD). The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold (LST) analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.

This mitigation measure is satisfied with preparation of this report.

MM AIR 2 Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and offsite, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.

MM AIR 3 To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with SCAQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the SCAQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:

- requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- keeping disturbed/loose soil moist at all times,
- installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip,

¹ City of Perris 2011. Perris Valley Commerce Center Specific Plan Environmental Impact Report (State Clearinghouse No. 2009081086)

- posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved portions of the project site,
- suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour,
- appointment of a construction relations officer to act as a community liaison concerning onsite construction activity including resolution of issues related to PM10 generation,
- sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials,
- replacement of ground cover in disturbed areas as quickly as possible.

MM AIR 4 Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.

MM AIR 5 Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.

MM AIR 6 The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or USEPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOX unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

MM AIR 7 During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.

MM AIR 8 Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

MM AIR 9 To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the

City of Perris' Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.

- MM AIR 10** To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined by the City of Perris as lead agency in conjunction with the SCAQMD. The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, CO Hot Spot analysis, or other appropriate analyses as determined by the City of Perris in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.
- MM AIR 11** Signage shall be posted at loading docks and all entrances to loading areas prohibiting all onsite truck idling in excess of five minutes.
- MM AIR 12** Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.
- MM AIR 13** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOX] funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants would be required to use those funds, if awarded.
- MM AIR 14** Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- MM AIR 15** To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with TRUs [Transport Refrigeration Units] per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile-source traffic generated by that

implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.

A project-specific Health Risk Assessment has been prepared under a separate report in satisfaction of this mitigation measure.

MM AIR 18 Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the project.

MM AIR 19 In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM AIR 20 Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24 and reduce indoor water use by 25 percent. All reductions would be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

1.6 - Conclusions

- The construction and operation of the Project would not exceed any project-level criteria pollutant regional or localized emission significance threshold adopted by the SCAQMD. No project-specific mitigation is required beyond those stipulated in the PVCCSP EIR list of mitigation measures.
- The construction and operation of the Project would not result in a cumulatively significant impact on the region's air quality. No project-specific mitigation is required beyond those stipulated in the PVCCSP EIR list of mitigation measures.
- The construction and operation of the Project would not exceed the greenhouse gas significance threshold adopted for this Project. No project-specific mitigation is required beyond those stipulated in the PVCCSP EIR list of mitigation measures.
- The construction and operation of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with project design, project location, the use of electricity and natural gas, and the use of fuel by vehicles anticipated to travel to and from the Project. No mitigation is

required.

SECTION 2: CALEEMOD EMISSION ESTIMATES – CRITERIA POLLUTANTS

This section quantifies the Project construction and operational criteria pollutant emissions² and compares the construction and operational emissions to significance thresholds recommended by the SCAQMD. The following analysis responds to the mitigation requirements of the **PVCCSP EIR Mitigation Measures MM AIR1 and MM AIR 10** that require the estimation and assessment of project construction and operational emissions, including a localized emission assessment.

2.1 - Significance Thresholds-Criteria Pollutants

The SCAQMD recommends several criteria pollutant significance thresholds that Lead Agencies can apply in CEQA reviews to the construction and operation of projects located within the jurisdiction of the SCAQMD. These thresholds are discussed below.

2.1.1 Regional Emission Significance Thresholds

The incremental regional air quality impacts of an individual project are generally very small and difficult to measure. However, the SCAQMD's regional significance thresholds define levels of maximum daily emissions whose exceedance by a project's construction or operation may add to the overall cumulative emission burden within the SCAQMD and impact the attainment and maintenance of ambient air quality standards.

The regional thresholds apply to criteria pollutant emissions of carbon monoxide (CO), oxides of nitrogen (NO_x), oxides of sulfur (SO_x), particulate matter (PM₁₀ and PM_{2.5}), and reactive organic gases (ROG) generated by a project during construction and operation. The quantification of regional emissions includes those project emissions generated from onsite emission sources (i.e., off-road construction equipment, fugitive dust, area sources, and energy sources) and offsite emission sources (vehicle travel away from the project). The SCAQMD's regional significance thresholds are shown in [Table 1](#). Daily maximum emission totals that exceed the levels shown in [Table 1](#) would be considered to result in a significant air quality impact requiring mitigation to reduce the significant emissions.

Table 1: SCAQMD Regional Emission Significance Thresholds

Air Pollutant	Maximum Daily Emissions (pounds/day)	
	Construction	Operation
Carbon Monoxide	550	550
Oxides of Nitrogen	100	55
Sulfur Oxides	150	150
PM ₁₀	150	150
PM _{2.5}	55	55

²Criteria pollutants are the only air pollutants with national air quality standards that define allowable concentrations of these substances in ambient air. Criteria pollutants include carbon monoxide (CO), oxides of nitrogen (NO_x), sulfur dioxide (SO_x), and particulate matter (PM₁₀ and PM_{2.5}). Note that ozone is another criteria pollutant; however, in terms of defining significance thresholds, ozone is represented as a threshold by its precursor components, oxides of nitrogen (NO_x) and reactive organic gases.

Air Pollutant	Maximum Daily Emissions (pounds/day)	
	Construction	Operation
Reactive Organic Gases	75	55
Source: SCAQMD ³		

2.1.2 Localized Significance Thresholds

Project-related construction or operational air emissions may have the potential to exceed the State and national air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact on the SCAQMD. As a result, the SCAQMD has also recommended localized significance thresholds (LSTs) that represent the maximum rates of daily construction or operational emissions from a project site that would not result in air pollutant levels that would exceed national or State ambient air quality standards (SCAQMD 2003⁴,2008⁵) in the immediate vicinity of a project.

There are three principal differences between the regional thresholds and the LSTs. First, the regional thresholds include all sources of project construction and operational emissions generated from both onsite and offsite emission sources, whereas the LSTs only consider the emissions generated from onsite emission sources. Second, the LSTs only apply to CO, NO_x, and particulate matter (PM₁₀ and PM_{2.5}) while the regional thresholds include both ROG and SO_x. Third, the regional thresholds apply to emission sources located anywhere within the SCAQMD whereas the LSTs are location-dependent and depend on the size of the project, and emission location relative to the nearest sensitive receptor⁶.

For the localized assessment purposes, the SCAQMD provides screening lookup tables for projects that disturb less than or equal to 5 acres in size in a day. The lookup tables were developed by the SCAQMD to determine if the daily emissions of CO, NO_x, PM₁₀, and PM_{2.5} from a project could significantly impact the local air quality. The appropriate LSTs can be determined based on the project's source receptor area (SRA)⁷, size, and distance to nearest sensitive receptor. The SCAQMD has divided the SCAQMD into 38 SRAs each with a set of LSTs that depend on the air pollutant, project size, and distance to the nearest sensitive receptor. The Project site is located within SRA 24, Perris Valley.

LSTs for Construction

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (SCAQMD 2011)⁸. The California Emissions Estimator Model (CalEEMod) model calculates construction emissions based on the number and types of construction equipment, equipment hours, rates of emission,

³ SCAQMD April 2019. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>

⁴ SCAQMD 2003. Final Localized Significance Threshold Methodology. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>

⁵ SCAQMD 2008: Final Localized Significance Threshold Methodology. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>

⁶ A sensitive receptor is defined as an individual who is most health wise susceptible to exposures to air pollutants including children the elderly, and adults with chronic health issues. Such receptors include residences, schools, elderly care centers, and hospitals.

⁷ A source-receptor area (SRA) is a geographic area within the SCAQMD that can act as both a source of emissions and a receptor of emission impacts

⁸ SCAQMD 2011: Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>

and the maximum daily disturbance activity possible for each piece of equipment for several land-use projects and their development intensity. The maximum disturbed area during construction serves as a factor in determining the LSTs' project size value for construction. Table 2 shows the maximum daily disturbed acreage during grading based on the types and numbers of construction equipment used during the demolition, site preparation, and grading construction activities identified by the CalEEMod model. As shown in Table 2, the maximum daily area disturbed during construction is 4.0 acres that occurs during the grading activity. Therefore, the maximum daily disturbed area during construction was set as 4.0 acres for the localized assessment of construction impacts.

Table 2: Project Construction Equipment Disturbed Area Rates

Activity	Equipment Type	Equipment Quantity	Acres Graded per 8-hour Day	Operating Hours per Day	Acres Graded per Day
Demolition	Concrete/Industrial Saws	1	0	8	0.0
	Excavators	3	0	8	0.0
	Rubber Tired Dozers	2	0.5	8	1.0
	Total1.0 acres				
Site Preparation	Rubber Tired Dozers	3	8	0.5	1.5
	Crawler Tractors	4	8	0.5	2.0
	Total3.5 acres				
Grading	Excavators	2	0	8	0
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Crawler Tractor	2	0.5	8	1.0
	Scrapers	2	1	8	2.0
	Total4.0 acres				
Source: see Attachment for CalEEMod model output.					

The specification of LSTs is also dependent on the distance to the nearest sensitive receptor. The nearest sensitive receptor location depends not only on the distance to the Project but also on the duration for which a receptor may be exposed to air pollution. The SCAQMD considers a sensitive receptor to be a location such as a residence, hospital, convalescent facility where it is possible that an individual could remain for 24 hours or longer. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain onsite for a full 24 hours but are present for shorter periods, such as eight hours.

The Project location is surrounded by relatively flat undeveloped land except for a few scattered residential units at the northwest and southeast corners of the Project. An electrical utility facility is located to the east of the Project across Wilson Avenue. The closest sensitive receptor where such a receptor could reside for 24 hours or longer is located at an existing residence approximately 50 feet at the southeast end

of the Project. The shortest distance contained within the SCAQMD LST emission lookup tables is 25 meters (82 feet), so following the guidance from the SCAQMD, the distance to the nearest sensitive receptor was set at 25 meters (82 feet). Table 3 provides the applicable construction LSTs for this Project.

Table 3: Construction Localized Significance Thresholds

NOx (lbs/day)	CO (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)
237	1,346	11	7
LSTs for SRA 24, Project area of 4.0 acres and a receptor distance of 25 meters. The LSTs were interpolated from the 2 and 5 acre LSTs provided in the LST lookup tables.			

