Final Report Analysis of Impacts to Air Quality Greenhouse Gas from Proposed Residential Development

Chico, California

November 28, 2023

Prepared For: Epick Homes 901 Bruce Road Suite 100 Chico, CA 95928 Contact: Chris Giampaoli

Prepared By: Environmental Permitting Specialists 7068 Riverside Boulevard Sacramento, CA 95831 Contact: Ray Kapahi, Principal Tel: 916-687-8352 Ray.Kapahi@gmail.com

TABLE OF CONTENTS

SECTION 1: INTRODUCTION	3
SECTION 2: PROJECT DETAILS	6
SECTION 3: CALCULATION METHODOLOGY	7
3.1 Calculation of Criteria Air Pollutants	
3.2 Calculation of Toxic Air Contaminants	
3.3 Calculation of GHG Emissions	
SECTION 4: PROJECT IMPACTS	9
4.1 Impacts to Air Quality	-
4.2 Impacts from Toxic Air Pollutants	
4.3 Impacts from GHG Emissions	
SECTION 5: SIGNIFICANCE OF PROJECT IMPACTS	. 13
SECTION 6: REFERENCES	16

APPENDIX

- A. CalEEMod Emission Reports
- B. Calculation of Screening Level Health Risks
- C. Response to Appendix G CEQA Guidelines

SECTION 1: INTRODUCTION

Environmental Permitting Specialists (EPS) has been retained by Epick Homes to evaluate impacts to air quality and from greenhouse gas emissions from a proposed residential development. This analysis has been prepared in support of an Initial Study pursuant to the California Environmental Quality Act (CEQA) being conducted by the Community Development Department at the City of Chico, California.

The project , known as the 2240 Nord Avenue Project, would develop 208 residential apartments on a 11.7 acre lot located near the intersection of Nord Avenue and West Lindo Avenue in Chico. The project would cover 217,870 square feet and includes a 3,208 square foot clubhouse for a total of 221,078 square feet.

The proposed project will be developed over the next two years with full buildout expected in 2025. Construction is expected to begin in June 2024 with full occupancy expected in 2026. A change in this timeline would not materially affect the emissions profile or the conclusions presented in this report.

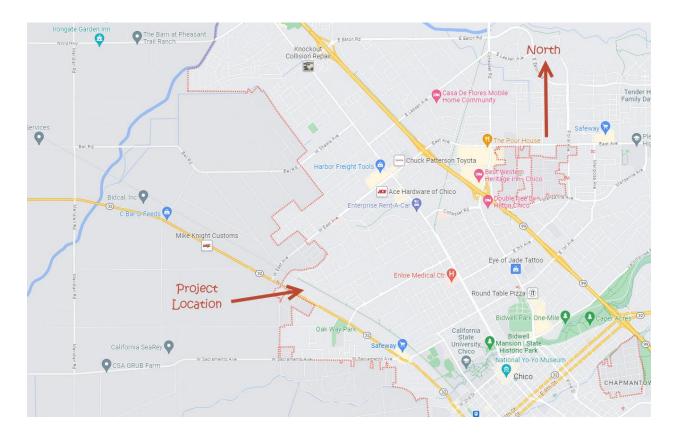
The objective of the proposed analysis is to evaluate three categories of impacts associated with the construction and operation (occupancy) phases of this project:

- 1. Air Quality Impacts
- 2. Impacts to Public Health
- 3. Impacts from GHG Emissions

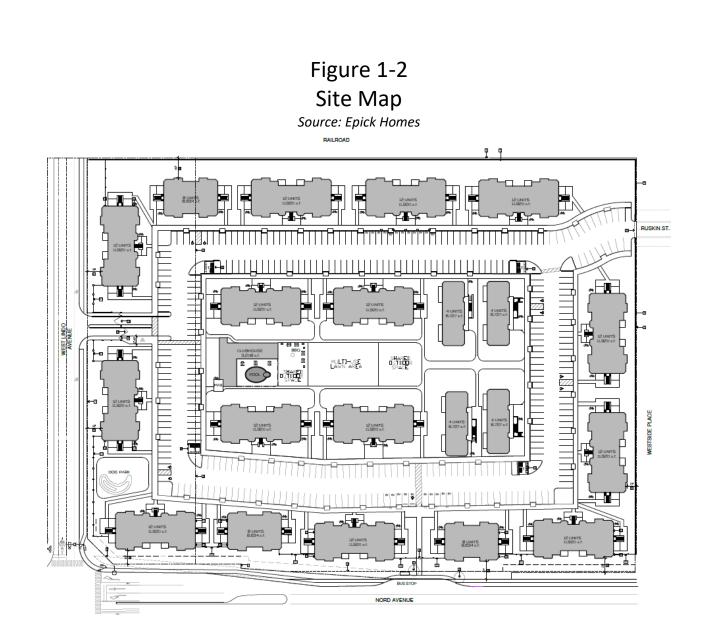
The overall approach used in this analysis is to quantify the emission rates of regulated air pollutants for the construction and occupancy phases and then compare the emission rates with thresholds of significance established by the Butte County Air Pollution Control District (BCAPCD). The project is considered to have potentially significant environmental impact if any of the emission rates exceed the thresholds of significance established by BCAPCD. This approach and scope of work, including a demonstration of compliance with the City's Climate Air Plan (CAP) was developed in consultation with staff at the Community Development Department at the City of Chico.

This report is divided into 6 sections. Immediately following this Introduction, the project is described in Section 2. Next, the methodology for calculating air quality and GHG emissions is discussed in Section 3. The project's impacts are discussed in Section 4. The report concludes with a discussion of the significance of the project's impacts on air quality, public health and GHG (Section 5). References, technical and calculations are provided in Section 6 and in the Appendices respectively.

Figure 1-1 Vicinity Map



4



5

SECTION 2: PROJECT DETAILS

As noted in the Introduction, the proposed project would construct 208 residential apartment units on a 11.7 acre lot. The proposed midrise apartments, with each apartment being two stories, with a maximum height of 30 feet and 10 inches. The project includes 1, 2 and 3 bedroom units with a total residential area of 217,870 square feet and a 3,208 square foot club house. A total of 367 parking spaces will be provided including electric vehicle charging spaces. In addition, 51 bicycle parking racks will be provided.

The project site is located off Nord Avenue between West Lido Avenue and Westside Place adjacent to the railway tracks. The site is graded with one small structure that would be removed. No other demolition will be required and minimal amount of soil would be imported or exported.

The site has access to local utilities (water, sewage, gas, storm drain and communication services such as AT&T and Comcast), therefore, the only site work required involves trenching to connect to the utilities, excavation for building foundations and final grading. The actual building construction would involve the use of hand tools, compressors, cranes and forklifts. No heavy equipment is required during the building construction although such equipment would be used for the grading and site preparation. Since the site has access to electrical power, there would be minimal use of portable electric generators.

SECTION 3: CALCULATION METHODOLOGY

The construction and operation (occupancy) at the proposed residential development would release a variety of air pollutants, including GHG emissions. Project impacts are directly related to short-term and long-term emissions of these pollutants. This section identifies these pollutants and describes how they will be quantified. The significance of these emissions is discussed in Section 5.

3.1 Calculation of Criteria Air Pollutants

Criteria air pollutants refers to those pollutants for which the state and/or the federal government has established ambient (outside) air quality standards. Impacts are considered significant if project emissions violate any ambient air quality standards or exceed daily or annual thresholds set by the lead agency.

The following criteria air pollutants were quantified for both the construction and occupancy phases:

- Oxides of Nitrogen (NOx)
- Reactive Organic Compounds (ROG)
- Particulate Matter (PM10)
- Fine Particulate Matter (PM2.5)
- Carbon Monoxide (CO)
- Sulfur Dioxide (SO₂)

The maximum daily and annual emission rates of each of these air pollutants were quantified using Version 2022.1 of the California Emissions Estimator Model (CalEEMod) emissions model. This model is recommended by the BCAPCD for calculating emissions associated with the construction and occupancy phases.

For the construction phase, emissions from grading, site preparation, building construction, paving etc. are included. For the occupancy phase, direct emissions associated with traffic, space heating, and landscaping/maintenance were calculated. In addition, indirect emissions associated with electricity and water consumption and solid waste disposal are included in the analysis.

