Broadway Avenue
Complete Streets Corridor Project
Environmental Initial Study

Prepared for:

City of Seaside

January 2023

Prepared by:

Kimley»Horn

NEGATIVE DECLARATION

Project Title: Broadway Avenue Complete Streets Corridor Project Initial Study

Project Location: The proposed project site is in the City of Seaside, in Monterey County, California within the public right of way of Broadway Avenue between Fremont Boulevard and General Jim Moore Boulevard, and along Yosemite Street between San Pablo Avenue and Wanda Avenue.

Assessor's Parcel No. N/A

Applicant: Public Works Department, City of Seaside

440 Harcourt Avenue, Seaside CA 93955

Initial Study:

An Initial Study of this project was undertaken and prepared for the purpose of determining whether this project may have a significant effect on the environment. A copy of this study is on file at the City of Seaside, City Clerk Office, 440 Harcourt Avenue, Seaside, CA 93955.

Findings and Reasons:

The Initial Study examined any potentially significant impacts based on CEQA thresholds of significance and concluded that there is no substantial evidence to suggest that the project would have a significant effect on the environment. The following reasons support these findings:

1. The proposal is a logical component of the existing land use pattern and circulation system of this area.
2. Potentially adverse construction effects will be addressed by implementation of construction best practices and/or standard conditions of approval.
3. The project will yield beneficial impacts with respect to bicycle and pedestrian safety.
4. No significance thresholds under CEQA will be exceeded.
5. The proposed project is consistent with the adopted goals, policies and land uses of the City of Seaside General Plan and Municipal Code.
6. The proposed project is consistent with the West Broadway Urban Village Specific Plan.

Table of Contents

List of Tables

Figures

Note: All figures are presented at the end of the document.

Appendices

Appendix A: Air Quality and Greenhouse Gas Analysis Memo (Kimley-Horn, November 2022)

Appendix B: Noise and Vibration Analysis (Kimley-Horn, November 2022)

1.0 INTRODUCTION & PURPOSE

1.1 Purpose and Scope of the Initial Study

This Initial Study has been prepared to determine and identify the potential environmental effects of construction and operation of the Broadway Avenue Complete Streets Corridor Project ("project") in the City of Seaside. This study has been prepared pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, Section 21000, et seq.).

As a "road diet" project intended to reduce vehicle speeds, improve traffic flow at intersections and provide a safe corridor for pedestrian, cyclists and vehicles. The project is expected to provide certain benefits in terms of safety, non-motorized mobility, function and aesthetics. As such, the scope of this Initial Study focuses on the physical environmental effects of constructing the planned improvements for the corridor. Primary issues studied are air quality, greenhouse gas emissions, noise, transportation safety and construction related subjects; however, the Initial Study addresses all area of the standard checklist within CEQA Guidelines Appendix G.

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b) (1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Seaside (City) is the lead agency for the proposed project.

The conclusions herein are based on CEQA standards, professional judgement, field review and available public documents. This Initial Study constitutes substantial evidence supporting the conclusion that preparation of an EIR is not required prior to approval of the project by the City and provides the required documentation under CEQA.

1.2 Summary of Findings

The project would have beneficial impacts, less than significant impacts, or no impacts in all analysis categories except as identified below. Beneficial impacts of the project include improved traffic safety, improved pedestrian safety, opportunities for non-motorized transportation, and improved aesthetics/community character.

Environmental issues that could have effects requiring mitigation or standard conditions of approval include air quality (construction emissions) and tribal and cultural resources (protection of inadvertently discovered resources). Overall, the project has very minor environmental consequences, compared to the benefits that would be achieved with its implementation.

1.3 Public Review and Outreach Process

The Seaside & Marina Safe Walking & Biking to School Plan (funded by Caltrans' Active Transportation Program, or ATP) and 2018 TAMC Monterey County ATP established policies, goals and a list of recommended infrastructure improvements and non-infrastructure programming. This plan was developed with extensive community engagement and is consistent with future community needs as

identified in the City's general plan, as well as the regional active transportation plan and regional transportation plan. It included an analysis of existing conditions identifying the history of bicycle and pedestrian collision "hot spots", mode-share, and school demographics and student enrollment.

The Broadway Avenue Complete Streets Corridor project was identified in the Plan as a top priority Safe Routes to School corridor due to safety concerns, and the need to safely connect the majority of MLK Jr. School of the Arts and Highland Elementary students from their homes to the school campuses.[1]

In Fall, 2018, the City team held an evening community meeting at Martin Luther King Jr. Elementary School in Seaside. Parents, school and school district staff, elected officials, and City staff came to learn and share their interest in improving school access by bicycling and walking. The participants talked about barriers to biking and walking, traffic safety issues around schools, and ideas for future projects. Bilingual outreach materials were used to promote the meetings, and Spanish translation was offered and utilized at the meeting. Dinner and childcare were provided using local funds to let parents and guardians attend and participate in the meeting, and the school was accessible by transit.

Following the community meeting, "walk audits" were held at each of the schools to observe conditions during the morning drop-off period, when traffic is highest, and before most parents working hours. School principals, parents, community members, and City staff observed the existing infrastructure around the schools, traffic circulation patterns, and the behavior of pedestrians, bicyclists, and drivers. Following the audit, the group reported their observations, recorded any barriers to safe walking and cycling, and started the discussion of possible infrastructure improvements. Bilingual paper surveys were distributed to parents and teachers at each school. These surveys collected data on how students get to school now, how far they live from school, and the barriers that prevent parents from allowing their children to walk or bike to school.

A bilingual project website was created to explain the planning process, promote the community meetings and school audits, and solicit public comments.

Following the development of recommendations for each school, the planning team attended parent meetings to share the recommendations and get feedback from parents and school staff. Where appropriate, presentations were given in Spanish.

In May 2019, the community was able to experience some of the planned Broadway Avenue improvements first-hand by walking, bicycling and driving through a temporary safe street "pop-up" demonstration. The goal of the demonstrations was to learn how the recommendations worked in practice and to get feedback from the community on whether the changes should be made permanent. The planning team collected community opinion surveys asking parents and residents for direct feedback on the new design. Health Department staff conducted in-person surveys in Spanish at MLK Jr. School of the Arts to better explain the demonstration and get feedback from families who do not have internet access at home or would not otherwise have time to participate. Community feedback in favor of the changes was strong, and specific comments were used was used to refine project design.

The majority of survey respondents who tested out the project wanted the Broadway Avenue pop-up demonstration to be made permanent. Those who walked and/or bicycled through the demonstration

[1] It should be noted that Highland Elementary School was closed in 2021 but is still referenced in this Initial Study as it was open during the Safe Routes To School planning and ATP application.

had a “very positive” experience with new design and 85% said the changes made walking and bicycling on Broadway more comfortable. In addition, 63% of respondents said they were likely to or would definitely use the facility on foot if it became permanent. Forty-seven percent said they were likely to or would definitely use the facility on bike, which was an increase from the number of respondents who said they had biked through the demonstration and indicated an increased interest in biking if there were dedicated bicycle facilities on Broadway Avenue.

When respondents were asked about their favorite part of the demonstration-, they cited increased safety as their top response. Not all responses were positive however, and the project was adjusted to address community concerns. Specifically, a recommendation was added to explore installing a roundabout at Broadway Avenue at Ancon Street to provide shorter crossings for pedestrians, to slow traffic and to allow drivers to make a U-turn on Broadway to enter the school parking lot from the east. These recommendations were made due to the desire to address the unsafe environment for pedestrians, bicyclists and vehicles caused by through traffic going around drivers who were waiting to enter the school parking lot.