LST for Operation

As noted earlier, the SCAQMD has defined LSTs for project areas up to 5 acres in size. The Project is 11.3 acres. For projects that exceed 5 acres, the 5-acre LST lookup tables can be used as a screening tool to determine which pollutants require additional detailed air dispersion model analysis. This approach is conservative as it assumes that all onsite emissions associated with the Project would occur within a concentrated 5-acre area. Therefore, this screening method would over-predict potential localized impacts because the size of the LSTs increase with the size of the impacted area. As a result, if the LSTs were available for an 11.3-acre size, the LSTs would be greater than the LSTs for a 5-acre site. So, meeting the LSTs for a 5-acre area would imply compliance with an 11.3-acre site area. Table 4 provides the operational LSTs for this Project.

Table 4: Operational Localized Significance Thresholds

NOx (lbs/day)	CO (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)
270	1,577	4	2
LSTs for SRA 24, Project area of 5 acres and a receptor distance of 25 meters.			

2.1.3 Cumulative Significance Thresholds

The SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (SCAQMD 2003)⁹. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. Therefore, the Project-specific and cumulative significance thresholds are the same. As a result, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

The US Environmental Protection Agency currently designates the South Coast Air Basin, where the Project is located as nonattainment for ozone, PM₁₀, and PM_{2.5}. By its nature, air pollution is largely a cumulative

⁹ South Coast Air Quality Management District (SCAQMD) 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution

impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed Project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The determination of cumulative air quality impacts for construction and operational emissions is based on whether the Project would result in regional emissions that exceed SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD regional significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions.

2.2 - Criteria Pollutant Emission and Impact Estimates

2.2.1 Project Emissions

Project Construction

Construction activities for the Project were assumed to occur over 8 months commencing in January 2021 and would include the following elements:

- Fugitive dust mitigation applied as per SCAQMD Rule 403 – Fugitive Dust (2x per day watering, vehicle speed on unpaved surfaces <15 mph, unpaved surface moisture content of 12%, compliance with **PVCCSP EIR Mitigation Measure MM Air 3**
- Application of in-use off-road construction equipment meeting USEPA Tier 3 emission standards, compliance with **PVCCSP EIR Mitigation Measure MM Air 6**
- Application of "super compliant" architectural coatings (10 g/l or lower) with efficient high-volume low pressure (HVL) spray equipment, compliance with **PVCCSP EIR Mitigation Measures MM Air 8 and MM Air 9**
- Compliance with other applicable **PVCCSP EIR Mitigation Measures: MM Air 4 (limit on equipment idling), MM Air 5 (use of electric power equipment), and MM Air 7 (equipment maintained to manufacturer's specifications)**
- Construction equipment derived from the CalEEMod model equipment inventory
- Project site will balance with no soil import or export required
- Haul trucks used to remove demolition debris

Construction Emissions

The Project's conceptual construction schedule and equipment inventory are provided in [Table 5](#) and [Table 6](#), respectively, based on the applicant's general schedule and equipment inventory. The Project's construction vehicle trips are shown in [Table 7](#).

Table 5: Construction Schedule

Activity	Start Date	End Date	Total Days
Demolition	01/04/2021	01/08/2021	5
Site Preparation	01/09/2021	1/22/2021	10
Grading	01/23/2021	02/19/2021	20
Building Construction	02/20/2021	07/09/2021	100
Paving	07/10/2021	07/23/2021	10
Architectural Coating	07/24/2021	08/06/2021	10
Source: see CalEEMod output			

Table 6: Construction Equipment Inventory

Activity	Equipment	Project Number	Project Hours per day	Default Horse-power	Default Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber Tired Dozers	2	8	247	0.40
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
	Crawler Tractors	4	8	212	0.43
Grading	Excavators	2	8	158	0.38
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.40
	Crawler Tractor	2	8	212	0.43
	Scrapers	2	8	367	0.48
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	130	0.42
	Paving Equipment	2	8	132	0.36
	Rollers	2	8	80	0.38
Architectural Coating	Air Compressor	1	6	78	0.48
Source: see CalEEMod output					

Table 7: Construction Vehicle Trips

Activity	Construction Trips per Day		Total Trips
	Worker	Vendor	Haul
Demolition	15	0	145
Site Preparation	18	0	0
Grading	20	0	0
Building Construction	204	80	0
Paving	15	0	0
Architectural Coating	41	0	0
Note: (1) The demolition haul trucks account for the offsite transport of 1,469 tons of onsite demolition debris Source: see CalEEMod output			

Table 8 shows the Project's estimated maximum daily regional construction emissions. As noted in Table 8, the Project's construction would not exceed the SCAQMD's regional emission significance thresholds. Table 9 presents the results of the Project's localized construction impact assessment. From Table 9, the construction of the Project would not exceed the SCAQMD's construction, localized emission significance thresholds. The emission totals in both tables reflect the incorporation of the applicable PVCCSP mitigation measures noted earlier. As a result, the construction of the Project would not result in a significant impact during construction. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

Table 8: Estimated Maximum Daily Regional Construction Emissions

Construction Activity	Maximum Daily Regional Construction Emissions ⁽¹⁾ (pounds/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2021						
Demolition	1.1	24.6	26.1	<0.1	4.4	1.5
Site Preparation	1.5	27.0	31.0	0.1	9.3	5.6
Grading	1.9	34.1	40.7	0.1	6.0	3.1
Building Construction	1.9	22.2	26.8	<0.1	3.7	1.7
Paving	1.7	11.3	17.9	<0.1	0.8	0.6
Architectural Coating	28.2	1.5	2.3	<0.1	0.6	0.2
Maximum Daily Emissions	28.2	34.1	40.7	0.1	9.3	5.6
SCAQMD Significance Thresholds	75	100	550	150	150	55
Emissions Exceed Thresholds?	No	No	No	No	No	No
Notes: (ROG = reactive organic gases NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns or less in diameter PM _{2.5} = particulate matter 2.5 microns or less in diameter CO = carbon monoxide SO _x = sulfur oxides Source: see CalEEMod model output						

Table 9: Estimated Maximum Daily Localized Construction Emissions

Construction Activity	Maximum Daily Localized Construction Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
2021				
Demolition	18.3	24.7	3.7	1.3
Site Preparation	27.0	30.3	9.1	5.5
Grading	34.0	40.0	5.8	3.0
Building Construction	14.2	17.9	0.9	0.9
Paving	11.3	17.3	0.6	0.6
Architectural Coating	1.4	1.8	0.1	0.1
Maximum Daily Emissions	34.0	40.0	9.1	5.5
SCAQMD LST	237	1,346	11	7
Emissions Exceed Thresholds?	No	No	No	No
Notes: NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns or less in diameter PM _{2.5} = particulate matter 2.5 microns or less in diameter CO = carbon monoxide Source: see CalEEMod model output				

Project Operational Emissions

Long-term operational emissions are generated from the day-to-day operations. Operational emissions for land use development projects are typically distinguished as mobile, area, and energy-source emissions. Mobile-source emissions, which constitute the largest operational emissions source, are associated with motor vehicle traffic that would travel to and from the Project site. Area-source emissions are associated with landscape maintenance activities and periodic architectural coatings. Energy-source emissions are associated with natural gas consumption. Presented below are the main assumptions used in estimating the Project's operational emissions.

- The Project is expected to generate a total of 529 daily trips as per the Project Trip Generation Memorandum¹⁰. Table 10 provides the vehicle fleet mix assumed in this Project.
- The trip distances for the various vehicle types assumed the CalEEMod default values of 8.4 miles for the non-residential commercial – customer and 16.6 miles for the commercial – work. A trip length of 40 miles was assumed for the commercial – non-work (delivery trucks) based on previous guidance from the SCAQMD for warehouse-type projects without an assigned tenant.
- The LST methodology only considers emissions that are generated from onsite activities. However, the CalEEMod emission model does not separate operational mobile source emissions into onsite and offsite emissions. To estimate the Project's local operational mobile source emissions, an average onsite vehicle trip distance of 0.1 mile was assumed as representative of the average vehicle travel while onsite.
- Incorporation of **PVCCSP EIR Mitigation Measures MM Air 11** (truck idling), **MM Air 14** (priority

¹⁰ EPD Solutions, 2020. Rider Assemblage Trip Generation.

parking), **MM Air 15** (health risk assessment – addressed under a separate cover), **MM Air 18** (alternative transportation opportunities), **MM Air 19** (energy efficiency plans), and **MM Air 20** (increase building efficiency at least 15 percent beyond Title 24 requirements and reduction of indoor water usage by 25 percent).

Table 10: Project Daily Vehicle Trips

Warehouse		
Area	Trip Rate	
248.442 TSF	2.13 Trips/TSF	
Fleet Mix	Percentage of Fleet	Vehicle Trips per day
Passenger Cars (LDA,LDT1,LDT2, MDV)	84.4	446
2-axle trucks (LDTT1, LHDT2)	1.1	6
3-axle trucks (MHDT)	2.2	12
4 and 5+axle trucks (HHDT)	12.3	65
Total	100.0	529
LDA = light duty automobile, LDT1 and LDT2 = light duty trucks, MDV = medium duty vehicle, LHDT1 and LHDT2 = light heavy-duty trucks, MHDT = medium heavy-duty truck, HHDT = heavy heavy-duty truck TSF = thousand square feet Source: Traffic Impact Memorandum, EPDS October 7, 2020		

Table 11 summarizes the Project's regional operational emissions along with a comparison to the SCAQMD's regional significance thresholds. As noted in Table 11, the Project's operational emissions do not exceed the applicable regional significance thresholds. Table 12 provides the localized operational emissions results along with a comparison to the SCAQMD localized significance thresholds. From Table 12, the Project's operational emissions are less than the SCAQMD localized thresholds. Based on the information contained in Table 11 and Table 12, the operation of the Project would not result in a significant air quality impact during operation. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

Table 11: Estimated Maximum Daily Regional Operational Emissions

Operational Activity	Maximum Daily Regional Operational Emissions (pounds/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Area	5.6	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	0.1	0.1	<0.1	<0.1
Mobile	1.0	15.8	17.8	8.4	2.3
Total Project Operational Emissions	6.7	15.9	18.0	8.4	2.3
SCAQMD Significance Threshold	55	55	550	150	55

Operational Activity	Maximum Daily Regional Operational Emissions (pounds/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Exceed Threshold?	No	No	No	No	No

Notes:
NO_x = oxides of nitrogen PM₁₀ = particulate matter 10 microns or less in diameter ROG = reactive organic gases
PM_{2.5} = particulate matter 2.5 microns or less in diameter CO = carbon monoxide
Maximum of daily Summer or winter season emissions presented
Source: see CalEEMod model output