This calculation methodology is based on default emission factors for various sources and activities have been incorporated in the CalEEMod model. This includes default values of traffic volume and trip length and energy use

3.2 Calculation of Toxic Air Contaminants

Toxic air contaminants (TACs) refers to air pollutants known to be harmful to humans but for which there are no ambient air quality standards. Examples include benzene, nickel, formaldehyde, etc. These elements and compounds are released from combustion of fuels such as gasoline, diesel and natural gas.

Impacts from TACs are evaluated in terms of public health risks from exposure to these compounds. "Health Risks" refers to cancer and non-cancer risks and are reported in terms of a probability or a risk score.

The current project is not considered a major source of toxic air contaminants. There would be trace amounts of diesel particulate matter (DPM) released during the construction phase. Such emissions, however, would be temporary. Similarly, natural gas fueled heaters and appliances can be a source of TACs

For diesel particulate, CalEEMod provides emissions data reported at PM10e or PM2.5e. For other TACS, emission factors recommended by the Environmental Protection Agency (EPA) are typically used.

Impacts from TAC emissions are considered significant if public health risks exceed thresholds established by BCAPCD.

3.3 Calculation of GHG Emissions

Greenhouse gases refer to a variety of gases such as carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hyrofluorocarbons, and others. GHG emissions are to be reported in terms of annual metric tons of carbon dioxide equivalents [MT CO_2 (e)].

The main source of GHG emissions in Butte County are mobile sources, such as cars and trucks. These emissions are regulated by the State of California and not by Butte County. Therefore the County relies, in part, on the California Air Resources Board for future reductions in GHG emissions from mobile sources to achieve its climate goals.

SECTION 4: PROJECT IMPACTS

This section discusses the air quality, GHG and public health impacts associated with the project. The significance of the impacts is discussed in Section 5.

4.1 Impacts to Air Quality

Construction Phase

Impacts to air quality were determined by calculating the maximum daily and annual emission rate of each the criteria air pollutant. Emissions associated with various construction phases (grading, site work, etc.) were quantified. These emission rates are summarized in Tables 4-1 and 4-2. These daily and annual emission rates are compared with thresholds of significance in Section 5 to determine project level impacts and their significance A detailed emissions report is provided in Appendix A. The emissions report provides a breakdown of emissions by phase (construction or occupancy) and activity within each phase.

Table 4-1 Summary of Maximum Daily Emissions Construction Phase (in pounds/day)								
	ROG NOX CO SO2 PM10 PM2.5							
	17.2	4.41	15.7	0.01	3.49	1.87		

Table 4-2	
Summary of Annual Emissions	
Construction Phase	
(in tons per year)	

ROG	NOx	CO	SO ₂	PM10	PM2.5
0.42	0.28	0.77	<0.005	0.11	0.04

Occupancy Phase

As with the construction phase, impacts to air quality for the operational phase were determined by calculating the maximum daily and annual emission rate of each the criteria air pollutant identified earlier in Section 3.1.

Based on the use of the CalEEMod emissions model, the daily and annual emission rates are summarized in Tables 4-3 and Table 4-4. Detailed emissions report is provided in Appendix A.

Table 4-3
Summary of Maximum Daily Emissions
Occupancy Phase
(in pounds/day)

ROG	NOx	CO	SO ₂	PM10	PM2.5
13.4	8.73	74.0	0.12	9.60	2.57

Table 4-4	
Summary of Annual Emissions	
Occupancy Phase	
(in tons per year)	

ROG	NOx	CO	SO ₂	PM10	PM2.5
2.14	1.64	10.0	0.02	1.63	0.44

As with the construction emissions, these daily and annual emission rates are compared with thresholds of significance in Section 5 to determine project level impacts and their significance A detailed emissions report provided in Appendix A includes a breakdown of emissions under various categories such as energy use, disposal of solid waste, water consumption and mobile sources.

4.2 Impacts from Toxic Air Contaminants

Toxic air pollutants are defined in BCAPCD Regulation I, Rule 101 and refer to those air pollutants for which ambient air quality standards have not been established. Instead, their impacts are evaluated by calculating potential health risks from exposure to these contaminants. Health risks are divided into cancer and non-cancer risks. Non-cancer risks are further divided into acute (short-term) risks or chronic (long-term) risks. These are summarized below:

Risk Type	Reported As	Significance Threshold
Cancer	Probability or Risk Score	10 in a million or
		Cancer Risk Score of 10
Non-Cancer (Acute)	Hazard Index	1.0
Non-Cancer (Chronic)	Hazar Index	1.0

Health risk analyses are typically prepared at a screening level or as a refined health risk assessment (HRA). "Screening Level" analysis is prepared for facilities with no major sources of TACs. It provides a rough (conservative) estimate of risk. A "Major" source is defined in the

BCAPCD regulation I Rule 101 and includes compounds such a benzene, nickel and diesel particulate matter found in the exhaust of equipment.

By its very nature, a screening level risk analysis is a very conservative estimate of potential risks. Such an analysis does not take into account the local topography, properties of the emitting source and local wind patterns. If a screening level risk analysis indicates a potentially significant health risk, then a refined analysis is prepared.

For major sources, a refined health risk assessment is normally prepared that takes into account local topography, weather data and provides a spatial distribution of risks around the project site.

The proposed development is not considered a significant source of toxic air contaminants and therefore a screening level risk analysis is appropriate There would be trace amounts of diesel particulate released during the temporary construction phase. In addition, there would be emissions from combustion of natural gas.

Construction Phase

There would be trace amounts of diesel exhaust particulate matter released during the construction phase from various equipment during the site preparation, grading, paving, etc. For the construction phase, the CalEEMod emissions model provides daily and annual emission rate of diesel particulate matter (represented by exhaust PM10e). This value is reported as 0.01 ton/year for both on-site and off-site emissions. Of this amount, about 25% of the emissions occur off-site. EPS estimates the on-site diesel particulate emissions to equal 0.0075 tons/year or 15 pounds per year.

This annual amount of diesel particulate was used to calculate a screening level cancer risk score at the nearest homes. The nearest homes are located 125 meters (410 feet) East from the center of the project site. Based on this distance and an annual DPM emission rate of 15 lbs/yr, the cancer risk score is estimated to equal 8.66, which is considered "Moderate" risk. Detailed calculations are provided in Appendix B.

Occupancy Phase

There are no stationary sources, such as diesel fueled emergency generators, at the project that would release toxic air contaminants at the project site. The apartments would not have any fireplaces or other wood burning appliances that would release toxic air pollutants.

Natural gas would be used for space heating and cooking. However, the amounts and toxicity of TACs released from natural gas are considered negligible as compared to TAC emissions from diesel or wood combustion. As a result, a risk analysis for the occupancy phase is unnecessary.

4.3 Impacts from Greenhouse Gas Emissions

Impacts from greenhouse gas emissions are reported in terms of metric tons of carbon dioxide equivalents or [MT CO₂ \in]. Impacts from GHG emissions occur over the long term (years and

decades not months). Therefore, while daily GHG emissions were calculated and are included in the CalEEMod emissions report, it is not clear how short-term emissions affect Butte County's efforts to comply with the City's Climate Action Plan (CAP) or the County's effort to comply with state mandates, such as AB-32. As a result, this analysis focuses on the GHG emissions associated with the occupancy phase.

Consistent with BCAPCD CEQA Guidance, project level GHG emissions have been quantified. A summary of these emissions appears in Table 4-5. The significance of these emissions is discussed in Section 5.

Table 4-5	
Summary of Annual GHG Emissions	
Operational	
(in metric tons per year)	

CO ₂	CH ₄	N_2O_2	Refrigerant	CO ₂ (e)
2,041	1.70	0.11	3.44	2,119

SECTION 5: SIGNIFICANCE OF PROJECT IMPACTS

5.1 Impacts to Air Quality

The results of the current analysis for criteria air pollutants are compared with mass emission thresholds established by BCAPCD. The significance of project impacts for the construction and operational phases is summarized in Table 5-1 and 5-2.