It was also clear from the pop-up demonstration that the intersection of Broadway Avenue and Yosemite Street would need to function more efficiently for a lane reduction on Broadway Avenue to work. As a result, a recommendation was added to study the possibility of installing a roundabout at Yosemite Street to slow down traffic and thereby improve pedestrian and bicycle safety. The City subsequently conducted an intersection control evaluation and found a that a roundabout at Yosemite St and Broadway Ave and at other major intersections along the corridor would provide a corridor of safety benefits that would also make the road diet handle traffic more smoothly.

Lastly, recommendations for each school and citywide projects including the Broadway Avenue improvements were presented and discussed at multiple public Seaside Traffic Advisory Committee and Transportation Agency’s Bicycle & Pedestrian Facilities Advisory Committee meetings and were adopted by the City Council, School District Board and Transportation Agency Board in February 2020.

The Initial Study will be available for a 30-day public review period. At the close of public review, the City will consider public comments on the environmental document prior to making a decision on the project.

1.4 Report Organization

This document has been organized into the following sections:

Section 1.0 – Introduction. This section provides an introduction and overview describing the conclusions of the Initial Study.

Section 2.0 – Project Description. This section identifies key project characteristics and includes a list of anticipated discretionary actions.

Section 3.0 – Initial Study Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.

Section 4.0 – Environmental Analysis. This section contains an analysis of environmental impacts identified in the environmental checklist.

Section 5.0 – Report Preparers.

Section 6.0 – References. This section identifies resources used to prepare the Initial Study.

Appendices. Includes technical studies/memos prepared to quantify the project's potential effects.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Project Background, Location, and Setting

Location

The Broadway Avenue Complete Streets Corridor Project (Project) is located in the City of Seaside, California within a 1.3-mile segment of Broadway Avenue right of way between Fremont Boulevard and General Jim Moore Boulevard. The project improvements also extend along Yosemite Street, between San Pablo Avenue and Wanda Avenue. See **Figure 1**. The project is not located within the California Coastal Zone and is entirely within the City's right of way.

Background and Purpose

The City adopted the Seaside & Marina Safe Walking & Biking to School: Complete Streets Plan in February 2020, and also recognizes the TAMC 2018 Active Transportation Plan. The Plan identified Broadway Avenue and Yosemite Street as important safe routes to school corridors serving four of the seven elementary schools in Seaside. Consistent with the Plan, the Broadway Avenue Complete Streets Corridor will address the top community-identified safety concerns and barriers to children walking and biking to schools in the project area: safety of intersections and crossings; speed of traffic; and amount of traffic. These community concerns are validated by the history of bicycle and pedestrian involved collisions on Broadway Avenue. Over the past decade, 13.5% of all bicycle and pedestrian collisions in Seaside occurred within the project area. Over the most recent 11 year period, the project area experienced an average of 2.36 bicycle or pedestrian collisions per year that resulted in injuries.

Many Seaside residents also have health struggles that could be helped by increased walking and bicycling, especially for children and African American communities. In 2018, nearly half of all 5th graders in Seaside were overweight or obese. The City's African American community is the largest in Monterey County, and disproportionately affected by heart disease, diabetes, and obesity. To address these serious health issues, the residents of Seaside need more places in the City where they can feel safe and comfortable walking and bicycling, and would benefit from community-based education and encouragement programming to help them incorporate active transportation in their daily lives.

The project will build on the recently completed West Broadway Urban Village development to provide a continuous and safe corridor for bicyclists and pedestrians connecting residents to jobs and shopping on the west end and schools and affordable housing for families and seniors on the east end. The corresponding education and encouragement programing will be crucial to encourage and increase safe bicycling and walking and prevent unsafe behaviors that currently account for the high pedestrian and bicyclist collision rates involving children in the community. This programming will help ensure that all students and parents are provided with the opportunity to learn and practice safe walking and biking skills and habits in a safe environment, reduce the amount of traffic surrounding schools, increase the number of residents civically engaged around active transportation, increase the number of students walking, biking and carpooling to school and improve the health of children in Seaside.

The redesign of Broadway Avenue is intended to address the existing and acute safety concerns of speeding, sideswipes and broadside vehicle collisions that plague this main corridor of the City frequently used by children and seniors. Proposed bike lanes along Broadway Avenue will create the

only continuous citywide east-west bicycle facility in Seaside, which will serve as a backbone for future bicycling and walking infrastructure projects throughout the city. Bikeway markings and safe routes to school improvements will also be installed on Yosemite Street between San Pablo and Wanda Avenues, providing important safety connections.

The City of Seaside was awarded ATP grant funds to design and construct the Broadway Avenue Complete Streets Corridor Project. This project will contribute to improved quality of life in Seaside by calming traffic, reducing emissions, and enhancing the quality, usefulness, and overall aesthetic character of the Broadway Avenue corridor and Yosemite Street.

Site Conditions and Environmental Setting

Broadway Avenue between Fremont Boulevard and General Jim Moore Boulevard is a an existing four-lane undivided roadway with a typical curb to curb right of way of 60 feet. See **Figure 2.**

The western "lower" third of the Broadway Avenue corridor supports mixed use commercial businesses consistent with existing zoning. Businesses fronting the roadway include a mix of older established businesses and properties being redeveloped. The eastern "upper" two-thirds of the corridor is predominantly fronted by single family residential uses, several churches, and the Martin Luther King, Jr. School of the Arts. Yosemite Street is also located in residential neighborhoods and fronts the International School of Monterey.

Project Characteristics

Overview

The project includes the design and construction of a 1.3-mile road diet on Broadway Avenue from Fremont Boulevard to General Jim Moore Boulevard and safe routes to school improvements on Yosemite Street from San Pablo Avenue to Wanda Avenue. The road diet will transform the 4- lane roadway to a 2-lane roadway with curb extensions, dedicated and clearly marked bike facilities, roundabouts, and Safe Routes to School improvements including off-set crosswalks, rectangular rapid flashing beacons, and accessible design. Improvements on Yosemite Street will include bicycle pavement markings, signage, curb extensions and high visibility crosswalks.

Please see **Figures 3 through 14** for typical cross sections and design concepts for various segments of the corridor.

Traffic Calming Improvements

The project's "road diet" will result in several traffic calming improvements, including the removal of over 20,000 linear feet of travel lanes, and construction of curb extensions/bulbouts. The additional width gained from the lane reduction would be allocated to protected bike lanes, left turn lanes and medians, and curb extensions.

Roundabouts would be installed at seven intersections (Terrace, San Lucas, Noche Buena, Flores, Yosemite, Ancon, and Mescal) with high visibility crosswalks to facilitate pedestrian crossings on all approaches. Curb extensions are extensions of the sidewalk into the parking lane to facilitate accessibility and improve driver awareness of pedestrians and reduce the street crossing distance and pedestrian exposure to motor vehicles.

Street Parking

The project will retain street parking along Broadway Avenue; however, the parking lanes will be easier and safer to use with the bulbouts and dedicated bicycle lanes as a separator. To accommodate the bulbout and roundabout improvements some street parking will be reduced along the Broadway Avenue frontage.