Table 12: Estimated Maximum Daily Localized Operational Emissions

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area	<0.1	<0.1	<0.1	<0.1
Energy	0.1	0.1	<0.1	<0.1
Mobile	7.1	2.6	<0.1	<0.1
Total Operational Emissions	7.2	2.6	0.1	0.1
SCAQMD Significance Threshold	270	1,577	4	2
Exceed Threshold?	No	No	No	No

Notes:
NO_x = oxides of nitrogen PM₁₀ = particulate matter 10 microns or less in diameter
PM_{2.5} = particulate matter 2.5 microns or less in diameter CO = carbon monoxide
Maximum of daily Summer or winter season emissions presented
Source: see CalEEMod model output

2.2.2 Cumulative Impacts

Construction

As shown above in Table 8, the Project's maximum daily regional construction emissions would not exceed SCAQMD's regional thresholds of significance. Therefore, the Project's construction emissions would not result in a cumulatively considerable incremental contribution to the existing cumulative air quality impacts. Furthermore, all construction activities would comply with applicable SCAQMD rules and regulations, including Rule 403 to minimize fugitive PM dust emissions and the prescriptive PVCCSP EIR mitigation measures. Therefore, the cumulative impact from the construction of the Project would be less than significant. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

Operations

As shown above in [Table 11](#), the Project's maximum daily operational emissions would not exceed SCAQMD's regional thresholds of significance. Therefore, the Project's operational emissions would not result in a cumulatively considerable incremental contribution to the existing cumulative air quality impacts. As a result, the cumulative impact from the long-term operation of the Project would be less than significant. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

2.3 - Conclusions

The Project's construction and operational emissions would not exceed the SCAQMD's established project level or cumulative regional or localized pollutant significance thresholds during either construction or operation. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

SECTION 3: CALEEMOD EMISSION ESTIMATES - GREENHOUSE GAS EMISSIONS

This section analyzes the potential impacts on climate change from the Project's emissions of various greenhouses (GHG).

3.1 - Significance Threshold

The City of Perris has not adopted numerical significance thresholds for managing greenhouse gases. In accordance with CEQA guidance, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to assess the significance of a project's GHG emissions. The Project is located within the SCAQMD. To guide lead agencies on determining the significance of GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD proposed a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. This concept is equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The SCAQMD has continued to consider the adoption of significance thresholds for residential and general development projects. The most recent proposal was issued in September 2010 (SCAQMD 2010¹¹) uses a tiered approach to evaluate potential GHG impacts from various uses. This assessment will apply the Tier 3 approach that provides as follows:

- Tier 3 consists of screening values, which the lead agency can choose but must be consistent with all its jurisdiction projects. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - Option 1: All land use types: 3,000 MT CO₂e per year
 - Option 2: Based on land use type: residential: 3,500 MT CO₂e per year; commercial: 1,400 MT CO₂e per year; or mixed use: 3,000 MT CO₂e per year

Note that for projects where the SCAQMD is the Lead Agency, the SCAQMD adopted a stationary source GHG significance threshold is 10,000 MTCO₂e per year. This approach is also widely used by the City of Perris and various other cities in the South Coast Air Basin, where the SCAQMD is the lead agency. Further, this threshold has been applied by the City of Perris for other industrial developments subject to CEQA (Optimus Logistics Center 2, Duke Warehouse at Perris Boulevard and Markham Street, and IDI- Warehouse at Indian Avenue and Ramona Expressway). As such, this threshold of 10,000 MTCO₂e is utilized herein to determine if emissions of GHG from this Project will be significant. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

¹¹ SCAQMD 2010. Minutes of the GHG CEQA Significance Threshold Stakeholder Working Group #15. Website: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf)

3.2 - Estimation of GHG Emissions

3.3.1 Project Emissions

Construction

The Project's construction GHG emissions are summarized in Table 13.

Table 13: Project Construction GHG Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
2021	424
Total Emissions Amortized Over 30 years	14
Source: see CalEEMod output	

Operations

The Project's operational GHG emissions are summarized in Table 14 along with the construction GHG emissions and the total Project GHG emissions.

Table 14: Project GHG Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
Project Operational Emissions	
Area	0
Energy	174
Mobile	1,973
Waste	118
Water	265
Total	2,530
Project Construction Emissions	14
Project Construction and Operation	2,544
Significance Threshold	10,000
Project Exceeds Threshold?	No
Source: see CalEEMod output	

3.3.2 Conclusion

As noted from the results shown in Table 14 above, the Project's construction and operational emissions are well below the SCAQMD significance threshold of 10,000 MTCO₂e per year for an industrial project

adopted for this Project. No new mitigation is required beyond those mitigation measures prescribed in the PVCCSP EIR.

SECTION 4: PROJECT FUEL AND ENERGY CONSUMPTION

4.1 - Assumptions

- Construction equipment fuel consumption derived from ARB Offroad2017 emission model and the CalEEMod construction equipment
- Fuel Consumption from vehicle travel derived from ARB EMFAC2017 emission model
- Electrical and natural gas usage derived from the CalEEMod model

4.2 - Significance Thresholds

Neither Appendix F of the State CEQA Guidelines nor PRC Section 21100(b)(3)) provides a numerical threshold of significance that might be used to evaluate the potential significance of energy consumption of a proposed project. Instead, the emphasis is on reducing "the wasteful, inefficient, and unnecessary consumption of energy." Based on this focus of the guidelines, for purposes of this report, the Project would have a significant impact related to energy consumption if it would:

- Involve the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with project design, project location, the use of electricity and natural gas, and the use of fuel by vehicles anticipated to travel to and from the Project.

4.3 - Construction

4.3.1 Electricity and Natural Gas Usage

Southern California Edison Company would provide temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. The electricity used for such activities would be temporary and would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption.

Natural gas is not anticipated to be required during the construction of the Project. Fuels used during the construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of Project construction would be substantially less than that required for project operation and would have a negligible contribution to the Project's overall energy consumption.

4.3.2 Petroleum Fuel Usage

Off-road heavy-duty construction equipment associated with construction activities would rely on diesel fuel, as vendors and haul trucks would be involved in delivering building materials and removing the demolition debris from the project site. Construction workers would travel to and from the Project site throughout the duration of construction. The analysis assumed that construction workers would travel to and from the site in gasoline-powered passenger vehicles. Table 17 presents the fuel usage for the off-road construction equipment. These estimates are based on the annual total fuel consumption and horsepower-hour data contained within the ARB OFFROAD2017 emission model for specific types of diesel

construction equipment to be employed in the project construction. Note that the total fuel consumption during construction computed below likely substantially overstates the amount of fuel usage. Although construction equipment and their duration are listed under a particular construction activity, there is a likelihood that not all of the inventoried equipment would operate over the entire duration of the construction activity. For example, during building construction, a crane is listed as one of the equipment's operational pieces. However, it is highly unlikely that the crane would operate over the entire duration of 120 days assumed during the building construction activity.

Table 18 summarizes the Project's construction vehicle fuel usage. The fuel usage is based on the vehicle type (worker vehicle, vendor vehicle, and haul truck), vehicle miles traveled, and fuel usage factors contained in the ARB EMFAC2017 mobile source emission model and the CalEEMod model to derive the average vehicle fuel economy, which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. Table 19 summarizes the total construction fuel consumption.

4.4 - Operational Energy Requirements

Table 20 summarizes the Project's operational energy requirements.

4.5 - Conclusion

Construction of the Project would result in fuel consumption from construction tools and equipment, vendor and haul truck trips, and vehicle trips generated from construction workers traveling to and from the site. Construction activities and corresponding fuel energy consumption would be temporary and localized. The use of diesel fuel and heavy-duty equipment would not be a typical operational condition of the Project. Also, there are no unusual project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the State. Whether it be for a household task or construction project such as the proposed Project, any construction job's rational goal is to minimize construction costs while meeting all legal requirements for doing so. Therefore, construction-related fuel consumption by the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other construction sites in the region.

According to CEQA Guidelines Appendix F, the goal of conserving energy implies the wise and efficient use of energy, including decreasing overall per capita energy consumption, reducing reliance on natural gas and oil, and increasing reliance on renewable energy sources. The Project would comply with all of the energy efficiency requirements under all applicable State, county, and local business and energy code ordinances. As a result, the operation of the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other similar residential projects in the region. No mitigation is required.

Table 15: Construction Equipment Fuel Usage

Activity	Equipment	Project Number	Project Hours per day	Default Horse-power	Default Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	5	2,365	0.021465	51
	Crawler Tractors	3	8	212	0.43	5	10,939	0.022173	243
	Rubber Tired Dozers	2	8	247	0.4	5	7,904	0.0204615	162
Site Preparation	Rubber Tired Dozer	3	8	247	0.4	10	23,712	0.020461	485
	Crawler Tractor	4	8	212	0.43	10	29,171	0.022173	647
Grading	Excavators	2	8	187	0.41	20	24,534	0.021143	519
	Graders	1	8	158	0.38	20	9,606	0.021143	203
	Rubber Tired Dozers	1	8	247	0.4	20	15,808	0.020461	323
	Crawler Tractor	2	8	212	0.43	20	29,171	0.022173	647
	Scrapers	2	8	367	0.48	20	56,371	0.024988	1,409
Building Construction	Crane	1	7	231	0.29	100	46,893	0.020461	960
	Forklifts	3	8	89	0.2	100	42,720	0.022173	947
	Generator Sets	1	8	84	0.74	100	49,728	0.022173	1,103
	Tractors/Loaders/Backhoes	3	7	97	0.37	100	75,369	0.019757	1,489
	Welders	1	8	48	0.45	100	17,280	0.018658	322
Paving	Pavers	2	6	130	0.36	10	5,616	0.018334	103
	Paving Equipment	2	8	132	0.38	10	8,026	0.018333	147
	Rollers	2	7	80	0.38	10	4,256	0.023965	102
Architectural Coating	Air Compressor	1	6	78	0.48	10	2246.4	0.021465	48
								Total	9,909

Table 16: Estimated Project Construction Vehicle Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	406	0
Vendor Trucks	6,037	0
Worker Vehicles	0	10,936
Construction Vehicles Total	6,443	10,936
Source: see Construction Fuel Usage Spreadsheet		

Table 17: Total Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	6,443	10,936
Off-road Construction Equipment	9,909	0
Construction Total	16,352	10,936
Source: see Construction Fuel Usage Spreadsheet		

Table 18: Project Annual Operational Energy Requirements

Operational Source (value per year)		
	Annual VMT	Gallons of Fuel
Transportation – Project	3,905,150	
	609,203(DSL)	94,030,140(DSL)
	3,299,852(GAS)	5,256,609(GAS)
Thousands Kilowatt-Hours		
Electricity – Project	603,094	
Thousands British Thermal Units		
Natural Gas – Project	504,337	
Source: see Fuel Usage Spreadsheet and CalEEMod output		