Table 5-1 Summary of Project Level Impacts Construction Phase								
	Daily Annual (pounds/day) (tons/year)							
Pollutant	Project Emissions	Threshold	Project Emissions	Threshold	Significant impact?			
NOx	4.41	137	0.28	4.5	No			
ROG	17.2	137	0.42	4.5	No			
PM10	3.49	80	0.11	No Threshold	No			
PM2.5	1.78	80	0.06	No Threshold	No			

Summary	Table of Project Level		ncy Phase		
	Da	•			
	(pound				
Pollutant	Project Emissions	Threshold	Significant impact?		
NOx	8.73	25	No		
ROG	13.4	25	No		
PM10	9.60	80	No		
PM2.5	2.57	80	No		

These results demonstrate that impacts to air quality are less than significant.

5.2 Impacts from TAC Emissions

The project is not a significant source of toxic air emissions. For the occupancy phase, there are no significant sources of TACs. For the construction phase, the main TAC that would be temporarily released is DPM. EPS estimate the annual amount to be 15 pounds or less. EPS estimate the cancer risk score to equal 8.6, which is classified as "Medium Risk" and is below the threshold of 10. A detailed health risk assessment is not warranted, given the small quantity of emissions.

5.3 Impacts from GHG Emissions

Significance of Impacts

BCAPCD has not established any thresholds of significance for GHG emissions. However, California has used a threshold of 25,000 metric tons per year as a threshold in the State's Cap and Trade program [Title 17, Section 95812(c)(1)]. The 25,000 metric ton threshold is for a single facility.

California Air Resources Board (CARB) acknowledged that the 25,000 MT/year threshold is used for the mandatory reporting for the Cap and Trade program and not established as a CEQA threshold for GHG emissions. However, the California Air Pollution Control Officers Association (CAPCOA) identified 25,000 MT/yr as a threshold in their January 2008 report *"CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Air Quality Act"*

The issue of threshold of significance has also been reviewed by the Environmental Protection Agency (EPA). The EPA analyzed several thresholds for reporting and rejected lower thresholds of 1,000 and 10,000 metric tons/yr finding that these thresholds would greatly increase the number of covered entities without capturing a significant portion of GHG emissions (EPA 2009). The 25,000 MT/yr threshold would capture 94% of GHG emissions from stationary sources in California (CAPCOA 2008, Page 44).

Given the volume of research and resources that have been expended to develop the CARB reporting and the Cap and Trade regulations and the Federal (EPA) GHG reporting rule, the estimated 2,119 metric tons of GHG emissions plus 127 tons for the construction phase (total 2,246 metric tons) are well below the 25,000 MT/year threshold. Therefore, it is reasonable to conclude that GHG impacts associated with this project will be less than significant.

Consistency with Climate Action Plan (CAP)

The Climate Action Plan was prepared and adopted by the City of Chico in 2012 to meet the GHG reduction goal of 25% below 2005 emission levels by the end of 2020. That goal was met, and in 2019 the City of Chico set out new GHG emission reduction goals for 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050.

The updated CAP provides a roadmap for how the City will reduce its GHG emissions consistent with the State's goals under AB-32. The core of the CAP is the current (2017) GHG emissions inventory which is then used to forecast emissions in 2025, 2030 and 2045.

The CAP lists specific GHG reduction strategies related to the following sectors:

• Energy

- Transportation
- Waste
- Sequestration
- Outreach and Education

Specific actions "Measures" are included in the CAP for each of these sectors. The current project meets or exceeds applicable targets as summarized below.

Measure	Scope	Compliance Demonstration
E-3	Reduce overall per capita natural gas consumption to 100 therms per year by 2030 and to 30 therms per year by 2045	Based on annual natural gas consumption estimated with the CalEEMod emissions model (2,703,252 kBTU/yr or 27,032 therms) and assuming an average of 2.47 per residence (total 514 residents), the per capita consumption of natural gas is estimated to equal 52.6 therms per year. This is well below the target of 100 therms per year set for 2030.
T-1	Encourage rideshare and provide convenient bicycle parking	The current project includes 51 bicycle stalls
T-2	Encourage privately owned EV charging infrastructure	The current project would have 37 EV charging station (10% of parking stalls)
T-5	Support infill growth	This is an infill project

In summary, the current project would not have any significant impact from GHG emissions and would be in full compliance with the City's Climate Action Plan.

5.4 Summary

The analysis contained in this report demonstrates that the proposed project would not cause significant impacts related to emissions of criteria air pollutants, toxic air contaminants and greenhouse gas. These findings are also reported as required in Appendix G of the CEQA Guidelines. Please see Appendix C.

SECTION 6: REFERENCES

BCAPCD (2014): CEQA Air Quality Handbook. Adopted by Butte County APCD October 23, 2014. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://bcaqmd.org/wpcontent/uploads/CEQA-Handbook-Appendices-2014.pdf

CalEEMod (2022): California Emissions Estimator Model. Information available at: http://www.caleemod.com/

CAPCOA (2008). CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to CEQA. January 2008.

CARB Title 17 Section 95812 (c)(1).

BCAPCD (2014): CEQA Air Quality Handbook. Adopted by Butte County APCD October 23, 2014. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://bcaqmd.org/wpcontent/uploads/CEQA-Handbook-Appendices-2014.pdf

EPA (2009) Federal Register 56272-73, October 30, 2009

APPENDIX A

CalEEMod Emissions Reports

2240 Nord Avenue v4 Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Site Preparation (2024) Unmitigated
 - 3.3. Grading (2024) Unmitigated
 - 3.5. Building Construction (2024) Unmitigated
 - 3.7. Building Construction (2025) Unmitigated

- 3.9. Paving (2025) Unmitigated
- 3.11. Architectural Coating (2025) Unmitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use Unmitigated
 - 4.2.3. Natural Gas Emissions By Land Use Unmitigated
 - 4.3. Area Emissions by Source
 - 4.3.1. Unmitigated
 - 4.4. Water Emissions by Land Use
 - 4.4.1. Unmitigated
 - 4.5. Waste Emissions by Land Use
 - 4.5.1. Unmitigated
 - 4.6. Refrigerant Emissions by Land Use
 - 4.6.1. Unmitigated
 - 4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

- 4.8. Stationary Emissions By Equipment Type
 - 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
 - 4.9.1. Unmitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
 - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
 - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
 - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
- 5. Activity Data
 - 5.1. Construction Schedule
 - 5.2. Off-Road Equipment
 - 5.2.1. Unmitigated
 - 5.3. Construction Vehicles
 - 5.3.1. Unmitigated
 - 5.4. Vehicles
 - 5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

- 5.6.1. Construction Earthmoving Activities
- 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

- 5.9.1. Unmitigated
- 5.10. Operational Area Sources
 - 5.10.1. Hearths
 - 5.10.1.1. Unmitigated
 - 5.10.2. Architectural Coatings
 - 5.10.3. Landscape Equipment
- 5.11. Operational Energy Consumption
 - 5.11.1. Unmitigated
- 5.12. Operational Water and Wastewater Consumption
 - 5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

- 5.14. Operational Refrigeration and Air Conditioning Equipment
 - 5.14.1. Unmitigated
- 5.15. Operational Off-Road Equipment
 - 5.15.1. Unmitigated

5.16. Stationary Sources

- 5.16.1. Emergency Generators and Fire Pumps
- 5.16.2. Process Boilers
- 5.17. User Defined

5.18. Vegetation

- 5.18.1. Land Use Change
 - 5.18.1.1. Unmitigated
- 5.18.1. Biomass Cover Type
 - 5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

- 6.1. Climate Risk Summary
- 6.2. Initial Climate Risk Scores
- 6.3. Adjusted Climate Risk Scores
- 6.4. Climate Risk Reduction Measures

7. Health and Equity Details

- 7.1. CalEnviroScreen 4.0 Scores
- 7.2. Healthy Places Index Scores
- 7.3. Overall Health & Equity Scores
- 7.4. Health & Equity Measures
- 7.5. Evaluation Scorecard
- 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	2240 Nord Avenue v4
Construction Start Date	6/1/2024
Operational Year	2025
Lead Agency	City of Chico
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	39.0
Location	39.741038522202615, -121.87850960946417
County	Butte
City	Chico
Air District	Butte County AQMD
Air Basin	Sacramento Valley
TAZ	204
EDFZ	3
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Sul	type S	Size	Unit	Lot Acreage	Building Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
--------------	--------	------	------	-------------	-----------------------	--	-----------------------------------	------------	-------------