Bicycle and Pedestrian Improvements

The Broadway Ave Complete Streets Corridor project will create the only continuous citywide east-west bicycle facility in Seaside which will serve as a strong backbone for future safe bicycling and walking infrastructure projects throughout the City. The project will construct over 2.7 total miles of new Class 2, Class 3 and Class 4 bike routes, as well green striping at conflict areas. Other improvements and amenities include 50 new bikes for a bike share program and six new bike racks. Pedestrian improvements include over 1,200 feet of new sidewalks, 46 new ADA ramps, reconstruction of existing ramps, 29 locations of shortened pedestrian crossings, curb extensions (bulbouts) and surface treatments at intersections.

Marked crosswalks at roundabouts will be delineated with high-visibility white painted crossing marks and stop bars in addition at school crossings high-visibility yellow painted crossing marks and white yield lines will be installed. An off-set high visibility mid-block crosswalk with Rectangular Rapid Flashing Beacons (RRFB) will be placed across Broadway Avenue at the entrance to Martin Luther King School of the Arts to facilitate pedestrian crossing.

Landscaping/Drainage

The proposed improvements would occur within the existing “curb to curb” right of way. Beyond the bicycle and vehicle safety improvements, functional improvements would include stormwater management improvements to comply with current regulations, and drought tolerant landscaping at the roundabouts and bulbouts.

Construction and Scheduling

Construction of all improvements is anticipated to occur over 24 months. Improvements will be completed in sections, requiring temporary road closures and detours on a block-by-block basis. Businesses will be able to remain open during construction but street frontage parking in front of businesses may not be available during these periods.

3.0 INITIAL STUDY CHECKLIST

3.1 Project Information

1. **Project title:**

   Broadway Avenue Complete Streets Corridor Project
2. **Lead agency name and address:**

   City of Seaside, 440 Harcourt Avenue, Seaside CA 93955
3. **Contact person and phone number:**

   Nisha Patel, Public Works Director, (831) 899-6884
4. **Project location:**

   Public right of way of Broadway Avenue between Fremont Boulevard and General Jim Moore Boulevard, and along Yosemite Street between San Pablo Avenue and Wanda Avenue
5. **Project sponsor's name and address:**

   Same as above.
6. **General plan designation:**

   N/A (public roadway)
7. **Zoning:**

   N/A (public roadway)
8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

   The project includes the design and construction of a 1.3-mile road diet on Broadway Avenue from Fremont Boulevard to General Jim Moore Boulevard and safe routes to school improvements on Yosemite Street from San Pablo Avenue to Wanda Avenue. The road diet will transform the 4- lane roadway to a 2-lane roadway with curb extensions, buffered and protected bike facilities, roundabouts, and Safe Routes to School improvements including off-set crosswalk, rectangular rapid flashing beacons, and accessible design. Improvements on Yosemite Street will include bicycle pavement markings, signage, curb extensions and high visibility crosswalks. See Section 2.0 for more detail.
9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

   The western “lower” third of the Broadway Avenue corridor supports mixed-use and commercial businesses consistent with existing zoning. Businesses fronting the roadway include a mix of older established businesses and properties being redeveloped. The eastern “upper” two-thirds of the corridor is predominantly fronted by single family residential uses, several churches, and the Martin Luther King, Jr. School of the Arts. Yosemite Street is also located in residential neighborhoods and fronts the International School of Monterey.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

Transportation Agency for Monterey County (TAMC); Caltrans

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In October 2022 the City of Seaside sent letters to local tribal representatives informing them of the project and providing an opportunity to request consultation. As of December 20, 2022, no tribal representatives have responded to the City's notification.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

4.0 ENVIRONMENTAL ANALYSIS

4.1 Aesthetics

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
a) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				X
b) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
c) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a) Have a substantial adverse effect on a scenic vista?

No impact/Beneficial impact. Broadway Avenue slopes approximately 300 feet down toward the ocean from east to west. The eastern (upper) portion of the corridor provides views/vistas from the public roadway and private properties. The view from this area is currently dominated by pavement and the wide roadway width, with buildings on either side with very little landscaping. During construction, workers and equipment will be visible; however, this work should not block or substantially affect public views.

Once the project is constructed, these views would be enhanced by the reduction in lanes and pavement, a more visually appealing streetscape, and enhanced landscaping. The improvements would provide more visual interest to an otherwise wide and straight expanse of pavement. To motorized and non-motorized travelers moving westbound, the existing vistas created by the topography would

provide a more aesthetically pleasing view toward the ocean for the length of Broadway Avenue. Views would also be enjoyed for longer duration, due to the slower speeds resulting from the project.

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

No impact. The scenic environment along Broadway Avenue does not include any significant scenic resources such as significant trees, rock outcroppings, or historic buildings within a state scenic highway. Broadway Avenue is not a state or locally recognized scenic roadway. While the age of some local buildings may meet evaluation criteria under CEQA, no existing buildings will be affected, modified or removed by the project. For these reasons, there would be no impact to scenic resources.

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No impact/Beneficial Impact. The project is located within the City of Seaside's public right of way along Broadway Avenue and Yosemite Street. The existing visual character of this area is somewhat compromised by the expansive asphalt roadway, lack of consistent landscaping and typical character of a built urban environment. The subject roadways, located in an urbanized area, are in neighborhoods zoned for mixed use commercial and residential use. The proposed improvements are compatible and complementary to these land uses, as they will enhance the visual character of the area as seen from these public roadway locations. Temporary visual effects from project construction will not permanently degrade the visual character of the area, and would be typical of a roadway project.

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

Less than significant impact. Lighting sources along the roadway would be modified with the project by removing vehicle travel lanes (reducing headlight glare) and the addition of safety LED lighting at key locations (rapid flashing beacons). However, the project does not include new or additional lighting along the project frontages or private property. The proposed changes to lighting and sources necessary for safety and operations would not be substantial compared to existing conditions, create glare, or affect day or nighttime views in the area.

4.2 Agriculture and Forestry Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

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

d) Result in the loss of forest land or conversion of forest land to non-forest use?

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

No impact. The project location is an urban area along existing roadways. The strips of right of way affected by the project is not classified as farmland, has no forest land value, would not conflict with agricultural zoning, nor result in other changes that could result in the conversion of farmland.

4.3 Air Quality

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			X	

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

Less than Significant impact. The most recent air quality plan for Monterey County is the 2012-2015 Air Quality Management Plan (AQMP) which was adopted in March 2017. The proposed project would result in the construction and operation of a road diet, pedestrian improvements, and additional bike facilities. The project would not generate additional population, add additional traffic, or add jobs or housing. Therefore, implementation of the proposed project would not result in conflicts with or obstruction of implementation of the Air Quality Plan. MBARD guidance for analysis of air quality impacts of planning documents consists of assessing consistency with the Air Quality Plan. This analysis is presented in Appendix A: Air Quality and Greenhouse Gas Analysis and indicates no impact for ozone and ozone precursors, such as NO_X.

In addition, Appendix A shows that the proposed project's construction and operation emissions would not exceed MBARD thresholds. The NCCAB is currently in non-attainment for State ozone and PM_{10} standards which represents an existing cumulatively significant impact within the NCCAB. Ozone precursors include reactive organic gases (ROG) and NO_X. The project would not exceed quantitative thresholds for either of these ozone precursors. Similarly, PM_{10} thresholds also would not be exceeded for construction or operation of the project. Therefore, the project would not make a considerable

contribution to this existing, cumulatively significant impact. Impacts would be less than significant and no mitigation is required.

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. Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_X) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and temporary.