CalEEMod Model Spreadsheet Output

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CalEEMod Model Output: Project – Summer	1
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Core5 Rider Avenue Project - - Riverside-South Coast County, Summer

**Core5 Rider Avenue Project -
Riverside-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	248.44	1000sqft	5.70	248,442.00	0
Other Asphalt Surfaces	2.97	Acre	2.97	129,373.20	0
Parking Lot	1.10	Acre	1.10	47,916.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	534	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Core5 Rider Avenue Project - - Riverside-South Coast County, Summer

Project Characteristics - SCE CO# emission intensity factor for 2020 to 2029

Land Use - Warehouse: 248.442 sq-ft

Parking Lot: 1.1 acres

Landscaping: 1.4 acres

Internal Roadways: 2.97 acres

Construction Phase - Schedule duration provided by the applicant (8-month duration)

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Demolition - REmoval of three residential-tyoe buildings

Architectural Coating - PVCCSP Mitigation Requirement MM AIR 9 requires super compliant coatings

Vehicle Trips - Trip generation rate: 2.13 trips per thousand square feet

All delivery trucks assumed to have a trip distance of 24 miles

Construction Off-road Equipment Mitigation - PVCCSP Mitigation Measure MM AIR 6 requires a mininum in-use offroad diesel Tier 3 certified engines

Energy Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires

Increase building efficiency by a miminum 15% beyond Title 24

Water Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires 25% reduction of indoor water use

Fleet Mix - Fleet mix for all vehicles as per the project Trip Generation Memorandum

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
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tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstructionPhase	NumDays	20.00	5.00
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tblFleetMix	SBUS	9.3200e-004	0.00
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tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
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tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
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tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	2.13

2.0 Emissions Summary

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

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	28.3741	60.8347	31.9676	0.0736	18.2675	2.6472	20.9146	9.9840	2.4354	12.4195	0.0000	7,138.9175	7,138.9175	2.2451	0.0000	7,195.0444
Maximum	28.3741	60.8347	31.9676	0.0736	18.2675	2.6472	20.9146	9.9840	2.4354	12.4195	0.0000	7,138.9175	7,138.9175	2.2451	0.0000	7,195.0444

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	28.2146	34.0236	41.1384	0.0736	8.3310	1.3407	9.3582	4.5222	1.3405	5.5492	0.0000	7,138.9175	7,138.9175	2.2451	0.0000	7,195.0444
Maximum	28.2146	34.0236	41.1384	0.0736	8.3310	1.3407	9.3582	4.5222	1.3405	5.5492	0.0000	7,138.9175	7,138.9175	2.2451	0.0000	7,195.0444

	ROG	NOx	CO	SO2	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	44.07	-28.69	0.00	54.39	49.36	55.26	54.71	44.96	55.32	0.00	0.00	0.00	0.00	0.00	0.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Mobile	1.1895	15.6214	21.4616	0.1223	8.3647	0.0779	8.4427	2.2376	0.0733	2.3109		12,543.0955	12,543.0955	0.4272		12,553.7766
Total	6.8364	15.7571	21.6014	0.1231	8.3647	0.0883	8.4531	2.2376	0.0837	2.3213		12,705.7095	12,705.7095	0.4305	2.9800e-003	12,717.3602

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Mobile	1.1895	15.6214	21.4616	0.1223	8.3647	0.0779	8.4427	2.2376	0.0733	2.3109		12,543.0955	12,543.0955	0.4272		12,553.7766
Total	6.8342	15.7371	21.5846	0.1230	8.3647	0.0868	8.4515	2.2376	0.0821	2.3198		12,681.6861	12,681.6861	0.4301	2.5400e-003	12,693.1940

Core5 Rider Avenue Project - - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	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	0.03	0.13	0.08	0.10	0.00	1.73	0.02	0.00	1.83	0.07	0.00	0.19	0.19	0.11	14.77	0.19

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/8/2021	5	5	
2	Site Preparation	Site Preparation	1/9/2021	1/22/2021	5	10	
3	Grading	Grading	1/23/2021	2/19/2021	5	20	
4	Building Construction	Building Construction	2/20/2021	7/9/2021	5	100	
5	Paving	Paving	7/10/2021	7/23/2021	5	10	
6	Architectural Coating	Architectural Coating	7/24/2021	8/6/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.07

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 372,663; Non-Residential Outdoor: 124,221; Striped Parking Area: 10,637 (Architectural Coating – sqft)

OffRoad Equipment

Core5 Rider Avenue Project - - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	145.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	204.00	80.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					6.3258	0.0000	6.3258	0.9578	0.0000	0.9578			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	6.3258	1.5513	7.8772	0.9578	1.4411	2.3989		3,747.9449	3,747.9449	1.0549		3,774.3174

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.2 Demolition - 2021

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	0.1412	6.3033	0.8289	0.0218	0.5073	0.0192	0.5265	0.1391	0.0184	0.1574		2,318.0716	2,318.0716	0.1346		2,321.4377
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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078
Total	0.2123	6.3438	1.3835	0.0234	0.6749	0.0202	0.6951	0.1835	0.0193	0.2028		2,477.7843	2,477.7843	0.1385		2,481.2455

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					2.8466	0.0000	2.8466	0.4310	0.0000	0.4310			0.0000			0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	0.9246	18.3130	24.6739	0.0388	2.8466	0.8627	3.7093	0.4310	0.8627	1.2937	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.2 Demolition - 2021

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	0.1412	6.3033	0.8289	0.0218	0.5073	0.0192	0.5265	0.1391	0.0184	0.1574		2,318.0716	2,318.0716	0.1346		2,321.4377
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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078
Total	0.2123	6.3438	1.3835	0.0234	0.6749	0.0202	0.6951	0.1835	0.0193	0.2028		2,477.7843	2,477.7843	0.1385		2,481.2455

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343		5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	18.0663	2.6460	20.7123	9.9307	2.4343	12.3650		5,523.5047	5,523.5047	1.7864		5,568.1651

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.3 Site Preparation - 2021

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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.3991	27.0483	30.3128	0.0570		1.0260	1.0260		1.0260	1.0260	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651
Total	1.3991	27.0483	30.3128	0.0570	8.1298	1.0260	9.1558	4.4688	1.0260	5.4948	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.3 Site Preparation - 2021

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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694

3.4 Grading - 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					9.9990	0.0000	9.9990	3.7396	0.0000	3.7396			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032		6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	9.9990	2.2861	12.2851	3.7396	2.1032	5.8429		6,925.9674	6,925.9674	2.2400		6,981.9673

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.4 Grading - 2021

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	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771

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					4.4995	0.0000	4.4995	1.6828	0.0000	1.6828			0.0000			0.0000
Off-Road	1.7571	33.9695	40.3990	0.0715		1.3393	1.3393		1.3393	1.3393	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673
Total	1.7571	33.9695	40.3990	0.0715	4.4995	1.3393	5.8389	1.6828	1.3393	3.0222	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.4 Grading - 2021

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	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771

3.5 Building Construction - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.5 Building Construction - 2021

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	0.1868	7.4031	1.3208	0.0207	0.5123	0.0141	0.5264	0.1475	0.0135	0.1610		2,186.008 2	2,186.008 2	0.1564		2,189.917 9
Worker	0.9672	0.5510	7.5421	0.0218	2.2802	0.0134	2.2937	0.6047	0.0124	0.6171		2,172.091 9	2,172.091 9	0.0518		2,173.386 7
Total	1.1539	7.9541	8.8630	0.0425	2.7925	0.0275	2.8200	0.7522	0.0258	0.7781		4,358.100 0	4,358.100 0	0.2082		4,363.304 5

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.5 Building Construction - 2021

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	0.1868	7.4031	1.3208	0.0207	0.5123	0.0141	0.5264	0.1475	0.0135	0.1610		2,186.008 2	2,186.008 2	0.1564		2,189.917 9
Worker	0.9672	0.5510	7.5421	0.0218	2.2802	0.0134	2.2937	0.6047	0.0124	0.6171		2,172.091 9	2,172.091 9	0.0518		2,173.386 7
Total	1.1539	7.9541	8.8630	0.0425	2.7925	0.0275	2.8200	0.7522	0.0258	0.7781		4,358.100 0	4,358.100 0	0.2082		4,363.304 5

3.6 Paving - 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	1.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3219	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.6 Paving - 2021

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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6273	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.6 Paving - 2021

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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078

3.7 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	27.9608					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	28.1797	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

3.7 Architectural Coating - 2021

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	0.1944	0.1107	1.5158	4.3800e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		436.5479	436.5479	0.0104		436.8081
Total	0.1944	0.1107	1.5158	4.3800e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		436.5479	436.5479	0.0104		436.8081

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	27.9608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.0203	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309

Core5 Rider Avenue Project - - Riverside-South Coast County, Summer

3.7 Architectural Coating - 2021

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	0.1944	0.1107	1.5158	4.3800e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		436.5479	436.5479	0.0104		436.8081
Total	0.1944	0.1107	1.5158	4.3800e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		436.5479	436.5479	0.0104		436.8081

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	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	1.1895	15.6214	21.4616	0.1223	8.3647	0.0779	8.4427	2.2376	0.0733	2.3109		12,543.0955	12,543.0955	0.4272		12,553.7766
Unmitigated	1.1895	15.6214	21.4616	0.1223	8.3647	0.0779	8.4427	2.2376	0.0733	2.3109		12,543.0955	12,543.0955	0.4272		12,553.7766

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	529.18	529.18	529.18	3,905,150	3,905,150
Total	529.18	529.18	529.18	3,905,150	3,905,150

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0

4.4 Fleet Mix

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.504000	0.051000	0.162000	0.128000	0.009000	0.002300	0.022000	0.123000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
NaturalGas Unmitigated	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

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					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1381.75	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Total		0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.17755	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Total		0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582

6.0 Area Detail

6.1 Mitigation Measures Area

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Unmitigated	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

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	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

Core5 Rider AVenue Project - - Riverside-South Coast County, Summer

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

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

**Core5 Rider Avenue Project -
Riverside-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	248.44	1000sqft	5.70	248,442.00	0
Other Asphalt Surfaces	2.97	Acre	2.97	129,373.20	0
Parking Lot	1.10	Acre	1.10	47,916.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	534	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