Apartments Mid Rise 208	Dwelling Unit	11.7	221,078	5,000	_	532	_
-------------------------	---------------	------	---------	-------	---	-----	---

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	_	_		-	-	-		_	_	_	-	_	-	-		—
Unmit.	17.2	4.41	15.7	0.01	0.20	3.29	3.49	0.18	1.69	1.87	—	2,417	2,417	0.10	0.11	6.78	2,459
Daily, Winter (Max)	—	_	-		-	-	-		_	_	_	-	_	-	-		_
Unmit.	1.22	4.33	11.4	0.01	0.16	1.23	1.39	0.15	0.29	0.44	—	2,012	2,012	0.11	0.10	0.16	2,045
Average Daily (Max)	—		-		-	-	-		—	—		-	—	_	-	_	—
Unmit.	2.30	1.51	4.24	< 0.005	0.06	0.54	0.59	0.05	0.18	0.22	—	751	751	0.04	0.04	0.94	764
Annual (Max)	-	_	—	—	_	_	_	_	—	-	-	_	-	_	_	—	-
Unmit.	0.42	0.28	0.77	< 0.005	0.01	0.10	0.11	0.01	0.03	0.04	_	124	124	0.01	0.01	0.16	127

2.2. Construction Emissions by Year, Unmitigated

Year ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 N2O R CO2e	Yea	ar	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
---	-----	----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily - Summer (Max)	_	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
2024	1.19	4.41	12.2	< 0.005	0.20	3.29	3.49	0.18	1.69	1.87	_	1,847	1,847	0.08	0.10	6.01	1,884
2025	17.2	4.23	15.7	0.01	0.16	1.45	1.61	0.15	0.34	0.49	_	2,417	2,417	0.10	0.11	6.78	2,459
Daily - Winter (Max)	—	-	-		—	_	-	_	-	-		_	_	-	-	_	_
2024	1.04	2.96	9.66	0.01	0.10	1.17	1.28	0.10	0.28	0.38	_	1,695	1,695	0.09	0.10	0.16	1,727
2025	1.22	4.33	11.4	0.01	0.16	1.23	1.39	0.15	0.29	0.44	—	2,012	2,012	0.11	0.10	0.15	2,045
Average Daily	_	—	—	—	—	—	—	—	—	—	—	—	—	—	_		_
2024	0.35	1.15	3.16	< 0.005	0.04	0.54	0.59	0.04	0.18	0.22	—	549	549	0.03	0.03	0.78	559
2025	2.30	1.51	4.24	< 0.005	0.06	0.45	0.51	0.05	0.11	0.16	—	751	751	0.04	0.04	0.94	764
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.06	0.21	0.58	< 0.005	0.01	0.10	0.11	0.01	0.03	0.04	—	90.9	90.9	< 0.005	< 0.005	0.13	92.6
2025	0.42	0.28	0.77	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	_	124	124	0.01	0.01	0.16	127

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)			-	—													—
Unmit.	13.4	8.73	74.0	0.12	0.18	9.41	9.60	0.17	2.40	2.57	92.7	13,616	13,709	10.2	0.64	48.3	14,204
Daily, Winter (Max)	_	_	_	_			—			_	-				_		-
Unmit.	11.4	9.96	51.7	0.11	0.18	9.41	9.59	0.17	2.40	2.57	92.7	12,552	12,644	10.3	0.69	2.80	13,112

Average Daily (Max)	_		_	_				_	_		_	_					_
Unmit.	11.7	9.00	54.8	0.11	0.18	8.73	8.91	0.17	2.22	2.40	94.4	12,235	12,330	10.2	0.64	20.8	12,796
Annual (Max)	_	_	_	_	—	—	—	—	—	—	—	-	_	—	—	—	—
Unmit.	2.14	1.64	10.0	0.02	0.03	1.59	1.63	0.03	0.41	0.44	15.6	2,026	2,041	1.70	0.11	3.44	2,119

2.5. Operations Emissions by Sector, Unmitigated

Sector	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	-	-	—	—	—	—	-	—	—	—	_	-	-	—	—
Mobile	7.25	7.94	62.0	0.12	0.14	9.41	9.55	0.13	2.40	2.53	—	12,154	12,154	0.49	0.60	46.8	12,391
Area	6.15	0.11	11.6	< 0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	31.6	28.6	-0.01	< 0.005	—	28.3
Energy	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	_	1,419	1,419	0.17	0.01	—	1,426
Water	—	—	—	—	—	—	—	—	—	—	12.8	11.8	24.6	1.32	0.03	—	67.0
Waste	_	_	-	_	_	_	_	-	_	_	82.8	0.00	82.8	8.28	0.00	_	290
Refrig.	-	-	-	_	—	—	-	-	_	-	_	_	—	_	—	1.58	1.58
Total	13.4	8.73	74.0	0.12	0.18	9.41	9.60	0.17	2.40	2.57	92.7	13,616	13,709	10.2	0.64	48.3	14,204
Daily, Winter (Max)				-	—	-			-						-	-	—
Mobile	6.32	9.29	51.5	0.11	0.14	9.41	9.55	0.13	2.40	2.53	_	11,121	11,121	0.55	0.65	1.21	11,330
Area	5.09	> -0.005	-0.14	> -0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	0.00	-2.97	-0.02	0.00	—	-3.37
Energy	0.04	0.68	0.29	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,419	1,419	0.17	0.01	_	1,426
Water	_	_	_	_	—	_	_	_	_	_	12.8	11.8	24.6	1.32	0.03	_	67.0
Waste	_	_	_	_	_	_	_	_	_	_	82.8	0.00	82.8	8.28	0.00	_	290
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	1.58	1.58

Total	11.4	9.96	51.7	0.11	0.18	9.41	9.59	0.17	2.40	2.57	92.7	12,552	12,644	10.3	0.69	2.80	13,112
Average Daily	-	—	—	—	-	-	—	-	-	—	-	—	—	—	-	-	—
Mobile	6.09	8.27	48.8	0.11	0.13	8.73	8.86	0.12	2.22	2.35	_	10,789	10,789	0.49	0.59	19.2	10,997
Area	5.62	0.06	5.75	< 0.005	> -0.005	-	> -0.005	> -0.005	-	> -0.005	-1.22	15.6	14.3	-0.01	< 0.005	_	14.2
Energy	0.04	0.68	0.29	< 0.005	0.05	-	0.05	0.05	-	0.05	—	1,419	1,419	0.17	0.01	—	1,426
Water	—	—	—	—	—	-	—	—	-	—	12.8	11.8	24.6	1.32	0.03	—	67.0
Waste	—	—	—	—	—	-	—	—	-	—	82.8	0.00	82.8	8.28	0.00	—	290
Refrig.	_	—	—	—	_	-	—	_	-	—	_	—	—	_	-	1.58	1.58
Total	11.7	9.00	54.8	0.11	0.18	8.73	8.91	0.17	2.22	2.40	94.4	12,235	12,330	10.2	0.64	20.8	12,796
Annual	_	—	—	—	_	-	—	_	-	—	_	—	—	—	—	_	_
Mobile	1.11	1.51	8.90	0.02	0.02	1.59	1.62	0.02	0.41	0.43	_	1,786	1,786	0.08	0.10	3.18	1,821
Area	1.03	0.01	1.05	< 0.005	> -0.005	-	> -0.005	> -0.005	-	> -0.005	-0.20	2.58	2.37	> -0.005	< 0.005	_	2.36
Energy	0.01	0.12	0.05	< 0.005	0.01	-	0.01	0.01	-	0.01	_	235	235	0.03	< 0.005	_	236
Water	_	_	_	_	_	-	_	_	-	_	2.13	1.95	4.08	0.22	0.01	_	11.1
Waste	_	_	_	—		_	_	_	_	_	13.7	0.00	13.7	1.37	0.00	_	48.0
Refrig.	_	_	_	—	_	-	_	_	_	_	_	—	_	_	_	0.26	0.26
Total	2.14	1.64	10.0	0.02	0.03	1.59	1.63	0.03	0.41	0.44	15.6	2,026	2,041	1.70	0.11	3.44	2,119