The regional construction emissions associated with development of the proposed project were calculated using the California Emission Estimator Model (CalEEMod) 2022.4.0 computer program. For the purposes of the air quality analysis, site disturbance would be approximately 1.3 miles and construction is estimated to be approximately 24 months. Typical construction detail equipment includes cement and mortar mixers, graders, scrapers, rollers, pavers, tractors, loaders, and air compressors. As noted in Appendix A, construction thresholds for all criteria pollutant emissions in MBARD are established in the Guidelines for Implementing the California Environmental Quality Act (Draft) from February 2016. **Table 1: Project Construction Emissions**, shows construction emission

Table 1: Project Construction Emissions

Construction Year	Pollutant (maximum pounds per day)[1]				
	Reactive Organic Gases (ROG)	**Nitrogen Oxide (NO_x)**	**Carbon Monoxide (CO)**	**Respirable Particulate Matter (PM_{10})**	**Fine Particulate Matter ($PM_{2.5}$)**
2023	6.54	55.14	40.13	15.51	7.30
MBARD Significance Threshold[1]	*137*	*137*	*550*	*82*	*55*
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**	**No**

1. MBARD, *Guidelines for Implementing the California Environmental Quality Act (Draft)*, updated February 2016.
Source: Refer to the CalEEMod outputs provided in Appendix A.

As shown in **Table 1**, all criteria pollutants would remain below their respective thresholds. The proposed project's construction would not worsen ambient air quality, create additional violations of federal and State standards, or delay the air district's goal for meeting attainment standards. Therefore, impacts would be less than significant, and no mitigation would be required.

Long-term operational emissions are typically attributed to vehicle trips (mobile emissions), the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). Implementation of the proposed project would result in curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and

accessible designs and would alter the roadway on Broadway Avenue from a four-lane road to a two-lane road. The project would not generate additional population, add additional traffic, add stationary sources, or add jobs or housing. Therefore, operational emissions are less than significant and no mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. As discussed in Appendix A, construction equipment and associated heavy-duty truck traffic generates diesel exhaust which is a known Toxic Air Contaminants (TAC). Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. However, the use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the project site. Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. Additionally, the grading operations would take approximately 20 days, which further limits the intensity and duration of heavy-duty equipment use. The majority of time would be spent on less intensive phases of the project. The nearest sensitive receptor would be adjacent to the construction site. However, DPM generated by the project construction activities would be minimal and would not expose sensitive receptors to substantial amounts of air toxics. Therefore, impacts associated with construction activities would be less than significant and no mitigation is required.

The project would not generate additional traffic, population growth, or stationary sources. Operation of the project would not result in TAC emissions. The project would also extend the distance between sensitive receptors and the future roadway. Therefore, operational TAC emissions would be less than significant and no mitigation is required.

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

Less than significant impact. MBARD classifies landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries as typical land uses associated with odor complaints. The project does not include any uses identified by MBARD as being associated with odors.

As indicated in Appendix A, construction activities associated with the project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Any construction-related odors would be short-term in nature and cease upon project completion. As a result, impacts to

existing adjacent land uses from construction-related odors would be limited and therefore would be less than significant and no mitigation is required.

Operation of the project would not include any of MBARD classified land uses associated with odor. The additional roadway diets and infrastructure improvements would not substantially produce any emissions with substantial odor. Therefore, impacts associated with odor would be less than significant and no mitigation is required. MBARD's standard construction conditions are noted below.

Standard Conditions and Requirements

AQ SC-1: **MBARD Rule 400 – Visible Emissions.** Project applicants shall not discharge of visible air pollutant emissions into the atmosphere from any emission source for a period or periods aggregating more than three minutes in any one hour, as observed using an appropriate test method, is prohibited.

AQ SC-2: **MBARD Fugitive Dust Control.** Although the project would not exceed thresholds of significance for PM_{10}, MBARD recommends the use of the following Best Management Practices for the control of short-term construction generated emissions in any event:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads on construction sites. Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time.

4.4 Biological Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

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

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

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?

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

e) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The project is located along a public roadway and all work will occur within the public right of way. There are no habitat values within the limits of work, and therefore there is no opportunity for the site to support special status species as identified by the CDFW or USFWS. There is no riparian habitat present or adjacent to the site, nor wetlands. The site is not subject to a Habitat Conservation Plan or similar plan. The corridor does contain a few vacant parcels; however, these parcels are fragmented within an urbanized area, and the project will not be using these parcels for construction or staging. For these reasons, the project will have no impact on protected species or habitats.

f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant impact. The project will construct improvements, but will do so within the existing right of way and will narrow the existing roadway. All work will be from curb to curb and will not impact existing sidewalk plantings. As such, any existing street trees along the project frontage or medians will be retained if they are healthy. If any trees need to be removed for design or safety reasons, or due to the health of the tree, a tree removal permit consistent with City ordinance would be required.

4.5 Cultural Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

Less than significant impact. Broadway Avenue is lined with commercial and residential structures of various age, with several buildings dating to the mid 20th century. However, the proposed road diet improvements will occur within the existing right of way and will not result in the removal or modification of any existing structures regardless of age.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Potentially significant Impact unless mitigation incorporated. The Sacred Lands File search conducted for the project was negative, meaning that the Native American Heritage Commission found no record of nearby cultural or tribal cultural resources or sensitivity. However, because the possibility of unidentified (buried) cultural resources can be found during any earth disturbance, the following standard conditions of approval have been provided for incorporation into the project's construction documents:

CUL SC-1: **Undiscovered Cultural Resources**. During project construction, if any archeological, paleontological or tribal resources (e.g., evidence of past human habitation or fossils) are found, the project applicant and/or its contractor shall cease all work within 50 feet of the discovery and notify the City of Seaside Planning Division immediately. The project applicant and/or its contractor shall retain a qualified archaeologist,

paleontologist and Native American representative to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures. (Health and Safety Code Section 7050.5)

CUL SC-2: **Discovery of Human Remains**. If human remains or cultural resources associated with a burial (i.e. grave goods) are discovered during construction, the project applicant and/or its contractor shall cease all work within 50 feet of the find and notify the City of Seaside Planning Division and the County Coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission and shall follow the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) regarding treatment and disposition of recovered cultural items. The Commission will designate a Most Likely Descendant (MLD) who will be authorized to provide recommendations for management of the Native American human remains and any associated materials or objects (Public Resourced Code Section 5097.98 and Health and Safety Code Section 7050.5).

4.6 Energy

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant impact. The Pacific Gas & Electric Company (PG&E) provides natural gas service and the MBCP provides electricity to the project area. The proposed project would enhance pedestrian and bicycle safety, and increase connectivity and mobility. The project would result in a nominal increase in electricity due to additional lighting installations along the roadway. This nominal increase represents an insignificant percent increase compared to overall demand in Monterey County. Therefore, projected electrical and natural gas demand would not significantly impact county's level of service.

During construction, transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Most construction equipment during demolition and grading would be gas-powered or diesel-powered, and the paving and architectural coating phases would require electricity-powered equipment. Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies. Construction equipment use would also be temporary and would not expand the Monterey County's energy supply. Therefore, impacts would be less than significant and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant impact. The project is an infrastructure improvement that would utilize almost no energy, except what may be required for street lighting and the rectangular rapid flashing beacons (RFFB). The project would not generate any new automobile traffic or require additional transportation energy use. The project is consistent with regional and City strategies to reduce passenger vehicle trips and encourage pedestrian walkability. The proposed project also adds additional bike lanes bulb-outs, which would promote alternative forms of transportation in the project area. The project would not conflict with the stated goals of the City of Seaside's General Plan or Municipal Code. Therefore, energy impacts are considered less than significant, and no mitigation is required.