Project Characteristics - SCE CO# emission intensity factor for 2020 to 2029

Land Use - Warehouse: 248.442 sq-ft

Parking Lot: 1.1 acres

Landscaping: 1.4 acres

Internal Roadways: 2.97 acres

Construction Phase - Schedule duration provided by the applicant (8-month duration)

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Demolition - REmoval of three residential-tyoe buildings

Architectural Coating - PVCCSP Mitigation Requirement MM AIR 9 requires super compliant coatings

Vehicle Trips - Trip generation rate: 2.13 trips per thousand square feet

All delivery trucks assumed to have a trip distance of 24 miles

Construction Off-road Equipment Mitigation - PVCCSP Mitigation Measure MM AIR 6 requires a mininum in-use offroad diesel Tier 3 certified engines

Energy Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires

Increase building efficiency by a miminum 15% beyond Title 24

Water Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires 25% reduction of indoor water use

Fleet Mix - Fleet mix for all vehicles as per the project Trip Generation Memorandum

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.12
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	9.0000e-003
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	2.3000e-003
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblGrading	AcresOfGrading	70.00	75.00
tblGrading	AcresOfGrading	20.00	0.00
tblLandUse	LandUseSquareFeet	248,440.00	248,442.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	2.13
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	2.13
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	2.13

2.0 Emissions Summary

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	28.3705	60.8364	31.8250	0.0734	18.2675	2.6472	20.9146	9.9840	2.4354	12.4195	0.0000	7,117.0061	7,117.0061	2.2444	0.0000	7,173.1164
Maximum	28.3705	60.8364	31.8250	0.0734	18.2675	2.6472	20.9146	9.9840	2.4354	12.4195	0.0000	7,117.0061	7,117.0061	2.2444	0.0000	7,173.1164

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	28.2110	34.0254	40.9958	0.0734	8.3310	1.3407	9.3582	4.5222	1.3405	5.5492	0.0000	7,117.0061	7,117.0061	2.2444	0.0000	7,173.1164
Maximum	28.2110	34.0254	40.9958	0.0734	8.3310	1.3407	9.3582	4.5222	1.3405	5.5492	0.0000	7,117.0061	7,117.0061	2.2444	0.0000	7,173.1164

	ROG	NOx	CO	SO2	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	44.07	-28.82	0.00	54.39	49.36	55.26	54.71	44.96	55.32	0.00	0.00	0.00	0.00	0.00	0.00

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Mobile	1.0369	15.7726	17.8112	0.1142	8.3647	0.0785	8.4432	2.2376	0.0738	2.3115		11,728.2637	11,728.2637	0.4367		11,739.1823
Total	6.6838	15.9084	17.9510	0.1150	8.3647	0.0889	8.4536	2.2376	0.0842	2.3218		11,890.8776	11,890.8776	0.4400	2.9800e-003	11,902.7658

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Mobile	1.0369	15.7726	17.8112	0.1142	8.3647	0.0785	8.4432	2.2376	0.0738	2.3115		11,728.2637	11,728.2637	0.4367		11,739.1823
Total	6.6816	15.8883	17.9341	0.1149	8.3647	0.0874	8.4521	2.2376	0.0827	2.3203		11,866.8542	11,866.8542	0.4396	2.5400e-003	11,878.5997

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	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	0.03	0.13	0.09	0.10	0.00	1.72	0.02	0.00	1.82	0.07	0.00	0.20	0.20	0.10	14.77	0.20

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/8/2021	5	5	
2	Site Preparation	Site Preparation	1/9/2021	1/22/2021	5	10	
3	Grading	Grading	1/23/2021	2/19/2021	5	20	
4	Building Construction	Building Construction	2/20/2021	7/9/2021	5	100	
5	Paving	Paving	7/10/2021	7/23/2021	5	10	
6	Architectural Coating	Architectural Coating	7/24/2021	8/6/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.07

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 372,663; Non-Residential Outdoor: 124,221; Striped Parking Area: 10,637 (Architectural Coating – sqft)

OffRoad Equipment

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Core5 Rider Avenue Project - - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	145.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	204.00	80.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					6.3258	0.0000	6.3258	0.9578	0.0000	0.9578			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	6.3258	1.5513	7.8772	0.9578	1.4411	2.3989		3,747.9449	3,747.9449	1.0549		3,774.3174

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.2 Demolition - 2021

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	0.1485	6.3460	0.9669	0.0213	0.5073	0.0195	0.5268	0.1391	0.0186	0.1577		2,259.8309	2,259.8309	0.1473		2,263.5133
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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618
Total	0.2183	6.3879	1.4145	0.0227	0.6749	0.0205	0.6954	0.1835	0.0195	0.2031		2,403.1099	2,403.1099	0.1506		2,406.8751

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					2.8466	0.0000	2.8466	0.4310	0.0000	0.4310			0.0000			0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	0.9246	18.3130	24.6739	0.0388	2.8466	0.8627	3.7093	0.4310	0.8627	1.2937	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.2 Demolition - 2021

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	0.1485	6.3460	0.9669	0.0213	0.5073	0.0195	0.5268	0.1391	0.0186	0.1577		2,259.8309	2,259.8309	0.1473		2,263.5133
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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618
Total	0.2183	6.3879	1.4145	0.0227	0.6749	0.0205	0.6954	0.1835	0.0195	0.2031		2,403.1099	2,403.1099	0.1506		2,406.8751

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343		5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	18.0663	2.6460	20.7123	9.9307	2.4343	12.3650		5,523.5047	5,523.5047	1.7864		5,568.1651

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.3 Site Preparation - 2021

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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.3991	27.0483	30.3128	0.0570		1.0260	1.0260		1.0260	1.0260	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651
Total	1.3991	27.0483	30.3128	0.0570	8.1298	1.0260	9.1558	4.4688	1.0260	5.4948	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.3 Site Preparation - 2021

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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342

3.4 Grading - 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					9.9990	0.0000	9.9990	3.7396	0.0000	3.7396			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032		6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	9.9990	2.2861	12.2851	3.7396	2.1032	5.8429		6,925.9674	6,925.9674	2.2400		6,981.9673

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.4 Grading - 2021

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	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491

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					4.4995	0.0000	4.4995	1.6828	0.0000	1.6828			0.0000			0.0000
Off-Road	1.7571	33.9695	40.3990	0.0715		1.3393	1.3393		1.3393	1.3393	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673
Total	1.7571	33.9695	40.3990	0.0715	4.4995	1.3393	5.8389	1.6828	1.3393	3.0222	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.4 Grading - 2021

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	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491

3.5 Building Construction - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.5 Building Construction - 2021

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	0.1984	7.3394	1.5625	0.0200	0.5123	0.0145	0.5268	0.1475	0.0139	0.1614		2,103.7858	2,103.7858	0.1743		2,108.1421
Worker	0.9491	0.5698	6.0880	0.0196	2.2802	0.0134	2.2937	0.6047	0.0124	0.6171		1,948.5948	1,948.5948	0.0450		1,949.7205
Total	1.1475	7.9092	7.6505	0.0395	2.7925	0.0280	2.8205	0.7522	0.0262	0.7785		4,052.3806	4,052.3806	0.2193		4,057.8627

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.5 Building Construction - 2021

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	0.1984	7.3394	1.5625	0.0200	0.5123	0.0145	0.5268	0.1475	0.0139	0.1614		2,103.7858	2,103.7858	0.1743		2,108.1421
Worker	0.9491	0.5698	6.0880	0.0196	2.2802	0.0134	2.2937	0.6047	0.0124	0.6171		1,948.5948	1,948.5948	0.0450		1,949.7205
Total	1.1475	7.9092	7.6505	0.0395	2.7925	0.0280	2.8205	0.7522	0.0262	0.7785		4,052.3806	4,052.3806	0.2193		4,057.8627

3.6 Paving - 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3219	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.6 Paving - 2021

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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6273	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.6 Paving - 2021

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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

3.7 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	27.9608					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	28.1797	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.7 Architectural Coating - 2021

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	0.1908	0.1145	1.2236	3.9300e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		391.6294	391.6294	9.0500e-003		391.8556
Total	0.1908	0.1145	1.2236	3.9300e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		391.6294	391.6294	9.0500e-003		391.8556

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	27.9608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.0203	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

3.7 Architectural Coating - 2021

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	0.1908	0.1145	1.2236	3.9300e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		391.6294	391.6294	9.0500e-003		391.8556
Total	0.1908	0.1145	1.2236	3.9300e-003	0.4583	2.7000e-003	0.4610	0.1215	2.4900e-003	0.1240		391.6294	391.6294	9.0500e-003		391.8556

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	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	1.0369	15.7726	17.8112	0.1142	8.3647	0.0785	8.4432	2.2376	0.0738	2.3115		11,728.26 37	11,728.26 37	0.4367		11,739.18 23
Unmitigated	1.0369	15.7726	17.8112	0.1142	8.3647	0.0785	8.4432	2.2376	0.0738	2.3115		11,728.26 37	11,728.26 37	0.4367		11,739.18 23

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	529.18	529.18	529.18	3,905,150	3,905,150
Total	529.18	529.18	529.18	3,905,150	3,905,150

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0

4.4 Fleet Mix

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.504000	0.051000	0.162000	0.128000	0.009000	0.002300	0.022000	0.123000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
NaturalGas Unmitigated	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

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					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1381.75	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Total		0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.17755	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Total		0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582

6.0 Area Detail

6.1 Mitigation Measures Area

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Unmitigated	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

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	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

Core5 Rider AVenue Project - - Riverside-South Coast County, Winter

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

Core5 Rider Avenue Project - - Riverside-South Coast County, Annual

**Core5 Rider Avenue Project -
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	248.44	1000sqft	5.70	248,442.00	0
Other Asphalt Surfaces	2.97	Acre	2.97	129,373.20	0
Parking Lot	1.10	Acre	1.10	47,916.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	534	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

Project Characteristics - SCE CO# emission intensity factor for 2020 to 2029

Land Use - Warehouse: 248.442 sq-ft

Parking Lot: 1.1 acres

Landscaping: 1.4 acres

Internal Roadways: 2.97 acres

Construction Phase - Schedule duration provided by the applicant (8-month duration)

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Demolition - REmoval of three residential-tyoe buildings

Architectural Coating - PVCCSP Mitigation Requirement MM AIR 9 requires super compliant coatings

Vehicle Trips - Trip generation rate: 2.13 trips per thousand square feet

All delivery trucks assumed to have a trip distance of 24 miles

Construction Off-road Equipment Mitigation - PVCCSP Mitigation Measure MM AIR 6 requires a mininum in-use offroad diesel Tier 3 certified engines