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	—	—	_	_	—	—	—	—	_	—	—	_	—	—	_
Daily, Summer (Max)		_										_			—		—

Off-Road Equipment		0.58	0.71	< 0.005	0.03	_	0.03	0.02	_	0.02	_	89.1	89.1	< 0.005	< 0.005	_	89.4
Dust From Material Movement		_	_	_		0.00	0.00		0.00	0.00	_		_			_	_
Onsite truck	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
Daily, Winter (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	—	—	—	—	—	—	—	—	_	—	—	—	—	_	—	—	_
Off-Road Equipment	0.01 I	0.03	0.04	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	_	4.88	4.88	< 0.005	< 0.005	—	4.90
Dust From Material Movement		—	_	_		0.00	0.00	_	0.00	0.00	_	—	_	_	_	—	_
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	_	-	—	—	_
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	-	0.81	0.81	< 0.005	< 0.005	-	0.81
Dust From Material Movement		_	_	-		0.00	0.00		0.00	0.00	_	_	_	_		_	_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_
Daily, Summer (Max)		-	-	_		-	_	_	-	_	_	-	_	-	_	-	-
Worker	0.02	0.01	0.17	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.2	21.2	< 0.005	< 0.005	0.09	21.6

Vendor	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
Hauling	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
Daily, Winter (Max)	_	-	-	_	-	_	-	-	_	-	-	_	-	-	-	-	_
Average Daily	—	—	—	_	—	_	—	—	_	—	_	—	—	—	—	—	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.07
Vendor	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
Hauling	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	_	—	_	_		_	_		_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.40	4.40	2.88	< 0.005	0.20	—	0.20	0.18	—	0.18	—	403	403	0.02	< 0.005	—	404
Dust From Material Movement		_	_			3.28	3.28		1.68	1.68	_	_	_	_	_	_	_
Onsite truck	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

Daily, Winter (Max)		_	_	-	_	_	-	_	_	-	_	-	_	_	_		-
Average Daily	—	—	_	—	—	_	_	_	—	—	—	_	_	—	_	—	_
Off-Road Equipmen		0.27	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.3	24.3	< 0.005	< 0.005	—	24.4
Dust From Material Movement			_			0.20	0.20	_	0.10	0.10	_		_	_	_		_
Onsite truck	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
Annual	—	—	_	—	—	_	—	_	—	—	_	-	—	—	—	-	-
Off-Road Equipmen	< 0.005	0.05	0.03	< 0.005	< 0.005	-	< 0.005	< 0.005	—	< 0.005	-	4.02	4.02	< 0.005	< 0.005	_	4.03
Dust From Material Movement			_			0.04	0.04		0.02	0.02	_		_	_	_		_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Daily, Summer (Max)	_	-	-	-	-	-	-	-	-	-	_	-	_	-	-	_	-
Worker	0.02	0.01	0.17	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.2	21.2	< 0.005	< 0.005	0.09	21.6
Vendor	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
Hauling	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
Daily, Winter (Max)		-	_	-	-	-	-	-	-	-	_	-	-	_	-	_	-
Average Daily	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	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
Hauling	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
Annual	—	-	—	-	—	-	-	—	-	-	-	-	-	-	—	—	-
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	-	—	—	—	—	-	_
Daily, Summer (Max)		-		—			-	_		—		-	-		-	_	_
Off-Road Equipment	0.26	1.58	1.79	< 0.005	0.10	—	0.10	0.09	—	0.09	—	242	242	0.01	< 0.005		243
Onsite truck	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
Daily, Winter (Max)		-		—	-	_	_	—		—	_	_	-	—	-	_	—
Off-Road Equipment		1.58	1.79	< 0.005	0.10	—	0.10	0.09	—	0.09	—	242	242	0.01	< 0.005	_	243
Onsite truck	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
Average Daily	—	_	—	_	_	_		_	_	—	_		_	_		_	_
Off-Road Equipment		0.47	0.54	< 0.005	0.03	_	0.03	0.03	_	0.03	-	72.5	72.5	< 0.005	< 0.005	_	72.8

Onsite truck	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
Annual	_	—	—	—	—	—	—	—	—	—	-	—	—	—	—	_	_
Off-Road Equipmen	0.01 I	0.09	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	12.0	12.0	< 0.005	< 0.005	_	12.0
Onsite truck	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
Offsite	_	_	—	_	—	—	—	—	_	_	_	_	—	—	—	_	_
Daily, Summer (Max)	_	-	_	_	-	-	-	-	-	-	-	_	-	-	-	-	_
Worker	0.91	0.58	10.1	0.00	0.00	1.09	1.09	0.00	0.26	0.26	-	1,271	1,271	0.07	0.05	5.15	1,292
Vendor	0.02	0.56	0.23	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	-	334	334	< 0.005	0.05	0.86	349
Hauling	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
Daily, Winter (Max)		-	_	_	-	-	-	-	-	-	-	—	-	-	-	-	_
Worker	0.76	0.78	7.62	0.00	0.00	1.09	1.09	0.00	0.26	0.26	_	1,118	1,118	0.08	0.05	0.13	1,135
Vendor	0.02	0.60	0.24	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	_	334	334	< 0.005	0.05	0.02	349
Hauling	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
Average Daily		-	—	—	—	—	_	—	—	—	_	—	—		—	_	—
Worker	0.23	0.21	2.32	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	345	345	0.02	0.01	0.67	350
Vendor	0.01	0.18	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	100.0	100.0	< 0.005	0.01	0.11	104
Hauling	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
Annual	_	—	—	—	—	—	—	—	—	—	-	—	—	—	—	—	—
Worker	0.04	0.04	0.42	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.1	57.1	< 0.005	< 0.005	0.11	58.0
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	16.6	16.6	< 0.005	< 0.005	0.02	17.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

			,,	,, j	i annaai			uy 101 uu	,, <i>,</i> .		aanj						
Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		_	_	_	-	-	-	-	_	-	-	-	_	_	-	-	-
Off-Road Equipment	0.25	1.51	1.77	< 0.005	0.09	—	0.09	0.08	—	0.08	—	242	242	0.01	< 0.005	_	243
Onsite truck	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
Daily, Winter (Max)		-	_	_	-	-	-	-	_	-	-	-	-	_	-	-	-
Off-Road Equipment	0.25	1.51	1.77	< 0.005	0.09	—	0.09	0.08	—	0.08	-	242	242	0.01	< 0.005	-	243
Onsite truck	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
Average Daily	_	—	—	—		—	—	-	—	—	_	—	-	—	_	—	-
Off-Road Equipment	0.09	0.53	0.63	< 0.005	0.03	—	0.03	0.03	—	0.03	_	85.8	85.8	< 0.005	< 0.005	—	86.1
Onsite truck	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
Annual	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.10	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	-	14.2	14.2	< 0.005	< 0.005	-	14.3
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)		_	-	-	-	-	-	-	-	-	—	-	-	-	-	_	-
Worker	0.84	0.54	9.42	0.00	0.00	1.09	1.09	0.00	0.26	0.26	_	1,245	1,245	0.06	0.05	4.74	1,265
Vendor	0.02	0.54	0.22	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	328	328	< 0.005	0.05	0.85	343
Hauling	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
Daily, Winter (Max)	—	_	_	—	_	_	—	—	_	-	—	_	-	-	_	_	-
Worker	0.72	0.70	7.09	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,096	1,096	0.08	0.05	0.12	1,112
Vendor	0.02	0.58	0.23	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	328	328	< 0.005	0.05	0.02	343
Hauling	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
Average Daily	—	—	—	—	—	—		—	—	—		—	—			_	—
Worker	0.26	0.22	2.54	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	400	400	0.02	0.02	0.73	406
Vendor	0.01	0.20	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.13	121
Hauling	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
Annual	—	-	—	—	—	-	—	_	—	—	—	—	—	—	—	-	—
Worker	0.05	0.04	0.46	0.00	0.00	0.07	0.07	0.00	0.02	0.02	_	66.2	66.2	< 0.005	< 0.005	0.12	67.2
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	19.2	19.2	< 0.005	< 0.005	0.02	20.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	_			_					_		_		_		_		_