4.7 Geology and Soils

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No impact. According to readily available fault zone mapping, the project location is not subject to rupture of a known earthquake fault.

ii. Strong seismic ground shaking?

Less than significant impact. The project is a public infrastructure facility that is not occupied. Although the roadway improvements (and surroundings) could be subject to seismic ground shaking during an earthquake, the project will not directly or indirectly cause adverse effects (such as injury or death) due to shaking. The improvements will need to be designed to current structural codes to address the potential for ground shaking and general stability.

iii. Seismic-related ground failure, including liquefaction?

Less than significant impact. According to a recent geotechnical evaluation prepared for the nearby West Broadway Avenue Urban Village Specific Plan (West Broadway Avenue Urban Village Specific Plan, Seaside, CA, EIR, 2009), soils in Seaside are characterized as medium-grained sand of low to moderate organic matter content, and excessively well drained. Local soils in the vicinity of the project area are mapped as Baywood Sands. The Monterey County General Plan indicates this area has a low potential for liquefaction, with the water table being around 15 feet below ground surface at the westernmost portion of the project area. While the project could be exposed to potential seismic- related hazards, the project would not result in the exposure of persons and/or structures to a substantial adverse effect, including the risk of loss, injury, or death.

iv. Landslides?

Less than significant impact. While the eastern portion of Broadway is located on sloped topography, the roadway is in a stable, developed area with no history of landslides. Construction of the roadway improvements would not create a hazard or hazardous conditions related to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. The project will result in approximately 7 acres surface work for the road diet improvements, lane reductions, slurry resurfacing and striping. Construction and water quality best practices as required by existing codes and regulations will limit erosion on the construction footprint of the project. The nature of the project will not result in substantial erosion or loss of topsoil, as the project site is already paved.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than significant impact. See a) iii above.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than significant impact. See a) iii above.

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

No impact. The project will not generate or dispose of wastewater.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant impact. There are no rock outcroppings or geologic features that will be disturbed or destroyed by the construction footprint, and thus the risk of impact is considered less than significant. Resurfacing the existing pavement will not occur at depths that would impact previously undisturbed resources, if present.

4.8 Greenhouse Gas Emissions

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

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

Less than significant impact. Similar to the findings under Air Quality, the project will have no operational impacts. Construction impacts will be of short duration and will not directly or indirectly trigger any greenhouse gas emission thresholds.

As identified in Appendix A: Air Quality and Greenhouse Gas Analysis, MBARD does not have a GHG threshold adopted that would apply to the project. Therefore, a conservative 1,100 metric tons of CO_2 per year ($MTCO_2e$/year), based off the thresholds of the San Luis Obispo Air Pollution Control District, the Sacramento Metropolitan Air Quality Management District, and the Placer County Air Quality Control District, was utilized as the threshold of significance for the project.

Construction GHG emissions were estimated using CalEEMod 2020. For the purpose of the environmental analysis, project construction is expected to occur over an approximately 24-month period. Construction activities would include demolition, site preparation and grading, road paving, and architectural coating. Annual construction emissions would total 405 $MTCO_2e$/year which is below the 1,100 $MTCO_2e$/year threshold. Construction would be a temporary condition lasting 24 months and would not permanently increase GHG emissions. Therefore, construction GHG emissions would be less than significant and no mitigation is required.

Implementation of the proposed project would result in curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and accessible designs. These features would promote bicycle and pedestrian transportation modes, which in turn would be expected to reduce emissions. The project would not generate additional population, add additional traffic, add stationary sources, or add jobs or housing. Operationally, the project would have no GHG emissions. Therefore,

impacts would be less than significant. Operational GHG emissions would be less than significant and no mitigation is required.

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

Less than significant impact. The project would provide additional bike lanes, new roundabouts, crosswalks and accessibility designs which would encourage non-motorized transportation and enhance public safety consistent with the local city general plan policies and MBARD polices. As discussed in Appendix A, the proposed project would comply with all MBARD applicable rules and regulations during construction and would not interfere with the State's goals of reducing GHG emission to 1990 levels by 2020 as stated in AB 32; a 40 percent reduction below 1990 levels by 2030 as noted in SB 32; and, an 80 percent reduction in GHG emissions below 1990 levels by 2050 as stated in EO S-3-05. Therefore, the proposed project would have a less than significant impact on GHG emissions.

The project would also be consistent with policies established in the 2040 Association of Monterey Bay Area Governments (AMBAG) Metropolitan Transportation Plan (MTP)/ Sustainable Community Strategy (SCS) which aims to reduce GHG emissions in the Monterey Bay. The intent of the SCS is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips in the area. The proposed project would align with this plan as it would provide facilities that foster environmentally friendly transportation modes and would encourage alternate forms of transportation. The project would also provide a safer transportation system for the City of Seaside. Therefore, the proposed project would be consistent with all applicable plans and policies and would have a less than significant impact and no mitigation is required.

4.9 Hazards and Hazardous Materials

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

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

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

Less than significant impact. The complete streets project will result in the incidental use of hazardous materials (such as fuels for construction equipment) to construct the bulbouts, roundabouts and related features. However, the construction and installation of these improvements will not result in significant risk due to the transport of hazardous materials and will not result in the disposal or routine use of such materials. As a roadway project, the project will no create upset conditions or risk of accidental releases of hazardous materials.

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

Less than significant impact. The project is located within one quarter mile of three schools; however, the construction and operation of the road diet improvements will not emit or handle a significant amount of hazardous or acutely hazardous materials or substances.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. A search of the Envirostor database concluded that the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

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

No impact. The project is located within two miles of Monterey Regional Airport; however, it is a roadway project that will not result in people working or residing in the area that could create a safety hazard or trigger review by the airport land use commission.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The project consists of roadway improvements that will temporarily block or partially blocks segments of Broadway Avenue, requiring reduced travel lanes, detours or other forms of construction management. However, these improvements would not interfere with any specific emergency response or evacuation plans. The Seaside Fire Department has a station at the corner of Broadway and Yosemite. The project's traffic management plan, to be implemented during construction, would be reviewed with emergency service providers to ensure that access and response is not compromised during construction. The project design team met with the fire department in September 2022 and confirmed that the project would not impede the ability of the department to provide adequate service or response times.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No impact. The project is located within developed portions of the City of Seaside. The project itself would not be susceptible to fire should it occur, and the project would not create or exacerbate additional risk of wildland fire. This conclusion reflects the existing environmental condition, and the project would not cause any significant impacts upon construction.

4.10 Hydrology and Water Quality

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X	
i. Result in substantial erosion or siltation on- or off-site?			X	
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				X
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
iv. Impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than significant impact. The project will require resurfacing and hardscape installation in the public right of way. The existing condition is currently 100 percent impervious, so the post-project condition will not increase permeability, groundwater or runoff water quality. Construction best management practices for controlling water quality during construction will be required per current permitting requirements. Stormwater basins will be installed near bulbouts and roundabout locations to manage flows and maintain water quality consistent with current regulations. As such, construction and operational impacts to surface water quality will comply with waste discharge requirements resulting in less than significant impacts.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No impact. The project will result in no substantial water demand and therefore will not decrease groundwater supplies. Landscaping is limited to specific areas, using drought tolerant species and materials. The project will not affect permeability and therefore will not affect local groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less than significant impact. As noted above, project construction will require resurfacing and installation of traffic calming features. However, the Project will be required to incorporate several BMPs into the project plans and implement those measures during construction, as already required by the City's stringent stormwater measures.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

No impact. The project will not change the drainage pattern or permeability of the existing roadway, and therefore will not increase the rate or amount of surface runoff within the Broadway corridor in a manner that would cause flooding.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than significant impact. Existing storm drain facilities would accommodate post-project runoff, as total runoff volumes would not be expected to change significantly, and would be expected to decrease with the implementation of new control measures. As a roadway and traffic calming project that is reducing the number of travel lanes, the project will not result in substantial sources of polluted runoff or exceed the capacity of exiting storm drain systems.

iv. Impede or redirect flood flows?