Energy Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires

Increase building efficiency by a miminum 15% beyond Title 24

Water Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires 25% reduction of indoor water use

Fleet Mix - Fleet mix for all vehicles as per the project Trip Generation Memorandum

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.12
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	9.0000e-003
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00

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tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	2.3000e-003
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00

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tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblGrading	AcresOfGrading	70.00	75.00
tblGrading	AcresOfGrading	20.00	0.00
tblLandUse	LandUseSquareFeet	248,440.00	248,442.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	2.13
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	2.13
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	2.13

2.0 Emissions Summary

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

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	0.3876	2.3121	1.8008	4.7100e-003	0.3514	0.0932	0.4447	0.1286	0.0868	0.2155	0.0000	422.3459	422.3459	0.0721	0.0000	424.1480
Maximum	0.3876	2.3121	1.8008	4.7100e-003	0.3514	0.0932	0.4447	0.1286	0.0868	0.2155	0.0000	422.3459	422.3459	0.0721	0.0000	424.1480

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	0.2651	1.7156	2.0208	4.7100e-003	0.2381	0.0709	0.3089	0.0794	0.0708	0.1502	0.0000	422.3456	422.3456	0.0721	0.0000	424.1477
Maximum	0.2651	1.7156	2.0208	4.7100e-003	0.2381	0.0709	0.3089	0.0794	0.0708	0.1502	0.0000	422.3456	422.3456	0.0721	0.0000	424.1477

	ROG	NOx	CO	SO2	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	31.62	25.80	-12.22	0.00	32.26	24.01	30.53	38.25	18.52	30.29	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2021	4-3-2021	1.4571	0.9158
2	4-4-2021	7-3-2021	0.9243	0.7803
3	7-4-2021	9-30-2021	0.2878	0.2650
		Highest	1.4571	0.9158

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	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003
Energy	2.7200e-003	0.0247	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	172.9937	172.9937	8.4500e-003	2.1300e-003	173.8411
Mobile	0.1893	2.9157	3.3688	0.0212	1.4976	0.0142	1.5118	0.4012	0.0134	0.4145	0.0000	1,971.8951	1,971.8951	0.0701	0.0000	1,973.6477
Waste						0.0000	0.0000		0.0000	0.0000	47.4288	0.0000	47.4288	2.8030	0.0000	117.5029
Water						0.0000	0.0000		0.0000	0.0000	18.2268	185.6874	203.9142	1.8822	0.0463	264.7623
Total	1.2197	2.9405	3.3928	0.0213	1.4976	0.0161	1.5137	0.4012	0.0153	0.4164	65.6556	2,330.5824	2,396.2381	4.7637	0.0484	2,529.7607

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003
Energy	2.3200e-003	0.0211	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	165.6765	165.6765	8.1900e-003	2.0200e-003	166.4846
Mobile	0.1893	2.9157	3.3688	0.0212	1.4976	0.0142	1.5118	0.4012	0.0134	0.4145	0.0000	1,971.8951	1,971.8951	0.0701	0.0000	1,973.6477
Waste						0.0000	0.0000		0.0000	0.0000	47.4288	0.0000	47.4288	2.8030	0.0000	117.5029
Water						0.0000	0.0000		0.0000	0.0000	13.6701	140.3877	154.0578	1.4117	0.0347	199.6992
Total	1.2193	2.9368	3.3897	0.0213	1.4976	0.0158	1.5135	0.4012	0.0150	0.4161	61.0989	2,277.9656	2,339.0646	4.2929	0.0368	2,457.3411

	ROG	NOx	CO	SO2	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	0.03	0.12	0.09	0.09	0.00	1.74	0.02	0.00	1.84	0.07	6.94	2.26	2.39	9.88	24.10	2.86

3.0 Construction Detail

Construction Phase

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/8/2021	5	5	
2	Site Preparation	Site Preparation	1/9/2021	1/22/2021	5	10	
3	Grading	Grading	1/23/2021	2/19/2021	5	20	
4	Building Construction	Building Construction	2/20/2021	7/9/2021	5	100	
5	Paving	Paving	7/10/2021	7/23/2021	5	10	
6	Architectural Coating	Architectural Coating	7/24/2021	8/6/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.07

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 372,663; Non-Residential Outdoor: 124,221; Striped Parking Area: 10,637 (Architectural Coating – sqft)

OffRoad Equipment

Core5 Rider Avenue Project - - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	145.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	204.00	80.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					0.0158	0.0000	0.0158	2.3900e-003	0.0000	2.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9100e-003	0.0786	0.0539	1.0000e-004		3.8800e-003	3.8800e-003		3.6000e-003	3.6000e-003	0.0000	8.5002	8.5002	2.3900e-003	0.0000	8.5600
Total	7.9100e-003	0.0786	0.0539	1.0000e-004	0.0158	3.8800e-003	0.0197	2.3900e-003	3.6000e-003	5.9900e-003	0.0000	8.5002	8.5002	2.3900e-003	0.0000	8.5600

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3.2 Demolition - 2021

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	3.6000e-004	0.0161	2.2200e-003	5.0000e-005	1.2500e-003	5.0000e-005	1.3000e-003	3.4000e-004	5.0000e-005	3.9000e-004	0.0000	5.2018	5.2018	3.2000e-004	0.0000	5.2098
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1800e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3333	0.3333	1.0000e-005	0.0000	0.3335
Total	5.2000e-004	0.0162	3.4000e-003	5.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.5000e-004	5.0000e-005	5.0000e-004	0.0000	5.5351	5.5351	3.3000e-004	0.0000	5.5433

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					7.1200e-003	0.0000	7.1200e-003	1.0800e-003	0.0000	1.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0458	0.0617	1.0000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	8.5002	8.5002	2.3900e-003	0.0000	8.5600
Total	2.3100e-003	0.0458	0.0617	1.0000e-004	7.1200e-003	2.1600e-003	9.2800e-003	1.0800e-003	2.1600e-003	3.2400e-003	0.0000	8.5002	8.5002	2.3900e-003	0.0000	8.5600

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3.2 Demolition - 2021

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	3.6000e-004	0.0161	2.2200e-003	5.0000e-005	1.2500e-003	5.0000e-005	1.3000e-003	3.4000e-004	5.0000e-005	3.9000e-004	0.0000	5.2018	5.2018	3.2000e-004	0.0000	5.2098
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1800e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3333	0.3333	1.0000e-005	0.0000	0.3335
Total	5.2000e-004	0.0162	3.4000e-003	5.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.5000e-004	5.0000e-005	5.0000e-004	0.0000	5.5351	5.5351	3.3000e-004	0.0000	5.5433

3.3 Site Preparation - 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.3039	0.1093	2.8000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568
Total	0.0267	0.3039	0.1093	2.8000e-004	0.0903	0.0132	0.1036	0.0497	0.0122	0.0618	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568

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3.3 Site Preparation - 2021

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	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-003	0.1352	0.1516	2.8000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567
Total	7.0000e-003	0.1352	0.1516	2.8000e-004	0.0407	5.1300e-003	0.0458	0.0223	5.1300e-003	0.0275	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567

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3.3 Site Preparation - 2021

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	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004

3.4 Grading - 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					0.1000	0.0000	0.1000	0.0374	0.0000	0.0374	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0492	0.5654	0.3123	7.2000e-004		0.0229	0.0229		0.0210	0.0210	0.0000	62.8313	62.8313	0.0203	0.0000	63.3393
Total	0.0492	0.5654	0.3123	7.2000e-004	0.1000	0.0229	0.1229	0.0374	0.0210	0.0584	0.0000	62.8313	62.8313	0.0203	0.0000	63.3393

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3.4 Grading - 2021

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	8.6000e-004	5.8000e-004	6.3000e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7777	1.7777	4.0000e-005	0.0000	1.7787
Total	8.6000e-004	5.8000e-004	6.3000e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7777	1.7777	4.0000e-005	0.0000	1.7787

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					0.0450	0.0000	0.0450	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0176	0.3397	0.4040	7.2000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	62.8312	62.8312	0.0203	0.0000	63.3393
Total	0.0176	0.3397	0.4040	7.2000e-004	0.0450	0.0134	0.0584	0.0168	0.0134	0.0302	0.0000	62.8312	62.8312	0.0203	0.0000	63.3393

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3.4 Grading - 2021

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	8.6000e-004	5.8000e-004	6.3000e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7777	1.7777	4.0000e-005	0.0000	1.7787
Total	8.6000e-004	5.8000e-004	6.3000e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7777	1.7777	4.0000e-005	0.0000	1.7787

3.5 Building Construction - 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	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8186	115.8186	0.0279	0.0000	116.5172
Total	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8186	115.8186	0.0279	0.0000	116.5172

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3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5400e-003	0.3730	0.0718	1.0200e-003	0.0253	7.1000e-004	0.0260	7.2900e-003	6.8000e-004	7.9700e-003	0.0000	97.5893	97.5893	7.4400e-003	0.0000	97.7754
Worker	0.0437	0.0295	0.3211	1.0000e-003	0.1121	6.7000e-004	0.1128	0.0298	6.2000e-004	0.0304	0.0000	90.6623	90.6623	2.1100e-003	0.0000	90.7151
Total	0.0533	0.4024	0.3929	2.0200e-003	0.1374	1.3800e-003	0.1388	0.0371	1.3000e-003	0.0384	0.0000	188.2516	188.2516	9.5500e-003	0.0000	188.4905

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	0.0337	0.7113	0.8937	1.3500e-003		0.0452	0.0452		0.0452	0.0452	0.0000	115.8185	115.8185	0.0279	0.0000	116.5171
Total	0.0337	0.7113	0.8937	1.3500e-003		0.0452	0.0452		0.0452	0.0452	0.0000	115.8185	115.8185	0.0279	0.0000	116.5171

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3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5400e-003	0.3730	0.0718	1.0200e-003	0.0253	7.1000e-004	0.0260	7.2900e-003	6.8000e-004	7.9700e-003	0.0000	97.5893	97.5893	7.4400e-003	0.0000	97.7754
Worker	0.0437	0.0295	0.3211	1.0000e-003	0.1121	6.7000e-004	0.1128	0.0298	6.2000e-004	0.0304	0.0000	90.6623	90.6623	2.1100e-003	0.0000	90.7151
Total	0.0533	0.4024	0.3929	2.0200e-003	0.1374	1.3800e-003	0.1388	0.0371	1.3000e-003	0.0384	0.0000	188.2516	188.2516	9.5500e-003	0.0000	188.4905