Off-Road Equipment	0.19	1.51	1.96	< 0.005	0.07	-	0.07	0.06	-	0.06	_	291	291	0.01	< 0.005	_	292
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Daily, Winter (Max)		-	-	_	-	-	-	-	-	_	-	_	-	_	-	-	-
Off-Road Equipment	0.19	1.51	1.96	< 0.005	0.07	-	0.07	0.06	-	0.06	_	291	291	0.01	< 0.005	_	292
Paving	0.00	—	—	_	—	_	_	_	_	_	-	_	—	_	-	_	_
Onsite truck	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
Average Daily	_	—	—	—		-	—	—	-	—	—	—	—	—		—	—
Off-Road Equipment	0.07	0.53	0.69	< 0.005	0.02	-	0.02	0.02	-	0.02	—	103	103	< 0.005	< 0.005	—	103
Paving	0.00		—	—	—	_	—	_	_	—	—		—		—	—	—
Onsite truck	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
Annual	_	_	-	_	—	_	-	_	_	—	-	_	—	_	-	-	—
Off-Road Equipment	0.01	0.10	0.13	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	_	17.0	17.0	< 0.005	< 0.005	_	17.1
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		-	-	_	-	-	—	-	-	—	-	—	-	—	-	-	—
Worker	0.04	0.03	0.47	0.00	0.00	0.05	0.05	0.00	0.01	0.01	_	62.3	62.3	< 0.005	< 0.005	0.24	63.4
Vendor	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

Hauling	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
Daily, Winter (Max)	_	-	-	-	_	_	_	_	-	-	—		_	-	-	-	—
Worker	0.04	0.04	0.35	0.00	0.00	0.05	0.05	0.00	0.01	0.01	_	54.9	54.9	< 0.005	< 0.005	0.01	55.7
Vendor	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
Hauling	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
Average Daily	-	—	-	—	—	—	—	—	—	—	—	-	—	—	-	-	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	20.0	20.0	< 0.005	< 0.005	0.04	20.3
Vendor	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
Hauling	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
Annual	—	—	-	—	—	—	—	-	—	—	—	—	_	—	—	_	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.31	3.31	< 0.005	< 0.005	0.01	3.36
/endor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T		PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite		—	—	—		—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)										-	—	—			—	—	_
Off-Road Equipment		0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectu ral Coatings	15.7	_	_				_	_		-	_	_	_	_	_	_	_

Onsite truck	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
Daily, Winter (Max)		_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_
Average Daily		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	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
Architectu ral Coatings	1.85	_	_	-	-	-	-		-	_	_		_	_	_	_	-
Onsite truck	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
Annual	_	—	—	—	—	—	_	—	—	—	—	—	—	—	—	_	—
Off-Road Equipment	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
Architectu ral Coatings	0.34	_	_	-	_	-	-	_	-	_	_		_	_	_	_	-
Onsite truck	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
Offsite	_	_	_	-	_	-	_	-	_	_	_	-	_	_	-	_	_
Daily, Summer (Max)		_	_	-	_	_	-		_	_	_		_	_	_	-	_
Worker	0.17	0.11	1.88	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	249	249	0.01	0.01	0.95	253
Vendor	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
Hauling	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
Daily, Winter (Max)		_		_	_	_	_		_				_			_	_
Average Daily		_	-	_		_	-	-	-	-	_	-	_	-	-	-	-

Worker	0.02	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	26.6	26.6	< 0.005	< 0.005	0.05	27.0
Vendor	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
Hauling	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
Annual	_	—	—	-	—	—	—	—	-	-	-	-	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	-	4.40	4.40	< 0.005	< 0.005	0.01	4.47
Vendor	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
Hauling	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

		· · ·	,				· ·	1	3, 3		/						
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	—		-	-	-	-	-		-	-	-			-	-	-	—
Apartmen ts Mid Rise	7.25	7.94	62.0	0.12	0.14	9.41	9.55	0.13	2.40	2.53	_	12,154	12,154	0.49	0.60	46.8	12,391
Total	7.25	7.94	62.0	0.12	0.14	9.41	9.55	0.13	2.40	2.53	—	12,154	12,154	0.49	0.60	46.8	12,391
Daily, Winter (Max)			_	-	-	_	_		_	_	_	—		_	-	_	—
Apartmen ts Mid Rise	6.32	9.29	51.5	0.11	0.14	9.41	9.55	0.13	2.40	2.53	_	11,121	11,121	0.55	0.65	1.21	11,330
Total	6.32	9.29	51.5	0.11	0.14	9.41	9.55	0.13	2.40	2.53	_	11,121	11,121	0.55	0.65	1.21	11,330
Annual	_	—	_	_		_	_	_	_	_	_	_		_	_	_	_

Apartmen Mid Rise	1.11	1.51	8.90	0.02	0.02	1.59	1.62	0.02	0.41	0.43		1,786	1,786	0.08	0.10	3.18	1,821
Total	1.11	1.51	8.90	0.02	0.02	1.59	1.62	0.02	0.41	0.43	_	1,786	1,786	0.08	0.10	3.18	1,821

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

	onatant	(, e.e.)	,,	1011/91 10				ay lot dui	. , , , .								
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	—	-	-		—	—	—		—	_	—	—	_	-	_	-
Apartmen ts Mid Rise			-	_		_	_			—	_	560	560	0.09	0.01	_	566
Total		_	_	_	—	_	_	_	_	_	_	560	560	0.09	0.01	_	566
Daily, Winter (Max)		-	-	-		-	_	-		-	-	-	-	-	-	-	-
Apartmen ts Mid Rise		-	-	-		-	_	_		-	_	560	560	0.09	0.01	-	566
Total		_	_	_	—	_	_	_	_	_	_	560	560	0.09	0.01	_	566
Annual		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Mid Rise			_	_		_				_	_	92.8	92.8	0.02	< 0.005	_	93.7
Total		_	_	_		_	_	_	_	_	_	92.8	92.8	0.02	< 0.005	_	93.7

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_
Apartmen ts Mid Rise	0.04	0.68	0.29	< 0.005	0.05	_	0.05	0.05	_	0.05		858	858	0.08	< 0.005		860
Total	0.04	0.68	0.29	< 0.005	0.05	_	0.05	0.05	_	0.05	_	858	858	0.08	< 0.005	-	860
Daily, Winter (Max)	_	-	_	-	-	-	-	_	_	_	-	_	_	-	_	_	-
Apartmen ts Mid Rise	0.04	0.68	0.29	< 0.005	0.05	_	0.05	0.05	_	0.05	_	858	858	0.08	< 0.005		860
Total	0.04	0.68	0.29	< 0.005	0.05	_	0.05	0.05	_	0.05	_	858	858	0.08	< 0.005	-	860
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartmen ts Mid Rise	0.01	0.12	0.05	< 0.005	0.01	_	0.01	0.01		0.01	_	142	142	0.01	< 0.005		142
Total	0.01	0.12	0.05	< 0.005	0.01	_	0.01	0.01	_	0.01	_	142	142	0.01	< 0.005	_	142

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)					—									—			—
Hearths	-0.01	> -0.005	-0.14	> -0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	0.00	-2.97	-0.02	0.00	—	-3.37
Consume r Products	4.73	_		_	_		_	_		—	_		_	_	_	_	-

Architectu Coatings	0.37	_	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-
Landscap e Equipme nt	1.06	0.12	11.8	< 0.005	0.01		0.01	< 0.005	—	< 0.005	_	31.6	31.6	< 0.005	< 0.005	_	31.7
Total	6.15	0.11	11.6	< 0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	31.6	28.6	-0.01	< 0.005	—	28.3
Daily, Winter (Max)	_	_	—	_	_	_	_	_	—	—	_	_	_	—	_	_	_
Hearths	-0.01	> -0.005	-0.14	> -0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	0.00	-2.97	-0.02	0.00	—	-3.37
Consume r Products	4.73	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.37	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	5.09	> -0.005	-0.14	> -0.005	-0.01	—	-0.01	-0.01	—	-0.01	-2.97	0.00	-2.97	-0.02	0.00	—	-3.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	-0.20	0.00	-0.20	> -0.005	0.00	—	-0.23
Consume r Products	0.86	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.07	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipme nt	0.10	0.01	1.06	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	2.58	2.58	< 0.005	< 0.005	_	2.59
Total	1.03	0.01	1.05	< 0.005	> -0.005	-	> -0.005	> -0.005	_	> -0.005	-0.20	2.58	2.37	> -0.005	< 0.005	_	2.36