No impact. The project design will maintain existing surface drainage and storm drain flows, and such flows will be accommodated within the existing storm drain system. The project will not impede or redirect existing flows in any way.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. The site is not in a flood hazard, tsunami or seiche zone, and any inundation – if it occurred – would not release pollutants from the project.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. As identified above, the project will be subject to the city's stringent water quality control measures during construction and will have no effect on groundwater resources.

4.11 Land Use and Planning

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

a) Physically divide an established community?

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact/Beneficial impact. As a traffic calming and safety project that will eliminate two travel lanes and make Broadway Avenue more compatible with non-motorized modes of travel, the project would be expected to bring neighborhoods on either side of Broadway closer together by reducing barriers created by the existing width of the road and encouraging non-motorized travel. The complete streets project is compatible with City plans, programs and policies designed to address acute safety problems. For these reasons, the project would have beneficial land use effects.

.

4.12 Mineral Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No impact. The project location and nature of the improvements will result in no impacts with respect to mineral resources. There are no known mineral sources located within the area of ground disturbance.

4.13 Noise

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than significant impact. As discussed in Appendix B: Noise and Vibration Analysis, the project would involve construction activities which would be temporary and have a short duration resulting in periodic increases in the ambient noise environment. Construction would last approximately 24-months. The construction activities would require the use of graders, scrapers, tractors, bulldozers, backhoes, dozers, and air compressors, as well as trucks and equipment for concrete work and resurfacing. The loudest equipment is expected to operate at 90 dBA at 40 feet during the demolition phase (assuming periodic use of a jack hammer). The other construction phases would utilize equipment that would produce a lower level of noise. project construction would be exempt from construction noise thresholds as it is adding pedestrian safety elements, bike facilities, and Safe Routes to School improvements. Section 17.30.080 exempts construction by public agencies and and/or utilities or their contractors that are serving public interest and/or protecting public health, safety and general welfare from normally recognized maximum allowable noise levels. The project would be classified as a project

by a public agency (or their contractor) that serves the public interest and the City's general welfare. Therefore, the project's construction noise would be less than significant and no mitigation is required.

Operationally, the project would add curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and pedestrian accessibility improvements including ramps and mid-block crossing areas. These features are not noise generating, and therefore the project would not result in an increase of existing operational noise. Broadway Avenue would transform the road from a 4-lane roadway to a 2-lane roadway which would reduce speeds and traffic noise along the roadway. Additionally, the project would not introduce new stationary noise sources into the area. The project would not generate a substantial temporary or permanent increase in noise levels during construction or operations. Impacts would be less than significant and mitigation measures are not required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. As discussed in Appendix B, project construction can generate varying degrees of groundborne vibration depending on the construction procedure and type of construction equipment used. The effect on buildings located near a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures. The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations (i.e., 0.20 inch/second). Groundborne vibration decreases rapidly with distance. Based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.089 inches per second peak particle velocity (PPV) at approximately 25 feet from the source of activity. The nearest sensitive receptors to the project site are approximately 15 feet north of the project site. Vibration from construction activities experienced at the nearest sensitive residential uses (15 feet) would range between 0.007 and 0.192 inches per second PPV for non-pile driving equipment. Section 17.30.080 in the City of Seaside Municipal Code states that ground vibration that that is readily perceptible to a reasonable person is permissible if generated by temporary construction or demolition activities including motor vehicle operations. Therefore, ground vibration due to construction of the project would be allowable under the City's municipal code and groundborne vibration impacts would be less than significant.

Project operations would not include any equipment or facilities that would generate groundborne vibration. Therefore, vibration impacts associated with project operations would be less than significant and no mitigation is required.

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

Less than Significant. The Monterey Regional Airport is located approximately 1.0 miles south of the proposed project site. The project is located outside the 65, 70 and 75 dBA CNEL contours for aircraft activities associated with Airport. Therefore, the proposed project would not be exposed to aircraft

overflight noise that exceeds the City's exterior noise exposure thresholds. There are no private airstrips within the project site vicinity, thus, no impact would occur in this regard.

4.14 Population and Housing

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. The project is an infrastructure improvement that will not result in population growth or displace existing housing.

4.15 Public Services

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?				X
ii) Police protection?				X
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?				X

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

ii. Police protection?

iii. Schools?

iv. Parks?

v. Other public facilities?

No impact. The project is an infrastructure improvement that will not generate additional demand or affect performance standards for fire protection, police protection, schools or other public facilities. One of the project objectives is to provide safer routes to school, which would be a benefit to local schools. While Broadway would be reduced to two lanes, the roadway with roundabouts will continue to provide adequate access and mobility to first responders. The project will not result in the need for new or physically altered park facilities elsewhere. For these reasons, the project will have no environmental effect on existing public services.

4.16 Recreation

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

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

No impact. The project would not generate additional population near existing parks and recreational facilities or require the construction of expansion of such facilities. The addition of sidewalks and bicycle facilities can be viewed as a project benefit with respect to recreation facilities and improved access to existing facilities.

4.17 Transportation

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?			X	

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No impact. As documented in this Initial Study, the project would implement a priority component of the complete street improvements identified in the Seaside & Marina Safe Walking and Biking to School Plan. The road diet for Broadway Avenue is also consistent with the adjacent West Broadway Urban Village Specific Plan, as well as the mobility and safety goals and policies of the Seaside General Plan. As such, the project will have no significant environmental impacts with respect to program or plan conflicts.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than significant impact. CEQA Guidelines Section 15064.3 addresses new requirements for analyzing vehicle miles traveled (VMT). Subdivision (b)(2) notes that transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact. That is the case for this project.

Based on the Technical Advisory on Evaluating Transportation Impacts in CEQA (Governor's Office of Planning and Research, 2018) projects that do not result in substantial "induced vehicle travel" generally do not required an induced travel analysis. Examples of such projects include the reduction in the

number of through lanes, installation of roundabouts or traffic circles, installation of traffic calming devices, removal or relocation of parking spaces, and the addition of new or enhanced bike or pedestrian facilities on existing streets. This project includes all of these example components, and therefore would not be in conflict with CEQA Guidelines Section 15064.3(b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No impact. One of the primary objectives of the project is to improve safety along Broadway Avenue and Yosemite Street by installing traffic calming measures, slowing vehicle speeds, and reducing vehicle conflicts with bicycles and pedestrians. Because the project is designed to reduce such hazards, impacts would be beneficial.

d) Result in inadequate emergency access?

Less than significant impact. The Seaside Fire Department and fire station is located at 1635 Broadway Avenue. While the project would reduce the number of travel lane along Broadway, consultation with Fire Department representatives in September 2022 did not raise concerns regarding emergency access or emergency response. The roadway as designed would still provide adequate emergency vehicle access, and roundabouts along the corridor could provide fewer conflicts than stop controlled intersections. Because Broadway Avenue would remain an accessible thoroughfare and would not impede access, this is a less than significant impact.