3.6 Paving - 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	6.2800e-003	0.0646	0.0733	1.1000e-004		3.3900e-003	3.3900e-003		3.1200e-003	3.1200e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927
Paving	5.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0116	0.0646	0.0733	1.1000e-004		3.3900e-003	3.3900e-003		3.1200e-003	3.1200e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927

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3.6 Paving - 2021

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	3.2000e-004	2.2000e-004	2.3600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6666	0.6666	2.0000e-005	0.0000	0.6670
Total	3.2000e-004	2.2000e-004	2.3600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6666	0.6666	2.0000e-005	0.0000	0.6670

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0565	0.0865	1.1000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927
Paving	5.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.1300e-003	0.0565	0.0865	1.1000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927

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3.6 Paving - 2021

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	3.2000e-004	2.2000e-004	2.3600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6666	0.6666	2.0000e-005	0.0000	0.6670
Total	3.2000e-004	2.2000e-004	2.3600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6666	0.6666	2.0000e-005	0.0000	0.6670

3.7 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	tons/yr										MT/yr					
Archit. Coating	0.1398					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.1409	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

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3.7 Architectural Coating - 2021

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	8.8000e-004	5.9000e-004	6.4500e-003	2.0000e-005	2.2500e-003	1.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8221	1.8221	4.0000e-005	0.0000	1.8232
Total	8.8000e-004	5.9000e-004	6.4500e-003	2.0000e-005	2.2500e-003	1.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8221	1.8221	4.0000e-005	0.0000	1.8232

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	0.1398					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.1401	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

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3.7 Architectural Coating - 2021

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	8.8000e-004	5.9000e-004	6.4500e-003	2.0000e-005	2.2500e-003	1.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8221	1.8221	4.0000e-005	0.0000	1.8232
Total	8.8000e-004	5.9000e-004	6.4500e-003	2.0000e-005	2.2500e-003	1.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8221	1.8221	4.0000e-005	0.0000	1.8232

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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
Category	tons/yr										MT/yr					
Mitigated	0.1893	2.9157	3.3688	0.0212	1.4976	0.0142	1.5118	0.4012	0.0134	0.4145	0.0000	1,971.895 1	1,971.895 1	0.0701	0.0000	1,973.647 7
Unmitigated	0.1893	2.9157	3.3688	0.0212	1.4976	0.0142	1.5118	0.4012	0.0134	0.4145	0.0000	1,971.895 1	1,971.895 1	0.0701	0.0000	1,973.647 7

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	529.18	529.18	529.18	3,905,150	3,905,150
Total	529.18	529.18	529.18	3,905,150	3,905,150

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.504000	0.051000	0.162000	0.128000	0.009000	0.002300	0.022000	0.123000	0.000000	0.000000	0.000000	0.000000	0.000000

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	142.7405	142.7405	7.7500e-003	1.6000e-003	143.4123
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0804	146.0804	7.9300e-003	1.6400e-003	146.7678
NaturalGas Mitigated	2.3200e-003	0.0211	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	22.9360	22.9360	4.4000e-004	4.2000e-004	23.0723
NaturalGas Unmitigated	2.7200e-003	0.0247	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	26.9134	26.9134	5.2000e-004	4.9000e-004	27.0733

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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					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	504337	2.7200e-003	0.0247	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	26.9134	26.9134	5.2000e-004	4.9000e-004	27.0733
Total		2.7200e-003	0.0247	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	26.9134	26.9134	5.2000e-004	4.9000e-004	27.0733

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	429805	2.3200e-003	0.0211	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	22.9360	22.9360	4.4000e-004	4.2000e-004	23.0723
Total		2.3200e-003	0.0211	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	22.9360	22.9360	4.4000e-004	4.2000e-004	23.0723

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	16770.6	4.0622	2.2000e-004	5.0000e-005	4.0813
Unrefrigerated Warehouse-No Rail	586323	142.0182	7.7100e-003	1.6000e-003	142.6865
Total		146.0804	7.9300e-003	1.6500e-003	146.7678

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	16770.6	4.0622	2.2000e-004	5.0000e-005	4.0813
Unrefrigerated Warehouse-No Rail	572535	138.6784	7.5300e-003	1.5600e-003	139.3310
Total		142.7405	7.7500e-003	1.6100e-003	143.4123

6.0 Area Detail

6.1 Mitigation Measures Area

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003
Unmitigated	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-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	0.1176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9098					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003
Total	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9098					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003
Total	1.0277	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3000e-003	6.3000e-003	2.0000e-005	0.0000	6.7200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	154.0578	1.4117	0.0347	199.6992
Unmitigated	203.9142	1.8822	0.0463	264.7623

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.66807	4.4889	2.4000e-004	5.0000e-005	4.5100
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	57.4517 / 0	199.4253	1.8819	0.0462	260.2523
Total		203.9142	1.8822	0.0463	264.7623

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.66807	4.4889	2.4000e-004	5.0000e-005	4.5100
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	43.0888 / 0	149.5690	1.4114	0.0347	195.1892
Total		154.0578	1.4117	0.0347	199.6992

8.0 Waste Detail

8.1 Mitigation Measures Waste

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	47.4288	2.8030	0.0000	117.5029
Unmitigated	47.4288	2.8030	0.0000	117.5029

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0244	1.4400e-003	0.0000	0.0604
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	233.53	47.4045	2.8015	0.0000	117.4426
Total		47.4288	2.8030	0.0000	117.5029

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0244	1.4400e-003	0.0000	0.0604
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	233.53	47.4045	2.8015	0.0000	117.4426
Total		47.4288	2.8030	0.0000	117.5029

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

Core5 Rider AVenue Project - - Riverside-South Coast County, Annual

Equipment Type	Number
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11.0 Vegetation

Core5 Rider Avenue Project - Operational LST - Riverside-South Coast County, Winter

Core5 Rider Avenue Project - Operational LST
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	248.44	1000sqft	5.70	248,442.00	0
Other Asphalt Surfaces	2.97	Acre	2.97	129,373.20	0
Parking Lot	1.10	Acre	1.10	47,916.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	534	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

Project Characteristics - SCE CO2 emission intensity factor for 2020 to 2029

Land Use - Warehouse: 248.442 sq-ft

Parking Lot: 1.1 acres

Landscaping: 1.4 acres

Internal Roadways: 2.97 acres

Construction Phase - Schedule duration provided by the applicant (8-month duration)

Off-road Equipment -

Off-road Equipment - Use of larger equipment

Demolition - REmoval of three residential-tyoe buildings

Architectural Coating - PVCCSP Mitigation Requirement MM AIR 9 requires super compliant coatings

Vehicle Trips - Trip generation rate: 2.13 trips per thousand square feet

All vehicles assumed to have an onsite vehicle trip distance of 0.1mile

Construction Off-road Equipment Mitigation - PVCCSP Mitigation Measure MM AIR 6 requires a mininum in-use offroad diesel Tier 3 certified engines

Energy Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires Increase building efficiency by a miminum 15% beyond Title 24

Water Mitigation - PVCCSP Mitigation Measure MM AIR 20 requires 25% reduction of indoor water use

Fleet Mix - Fleet mix for all vehicles as per the project Trip Generation Memorandum

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	0.00
tblFleetMix	HHD	0.07	0.00

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.12
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	9.0000e-003
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	2.3000e-003
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LandUseSquareFeet	248,440.00	248,442.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	2.13
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	2.13
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	2.13

2.0 Emissions Summary

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Mobile	0.5583	6.8051	2.6022	9.2900e-003	0.0413	4.6900e-003	0.0460	0.0110	4.3900e-003	0.0154		974.0308	974.0308	0.2335		979.8694
Total	6.2052	6.9408	2.7419	0.0101	0.0413	0.0151	0.0563	0.0110	0.0148	0.0258		1,136.6447	1,136.6447	0.2368	2.9800e-003	1,143.4530

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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Energy	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Mobile	0.5583	6.8051	2.6022	9.2900e-003	0.0413	4.6900e-003	0.0460	0.0110	4.3900e-003	0.0154		974.0308	974.0308	0.2335		979.8694
Total	6.2030	6.9208	2.7251	9.9800e-003	0.0413	0.0136	0.0548	0.0110	0.0133	0.0243		1,112.6213	1,112.6213	0.2364	2.5400e-003	1,119.2869

Core5 Rider Avenue Project - Operational LST - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	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	0.04	0.29	0.61	1.19	0.00	10.15	2.72	0.00	10.35	5.93	0.00	2.11	2.11	0.19	14.77	2.11

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	Site Preparation	1/9/2021	1/9/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.07

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	0	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021

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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

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

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021

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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	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	0.5583	6.8051	2.6022	9.2900e-003	0.0413	4.6900e-003	0.0460	0.0110	4.3900e-003	0.0154		974.0308	974.0308	0.2335		979.8694
Unmitigated	0.5583	6.8051	2.6022	9.2900e-003	0.0413	4.6900e-003	0.0460	0.0110	4.3900e-003	0.0154		974.0308	974.0308	0.2335		979.8694

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	529.18	529.18	529.18	19,262	19,262
Total	529.18	529.18	529.18	19,262	19,262

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.10	0.10	0.10	84.30	0.00	15.70	100	0	0

4.4 Fleet Mix

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.504000	0.051000	0.162000	0.128000	0.009000	0.002300	0.022000	0.123000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
NaturalGas Unmitigated	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

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					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1381.75	0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244
Total		0.0149	0.1355	0.1138	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.5583	162.5583	3.1200e-003	2.9800e-003	163.5244

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	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 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.17755	0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582
Total		0.0127	0.1155	0.0970	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003		138.5349	138.5349	2.6600e-003	2.5400e-003	139.3582

6.0 Area Detail

6.1 Mitigation Measures Area

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	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	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Unmitigated	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

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	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9851					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4100e-003	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592
Total	5.6320	2.4000e-004	0.0260	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0556	0.0556	1.5000e-004		0.0592

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

Core5 Rider AVenue Project - Operational LST - Riverside-South Coast County, Winter

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

Core5 Rider Street Demolition

Estimate of Construction and Operational Local Significance Thresholds

Size of Maximum Daily Disturbed Construction Area:	4 acres
Size of Maximum Daily Disturbed Operation Area:	5 acres (actual project area is approximately 11.1 acres)
Source Receptor Area:	24
Distance to Sensitive Receptor	25 meters for PM10 and PM2.5
Distance to Worker Receptor:	25 meters for NO2 and CO

Construction LST

Size (acres)	Distance = 25 meters		PM10 (lbs/day)	PM2.5 (lbs/day)
	NOx (lbs/day)	CO (lbs/day)		
2	170	883	7	4
5	270	1577	13	8
4	237	1346	11	7