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

		e (, e.e.)	,,,				(· · · · ·	.,,								
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	-	-	-	-	-	—			—	-	-	-		-	—	_
Apartmen ts Mid Rise		_	_	_	_	_	_			_	12.8	11.8	24.6	1.32	0.03	_	67.0
Total	—	_	_	_	_	-	—	—	—	—	12.8	11.8	24.6	1.32	0.03	—	67.0
Daily, Winter (Max)		-	-	-	-	-	-	-	_	-	-	-	-	_	-	-	-
Apartmen ts Mid Rise		-	-	-	-	-	-	-	_	-	12.8	11.8	24.6	1.32	0.03	-	67.0
Total	_	_	_	_	_	_	_	_	_	_	12.8	11.8	24.6	1.32	0.03	_	67.0
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Apartmen ts Mid Rise		_	_	_	_	_	_			_	2.13	1.95	4.08	0.22	0.01	_	11.1
Total	_	_	_	_	_	_	_	_	_	_	2.13	1.95	4.08	0.22	0.01	—	11.1

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	_	—	—	_	—	—	—	—		—	—	—	—	—	_

Apartmen Mid Rise			_								82.8	0.00	82.8	8.28	0.00	_	290
Total	—	—	—	—	—	—	—	—	—	—	82.8	0.00	82.8	8.28	0.00	_	290
Daily, Winter (Max)		_	_								_	_	_	_	_	_	_
Apartmen ts Mid Rise		_	_				—				82.8	0.00	82.8	8.28	0.00	—	290
Total	—	—	—	—	—	—	—	—	—	—	82.8	0.00	82.8	8.28	0.00	—	290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartmen ts Mid Rise		_	_								13.7	0.00	13.7	1.37	0.00	_	48.0
Total	_	_	_	_		_	_	_	_	_	13.7	0.00	13.7	1.37	0.00	_	48.0

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)		—									-		_				_
Apartmen ts Mid Rise	_	_		_	_	_	_		_	_	-		_		_	1.58	1.58
Total	—	—	—	—	—	—	—	—	—	—	_	—	—	—	—	1.58	1.58
Daily, Winter (Max)		_			_						-		_				-

Apartmen ts Mid Rise		_	-	_	_	_					_		_			1.58	1.58
Total	_	_	_	_	_	_	_	_	_		—	_	—	_	_	1.58	1.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Apartmen ts Mid Rise		_	_			—					—					0.26	0.26
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	ROG	NOx	со		PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—			—	—	—	—	—	—			—			—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Daily, Winter (Max)																	_
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_
Total	_	_	—	—	_	—		_	_	_	_	_		—	_	—	_

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipme nt Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)					—							—					
Total	_	_	—	—	_	—	—	_	_	_	—	_	—	_	_	—	_
Daily, Winter (Max)																	
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipme nt Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—				—		—	—	—		—	—				—	
Total	_		—	—	_	—	—	—	—	—	_	—	—	—	—	—	_
Daily, Winter (Max)	—			—	—		_	_									_
Total	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Annual	_		_	_	_	_	_	_	_	_	_	_		_	_	_	_
Total	—		_	—	_	_	—	—	_	_	_	_	_	_	_	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetatio n	ROG	NOx	со		PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—			—		—	—		—	—
Total	—	—	-	—	—	—	—	—	—	—	—	—	—	—	—	—	-
Daily, Winter (Max)			-								_		_	_		-	—
Total	_	—	—	—	_	—	—	—	—	—	_	—	_	—	—	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	ROG	NOx	со		PM10E	PM10D	PM10T		PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	—	_	—		—	_	—	_	_	—	—	—	_	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Daily, Winter (Max)				_		_					_	_	_		_		
Total	—	—	—	—		—	_	—	_	_	—	—	—	—	—	_	—
Annual	—	_	_	—	_	—	_	_	_	_	—	—	—	—	—	_	_
Total	_		_	_		_	_		_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

ontonia i	onatanta	o (ib/ duy	tor dury,	1011/91 10	annaar			ay for du	iy, ivi i / yi		uij						
Species	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	-	—	—	—	—	—	-	—	—	—	_	-	-	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	_	—	—	—	—	—	_	—	—	—	_	_	_	—	_
Subtotal	—	_	—	_	—	—	—	—	—	—	_	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)		_	_	_		_		_	_		—	_	_	_	_	_	_
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	_	_	—	—	—	—	_	—	—	—	_	_	_	_	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	_	—	—	—	—	—	—	_	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	_	—	—	—	-	—	—	—	-	—	—	—	_	_
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	_	—	—	—
Sequeste red	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	_	_	_	_	_	—	—	_		—	_	_		_	_	_
Removed	—	_	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	_	_	_	_	_	_	_	—	_	_	_	_	_	_	_	_	_
_	—	_	-	—	—	_	—	—	—	—	—	—	_	_	_	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2024	6/30/2024	5.00	20.0	—
Grading	Grading	7/1/2024	7/30/2024	5.00	22.0	—
Building Construction	Building Construction	8/1/2024	6/30/2025	5.00	238	—
Paving	Paving	1/1/2025	6/30/2025	5.00	129	—
Architectural Coating	Architectural Coating	5/1/2025	6/30/2025	5.00	43.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Average	1.00	4.00	47.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	216	0.40
Building Construction	Forklifts	Diesel	Average	2.00	4.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	4.00	14.0	0.74
Building Construction	Air Compressors	Electric	Average	3.00	4.00	37.0	0.48
Building Construction	Cranes	Diesel	Average	1.00	4.00	25.0	0.29
Paving	Paving Equipment	Diesel	Average	1.00	4.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	4.00	36.0	0.38
Architectural Coating	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	—	_	_
Site Preparation	Worker	2.50	10.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.50	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	_	HHDT
Grading	_	—	_	—
Grading	Worker	2.50	10.3	LDA,LDT1,LDT2
Grading	Vendor	—	4.50	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	_	HHDT
Building Construction	_	—	_	—
Building Construction	Worker	150	10.3	LDA,LDT1,LDT2
Building Construction	Vendor	22.2	4.50	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—		HHDT
Paving	_	—	_	—
Paving	Worker	7.50	10.3	LDA,LDT1,LDT2
Paving	Vendor	—	4.50	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT

Architectural Coating				
Architectural Coating	Worker	30.0	10.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	4.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_		HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	217,670	73,000	0.00	0.00	_

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	0.00	0.00	_
Grading	—	—	5.50	0.00	—
Paving	0.00	0.00	0.00	0.00	5.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	5.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Yea	ır	kWh per Year	CO2	CH4	N2O
202	24	159	204	0.03	< 0.005
202	25	238	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,132	1,021	851	392,615	13,171	11,888	9,902	4,569,977

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	38

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	-0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
440781.75	146,927	0.00	0.00	_

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,002,788	204	0.0330	0.0040	2,677,507

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	6,705,254	67,262

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	154	-

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
--------------------------	-------------	----------------	---------------	------------	-------------

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
--------------------------	----------------	---------------	----------------	------------	-------------

5.16.2. Process Boilers

Equipment Type Fuel Type Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
---------------------------------	--------------------------	------------------------------	------------------------------

5.17. User Defined

Equipment Type		Fuel Type	
5.18. Vegetation			
5.18.1. Land Use Change			
5.18.1.1. Unmitigated			
Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
5.18.1. Biomass Cover Type			
5.18.1.1. Unmitigated			
Biomass Cover Type	Initial Acres	Final Acres	
5.18.2. Sequestration			
5.18.2.1. Unmitigated			
Тгее Туре	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	25.8	annual days of extreme heat
Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	_	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.0
AQ-PM	29.0
AQ-DPM	45.2
Drinking Water	32.0
Lead Risk Housing	16.9
40	/ 45

85.8
5.04
31.0
17.1
6.97
16.6
23.9
0.00
46.6
20.0
14.5
12.0
71.6
5.64
66.1
94.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Poverty	34.94161427
Employed	43.57756961
Median HI	29.65481843