4.18 Tribal Cultural Resources

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

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Potentially significant unless mitigation incorporated. Please see Section 4.5 of this Initial Study. The response from the Native American Heritage Commission (NAHC) concluded a negative finding of the Sacred Lands File search. In addition, construction work for the project will consist primarily of resurfacing and surface improvements over an existing paved condition, without extensive excavation at depth. However, the City recognizes the potential to uncover buried or previously unidentified resources, and standard construction conditions **CUL SC-1** and **CUL SC-2** are in place if such resources are discovered during construction.

4.19 Utilities and Service Systems

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than significant impact. Construction of the project within the right of way of Broadway Avenue would involve minor changes and improvements to drainage facilities associated with the street improvements (see Section 4.10, Hydrology and Water Quality). The project will have no impact on electric power, natural gas, or telecommunications systems. The construction impacts associated with incidental drainage improvements are not unique or substantial and would be part of the overall construction program.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No impact. The project will not require a water supply or generate wastewater.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. The project will result in small amounts of solid construction waste but will not create a permanent waste stream. This temporary and limited amount of construction waste will not exceed standards, local infrastructure, or negatively impact solid waste reduction goals and regulations. The solid waste from construction activities will be properly disposed of according to law.

4.20 Wildfire

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. The project is not located in a state responsibility area or a very high fire severity zone. The project does not create a source of fire, or exacerbate local wildfire risk.

4.21 Mandatory Findings of Significance

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Does the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact. The project would have no effect on habitat or protected species. Also, as addressed under Cultural and Tribal Cultural Resources, the project would result in shallow ground

disturbance. While the project would not be expected to "eliminate important examples of the major periods of California history or prehistory", standard conditions of approval would be implemented with the project to address any inadvertent finds during construction.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than significant impact. The project is a roadway improvement project. The incremental effects as described in this Initial Study are largely site specific and will not combine with the effects of other projects to create cumulatively considerable effects. There are no nearby cumulative projects that have the potential to combine to create a cumulatively considerable effect on any of the checklist categories of this Initial Study.

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

Less than significant impact. As evidenced within this initial study, the project has little potential cause adverse effects on human beings from environmental concerns such as air quality, noise or exposure to geologic or hazardous materials risks. The nature of the project will not generate a new or permanent population that will be exposed to environmental concerns, and the project will actually improve safety along this portion of Broadway Avenue and Yosemite Avenue.

5.0 REPORT PREPARERS

Lead Agency

City of Seaside

Nisha Patel, Public Works Director

Consultants

Kimley-Horn and Associates, Inc.
10 Almaden Boulevard, Suite 1250
San Jose, CA 95113

Tad Stearn, CEQA Project Manager
Noemi Wyss, Environmental Analyst/Air Quality and Noise Specialist
Tanay Pradhan, Environmental Analyst
Molly Tremblay, Funding Lead

6.0 REFERENCES

Association of Monterey Bay Area Governments, 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy, 2022.

California Geological Survey (CGS). 2020. Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed on October 19, 2022.

California Department of Toxic Substances Control (DTSC). 2020. Envirostor. Available at: https://www.envirostor.dtsc.ca.gov/public/.

California Department of Transportation (Caltrans). 2020. Seaside & Marina Safe Walking & Biking to School: Complete Streets Plan.

City of Seaside. 2004 General Plan.

City of Seaside. 2003. General Plan EIR.

City of Seaside. 2013. Local Coastal Program.

City of Seaside. Municipal Code.

City of Seaside. 2010. West Broadway Urban Village Specific Plan.

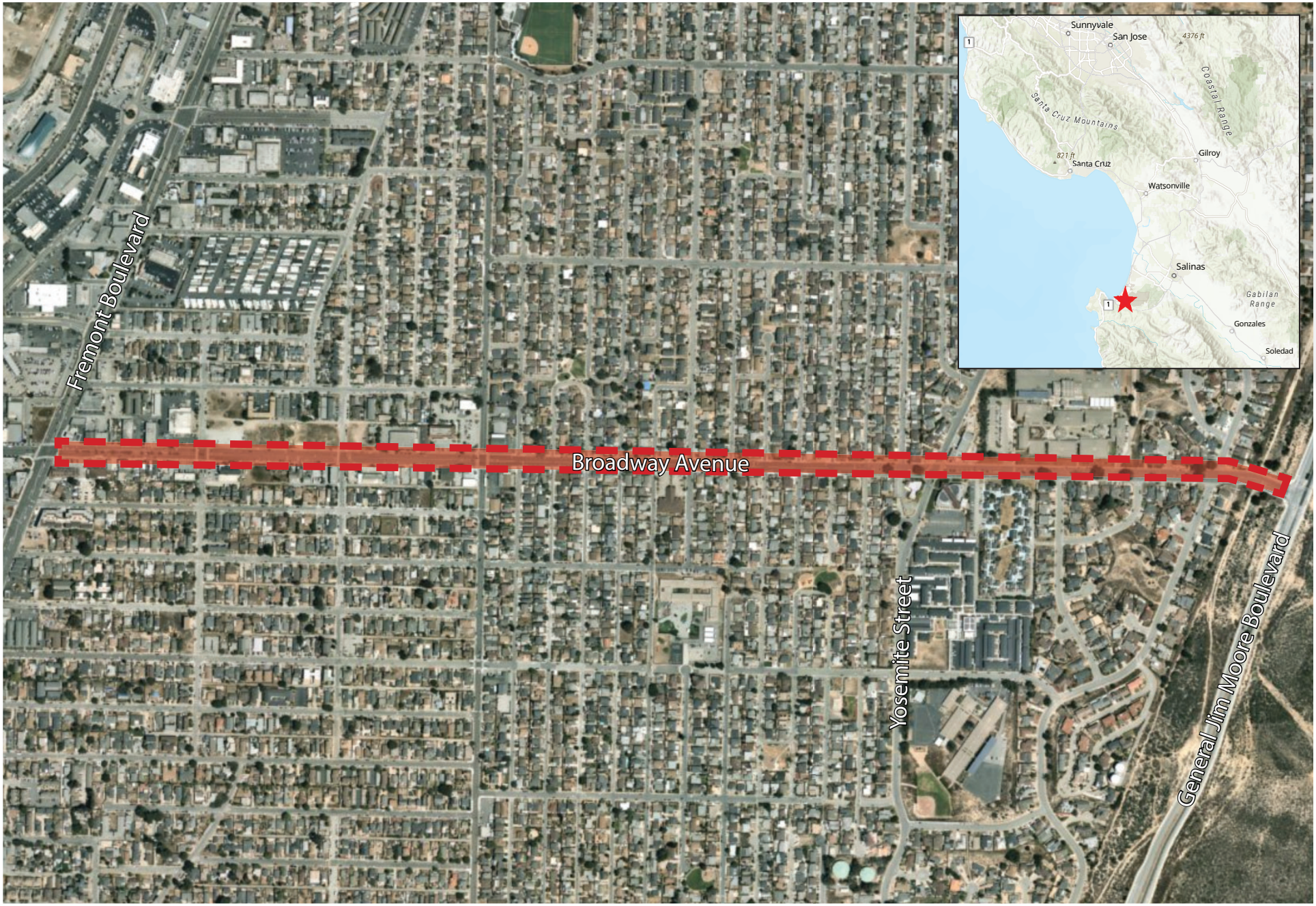
City of Seaside. 2009. West Broadway Urban Village Specific Plan Final Environmental Impact Report.

County of Monterey. 2010. Monterey County General Plan.

Google. 2019. Google Maps.