Estimation of Operational LSTs

Size (acres)	Distance = 25 meters		PM10 (lbs/day)	PM2.5 (lbs/day)
	NOx (lbs/day)	CO (lbs/day)		
5	270	1577	4	2

Core5 Rider Street Demolition

CalEEMod Construction Emission Summary

2020	Maximum Daily Emissions (pounds/day)									
	ROG	NOx	CO	SOx	PM10F	PM10Exh	PM10Total	PM2.5Fug	PM2.5 Exh	PM2.5Total
Demolition										
Onsite	0.9	18.3	24.7	0.0	2.8	0.9	3.7	0.4	0.9	1.3
Offsite	0.2	6.3	1.4	0.0	0.7	0.0	0.7	0.2	0.0	0.2
Total	1.1	24.6	26.1	0.0	3.5	0.9	4.4	0.6	0.9	1.5
Site Prep										
Onsite	1.4	27.0	30.3	0.1	8.1	1.0	9.1	4.5	1.0	5.5
Offsite	0.1	0.0	0.7	0.0	0.2	0.0	0.2	0.1	0.0	0.1
Total	1.5	27.0	31.0	0.1	8.3	1.0	9.3	4.6	1.0	5.6
Grading										
Onsite	1.8	34.0	40.0	0.1	4.5	1.3	5.8	1.7	1.3	3.0
Offsite	0.1	0.1	0.7	0.0	0.2	0.0	0.2	0.1	0.0	0.1
Total	1.9	34.1	40.7	0.1	4.7	1.3	6.0	1.8	1.3	3.1
Building Construction										
Onsite	0.7	14.2	17.9	0.0	0.0	0.9	0.9	0.0	0.9	0.9
Offsite	1.2	8.0	8.9	0.0	2.8	0.0	2.8	0.8	0.0	0.8
Total	1.9	22.2	26.8	0.0	2.8	0.9	3.7	0.8	0.9	1.7
Paving										
Onsite	1.6	11.3	17.3	0.0	0.0	0.6	0.6	0.0	0.6	0.6
Offsite	0.1	0.0	0.6	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Total	1.7	11.3	17.9	0.0	0.2	0.6	0.8	0.0	0.6	0.6
Architectural Coating										
Onsite	28.0	1.4	1.8	0.0	0.0	0.1	0.1	0.0	0.1	0.1
Offsite	0.2	0.1	0.5	0.0	0.5	0.0	0.5	0.1	0.0	0.1
Total	28.2	1.5	2.3	0.0	0.5	0.1	0.6	0.1	0.1	0.2
2021 Max Onsite	28.0	34.0	40.0	0.1	8.1	1.3	9.1	4.5	1.3	5.5
2021 Max Total	28.2	34.1	40.7	0.1	8.3	1.3	9.3	4.6	1.3	5.6

Regional Threshold	75	100	550	150		150				55
Exceeds Threshold	NO	NO	NO	NO		NO				NO

LST Threshold		237	1346			11				7
Exceeds LST		NO	NO			NO				NO

Core5 Rider Street Demolition

Estimates of Demolition Debris

Single Family Demolition

Building	Length (ft)	Width (ft)	Stories	VCM	Demo Building Volume (cy)	
Residence 1	60	70	1	1.3	1092	Note 1
Residence 2	60	60	1	1.3	936	
Residence 3	70	50	1	1.3	910	
Total					2938	Note 2
Weight of the Building Demolition Debris (ton/cy):					0.5	Note 3
Total Weight of Building Debris					1469	tons

Note 1: Estimate of building size derived from Google Earth

Note 2: FEMA Debris Estimating Field Guide, FEMA 329. September 2010

VCM = vegative cover multiplier

Note 3: CalEEMod User Guide

Vehicle Trips

Haul Truck Capacity	20 tons	Note 3
Number of Trucks	73 trucks	
Number of Truck Trips	147 truck trips	

Core5 Rider Street Project - Perris,CA

Construction Equipment Fuel Usage

Activity	Equipment	Project Number	Project Hours per day	Default Horse-power	Default Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	5	2,365	0.021465	51
	Crawler Tractors	3	8	212	0.43	5	10,939	0.022173	243
	Rubber Tired Dozers	2	8	247	0.4	5	7,904	0.020461498	162
Site Preparation	Rubber Tired Dozer	3	8	247	0.4	10	23,712	0.020461	485
	Crawler Tractor	4	8	212	0.43	10	29,171	0.022173	647
Grading	Excavators	2	8	187	0.41	20	24,534	0.021143	519
	Graders	1	8	158	0.38	20	9,606	0.021143	203
	Rubber Tired Dozers	1	8	247	0.4	20	15,808	0.020461	323
	Crawler Tractor	2	8	212	0.43	20	29,171	0.022173	647
	Scrapers	2	8	367	0.48	20	56,371	0.024988	1,409
Building Construction	Crane	1	7	231	0.29	100	46,893	0.020461	960
	Forklifts	3	8	89	0.2	100	42,720	0.022173	947
	Generator Sets	1	8	84	0.74	100	49,728	0.022173	1,103
	Tractors/Loaders/Backhoes	3	7	97	0.37	100	75,369	0.019757	1,489
	Welders	1	8	48	0.45	100	17,280	0.018658	322
Paving	Pavers	2	6	130	0.36	10	5,616	0.018334	103
	Paving Equipment	2	8	132	0.38	10	8,026	0.018333	147
	Rollers	2	7	80	0.38	10	4,256	0.023965	102
Architectural Coating	Air Compressor	1	6	78	0.48	10	2246.4	0.021465	48
Total									9,909

Fuel Consumption rates derived from the ARB OFFROAD2017 - Orion Web Database

Core5 Rider Street Project - Perris,CA

Fuel Consumption from Construction Vehicles (Derived from the ARB EMFAC2017 Mobile Source Emission Model)

Emission Factors

Region (County)	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT (miles/day)	Fuel Consumption (1000 gallons/day)	Fuel Rate (miles/gallon)
RIVERSIDE	2022	MHDT-T6	Aggregated	Aggregated	DSL	974620	87.5	11.1
RIDERSIDE	2022	HHDT-T7	Aggregated	Aggregated	DSL	3904544	546.3	7.1
							Average (50%/50%)	9.1
RIVERSIDE	2022	LHDT1	Aggregated	Aggregated	DSL	691059	32.9	21.0
RIVERSIDE	2022	LHDT2	Aggregated	Aggregated	DSL	266862	13.9	19.3
ORANGE	2022	LDA	Aggregated	Aggregated	GAS	30295680	950	31.9
ORANGE	2022	LDT1	Aggregated	Aggregated	GAS	3076688	114	27.0
ORANGE	2022	LDT2	Aggregated	Aggregated	GAS	9768782	384	25.4
ORANGE	2022	MDV	Aggregated	Aggregated	GAS	7586688	373	20.3
							Average (50%/25%/25%)	29

Vehicle Assumptions (CalEEMod)

Haul trucks represented by HHDT-T7 (heavy -heavy duty haul truck)

MHDT-T6 (medium heavy duty haul truck)

Vendor trucks assumed to be 50% HHDT-T7 and MHDT-T6)

LDA (light duty automobile for worker vehicles)

LDT1 (light duty truck 1 for worker vehicles)

LDT2 (light duty truck 2 for worker vehicles)

Worker vehicles represented as 50% LDT, 25% LHT1, and 25% LDT2

Construction Vehicle Use (Derived from the CalEEMod model output)

Fuel Consumption for Haul Trucks

Construction Activity	No Haul Truck Trips	Trip Length	VMT (miles)	DSL Fuel (gallons)
Demolition	145	20	2900	406
Site Preparation	0	20	0	0
Grading	0	20	0	0
Building Construction	0	20	0	0
Paving -	0	20	0	0
Architectural Coating	0	20	0	0
Total	145		2900	406

Fuel Consumption for Vendor Trucks

Construction Activity	No Vendor Truck Trips/day	Duration (days)	Trip Length (miles)	VMT (miles)	Fuel	Fuel Rate (miles/gallon)	DSL Fuel (gallons)
Demolition	0	5	6.9	0	DSL	9.1	0
Site Preparation	0	10	6.9	0	DSL	9.1	0
Grading	0	20	6.9	0	DSL	9.1	0
Building Construction	80	100	6.9	55200	DSL	9.1	6037
Paving	0	10	6.9	0	DSL	9.1	0
Architectural Coating	0	10	6.9	0	DSL	9.1	0
Total				55200			6037

Fuel Consumption for Worker Vehicles

Activity	No Worker Vehicles Trips/day	Duration (days)	Trip Length (miles)	VMT (miles)	Fuel	Fuel Rate (miles/gallon)	Gas Fuel (gallons)
Demolition	15	5	14.7	1102.5	GAS	29	38
Site Preparation	18	10	14.7	2646	GAS	29	91
Grading	20	20	14.7	5880	GAS	29	202
Building Construction	204	100	14.7	299880	GAS	29	10321
Paving	15	10	14.7	2205	GAS	29	76
Architectural Coating	41	10	14.7	6027	GAS	29	207
Total -DSL				317741			10936

Summary - Fuel

	Gallons
Total -DSL	6443
Total - GAS	10936
	17379

Summary - VMT

Total - DSL	6443
Total - GAS	10936

Core5 Rider Street Project - Perris,CA

Estimation of Operational Vehicle Fuel Use

Annual Operational VMT **3,905,150 miles per year**

Fleet Mix	% Vehicle Trips	Annual VMT (miles/year)	Fuel Rate (miles/gallon)	Annual Fuel Use (gallons/year)	Fuel
LDA	50%	1,968,196	31.7	62,481,767	GAS
LDT1	5%	199,163	27.3	5,431,149	GAS
LDT2	16%	632,634	25.2	15,935,765	GAS
MDV	13%	499,859	20.4	10,181,459	GAS
LHDT1	1%	35,146	21.0	738,463	DSL
LHDT2	0%	7,810	19.3	150,368	DSL
MHDT	2%	85,913	10.9	934,604	DSL
HHDT	12%	480,333	7.15	3,433,173	DSL
Total	100%	3,909,055		99,286,749	
VMT Total-GAS		3,299,852 miles/year			
VMT Total-DSL		609,203 miles/year			
		3,909,055 miles/year			
Fuel - GAS		94,030,140 gallons/year			
Fuel - DSL		5,256,609 gallons/year			

Note 1: Average fuel rate taken from the Construction Vehicle Fuel Use Worksheet