Education	_
Bachelor's or higher	76.49172334
High school enrollment	100
Preschool enrollment	26.03618632
Transportation	—
Auto Access	22.57153856
Active commuting	78.53201591
Social	—
2-parent households	95.18798922
Voting	64.03182343
Neighborhood	—
Alcohol availability	79.28910561
Park access	48.47940459
Retail density	30.12960349
Supermarket access	28.28179135
Tree canopy	91.00474785
Housing	—
Homeownership	40.15141794
Housing habitability	43.83421019
Low-inc homeowner severe housing cost burden	96.17605543
Low-inc renter severe housing cost burden	19.02989863
Uncrowded housing	58.11625818
Health Outcomes	—
Insured adults	82.81791351
Arthritis	97.1
Asthma ER Admissions	63.0
High Blood Pressure	97.7

Cancer (excluding skin)	89.7
Asthma	19.7
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	98.4
Life Expectancy at Birth	74.6
Cognitively Disabled	22.1
Physically Disabled	39.7
Heart Attack ER Admissions	61.1
Mental Health Not Good	41.5
Chronic Kidney Disease	98.0
Obesity	71.5
Pedestrian Injuries	54.3
Physical Health Not Good	85.2
Stroke	95.7
Health Risk Behaviors	_
Binge Drinking	0.8
Current Smoker	44.4
No Leisure Time for Physical Activity	84.4
Climate Change Exposures	_
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	75.0
Elderly	45.9
English Speaking	70.4
Foreign-born	2.2
Outdoor Workers	46.8

Climate Change Adaptive Capacity	—
Impervious Surface Cover	60.5
Traffic Density	7.0
Traffic Access	0.0
Other Indices	—
Hardship	45.4
Other Decision Support	
2016 Voting	65.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	23.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification	
Land Use	Per project plans	
Construction: Construction Phases	Per project plans	
Construction: Off-Road Equipment	Equipment type and usage based on project design	
Construction: Architectural Coatings	Per project design	
Operations: Hearths	No fireplaces or wood stoves will be used	

APPENDIX B

Calculation of Screening Level Health Risks

Table B-1 Risk Screen Calculation - Construction Phase Prioritization

Name Risk Screen Calculation		Р	rioritizatio
Applicability	Use to provide		core based on t yellow areas, ou
Author or updater	Rav	Kapahi	Last Update
Facility:	2240 Nord Avenue Project		
ID#:	Chico CA		
Project #:	Construction Pl	hase	
Unit and Process#	15 lbs/yr DPM	emissions	
Operating Hours hr/yr	8,760.00		
Receptor Proximity and Proximity Factors	Cancer	Chronic	Acute
	Score	Score	Score
0< R<100 1.000	3.47E+01	5.14E-02	0.00E+00
100≤R<250 0.250	8.66E+00	1.28E-02	0.00E+00
250≤R<500 0.040	1.39E+00	2.05E-03	0.00E+00
500≤R<1000 0.011	3.81E-01	5.65E-04	0.00E+00
1000≤R<1500 0.003	1.04E-01	1.54E-04	0.00E+00
1500≤R<2000 0.002	6.93E-02	1.03E-04	0.00E+00
2000 <r 0.001<="" th=""><th>3.47E-02</th><th>5.14E-05</th><th>0.00E+00</th></r>	3.47E-02	5.14E-05	0.00E+00
			substances emit
Based on 15 lbs/yr DPM emissions		amo	
		Annual	Maximum
		Emissions	Hourly
Substance	CAS#	(lbs/yr)	(lbs/hr)
	040#	(183/91)	
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.50E+01	1.71E-03
			0.00E+00
			0.002100

APPENDIX C

Response to Appendix G CEQA Guidelines

CEQA Appendix G Environmental Checklist

Air Quality Section III

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
 b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard? 	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
 d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? 	Less Than Significant Impact

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

Currently, the attainment status for various air quality standards for Butte County is as follows:

Table 1		
Criteria Air Pollutant	California	Federal
Ozone (8-hour)	Nonattainment	Nonattainment
Carbon Monoxide (1-hour and 8-hour)	Attainment	Attainment
Nitrogen Dioxide (1-hour and annual)	Attainment	Attainment
Sulfur dioxide (1, 3, 24-hour and annual)	Attainment	Attainment
PM-10 (24-hour and annual)	Non-Attainment (24-hour) Attainment (annual)	Attainment (24 hour) No annual standard
PM-2.5 (24-hour and annual)	No Standard (24 hour) Nonattainment (annual)	Attainment (24 hour) Attainment (annual)
Lead (30 day and quarterly)	Attainment	Attainment

Butte County currently does not have an attainment plan for ozone or PM10. For PM2.5, the County has requested the EPA for a resignation to attainment status. This Plan was submitted by BCAQMD to the EPA September 26, 2017.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state standard?

Emissions of NOx, ROG, PM10 and PM2.5 were quantified and appear in Section 4 of this report. The emissions are well below the thresholds of significance as discussed in Section 5. Therefore, the impacts will also be cumulatively less than significant.

c) Expose sensitive receptors to substantial pollutant concentration?

Project emissions were calculated for the various criteria air pollutants and compared with thresholds of significance established by BCAQMD. These emissions are summarized in Tables 5-1 and 5-2 in the attached report and demonstrate that project emissions are well below the thresholds of significance and therefore would not expose sensitive receptors to pollutant concentrations. Detailed emission calculations for both the construction and operational phases appear in the Appendix A

d) Result in other emissions (such as those leading to odors) adversely affecting substantial number of people?

During the construction phase, trace quantities of diesel exhaust would be released from the construction equipment such as graders and backhoes. Such emissions would be intermittent and their impacts would be limited mostly to on-site areas.

Diesel particulate matter (DPM) is also regulated as a carcinogen and therefore, there is a potential for health impacts to nearby homes and businesses. Annual PM-10 (exhaust) emissions from construction equipment exhaust can be used as a surrogate for DPM. Annual PM-10 (exhaust) from equipment and trucks exhaust is estimate to equal 0.01 tons/year during the construction phase.

A screening level health risk evaluation was completed and it was demonstrated that impacts to public health were less than significant. Please see Section 5.2 in the attached report for detailed discussion of health impacts associated with exposure to DPM during the construction phase.

The project will not have any stationary sources of odors and/or long-term toxic air pollutants. Therefore during the occupancy phase, the project would not be a source of odors or toxic air pollutants.

GREENHOUSE GAS EMISSIONS

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
 b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? 	Less Than Significant Impact

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

The annual GHG for the construction and operational phases is estimated to be 127 metric tons/year and 2,119 metric tons/yr respectively.

As discussed in Section 5.3 of this report, the City of Chico has not formally established any thresholds of significance for GHG emissions. Instead, the current analysis relies on thresholds used to identify significant sources of GHG emissions in the State's Cap and Trade program [Title 17, Section 95812(c)(1)]. This threshold is set at 25,000 metric tons per year.

California Air Resources Board (CARB) acknowledged that the 25,000 MT/year threshold is used for the mandatory reporting for the Cap and Trade program and not established as a CEQA threshold for GHG emissions. However, the California Air Pollution Control Officers Association (CAPCOA) identified 25,000 MT/yr as a threshold in their January 2008 report "CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Air Quality Act"

The issue of threshold of significance has also been reviewed by the Environmental Protection Agency (EPA). The EPA analyzed several thresholds for reporting and rejected lower thresholds of 1,000 and 10,000 metric tons/yr finding that these thresholds would greatly increase the numbered of covered entities without capturing a significant portion of GHG emissions (EPA 2009). The 25,000 MT/yr threshold would capture 94% of GHG emissions from stationary sources in California (CAPCOA 2008, Page 44).

Given the volume of research and resources that have been expended to develop the CARB reporting and the Cap and Trade regulations and the Federal (EPA) GHG reporting rule, the City 25,000 MT/yr threshold is an appropriate threshold of significance to the proposed project. Under this thresholds, GHG impacts are less than significant.

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

The City of Chico has established a Climate Action Plan. As required under this Plan, the emissions of GHG were quantified and presented in Section 4.3. The specific actions required under the CAP are discussed in Section 5.3 of this report. The Project's consistency with the CAP is also demonstrated in Section 5.3.