Monterey Bay Air Resource District. 2017. Air Quality Management Plan.

7.0 FIGURES



Source: Google Earth, 2022

Figure 1: Project Vicinity

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.

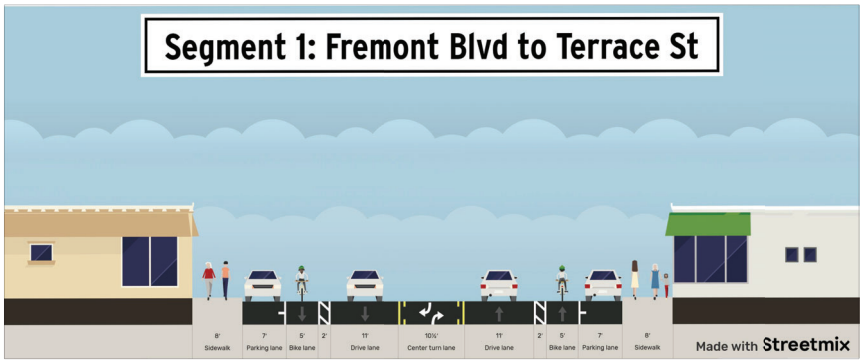
Source: Kimley-Horn, 2020

Figure 2: Existing Site Conditions

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.



LEGEND

- ASPHALT
- SIDEWALK
- MOUNTABLE TRUCK APRON
- HARDSCAPE
- LANDSCAPE
- GREEN PAVEMENT MARKING

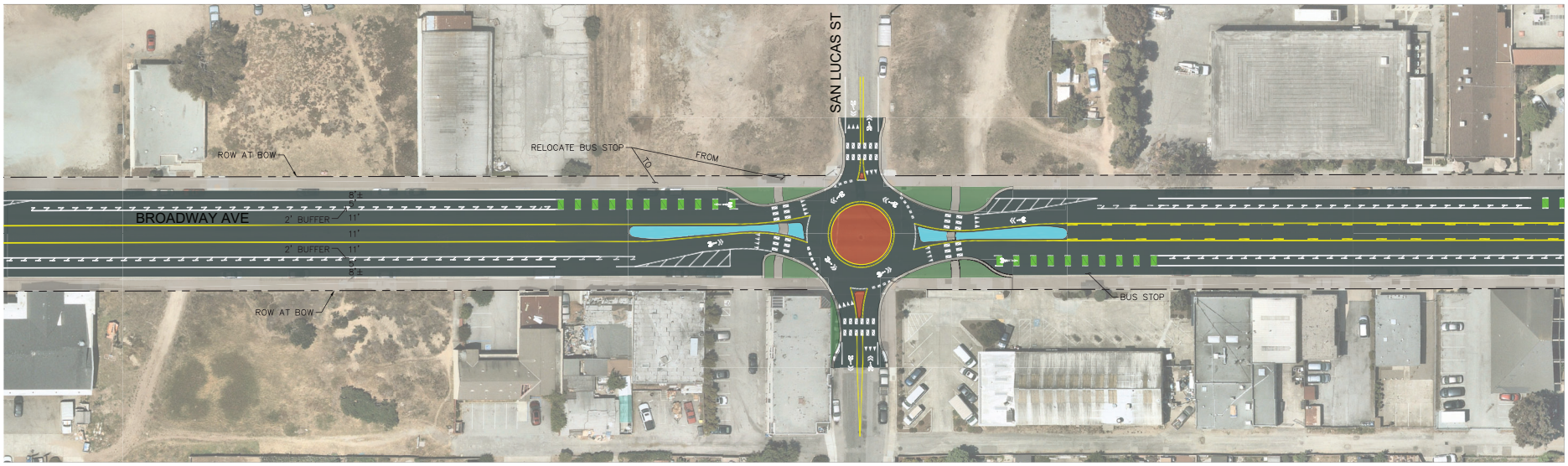
Source: Kimley-Horn, 2020

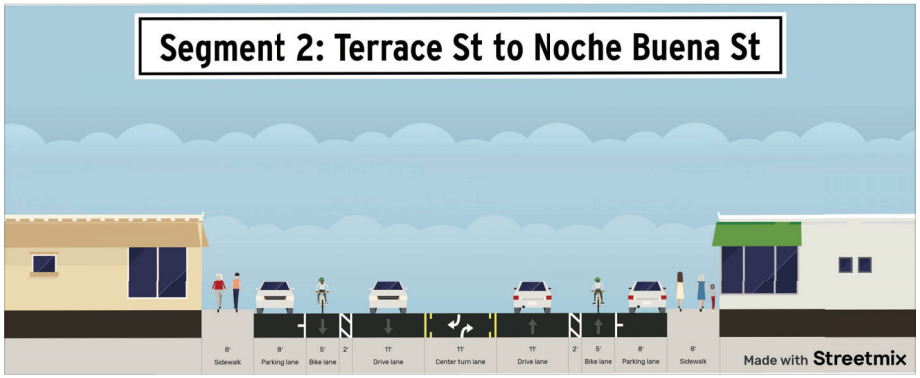
Figure 3: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.





LEGEND

- ASPHALT
- SIDEWALK
- MOUNTABLE TRUCK APRON
- HARDSCAPE
- LANDSCAPE
- GREEN PAVEMENT MARKING

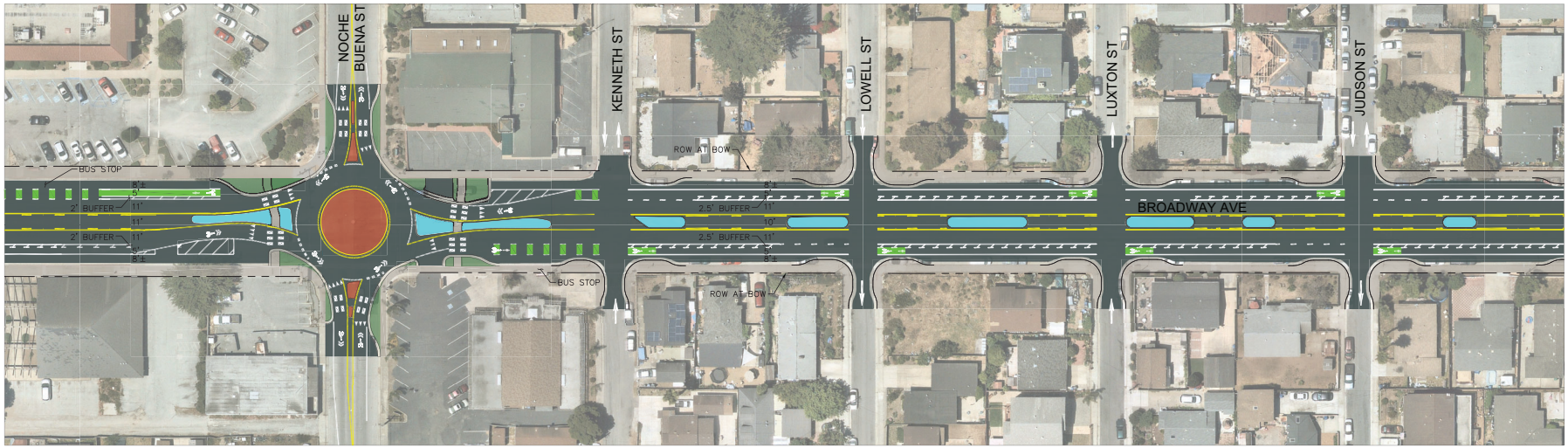
Source: Kimley-Horn, 2020

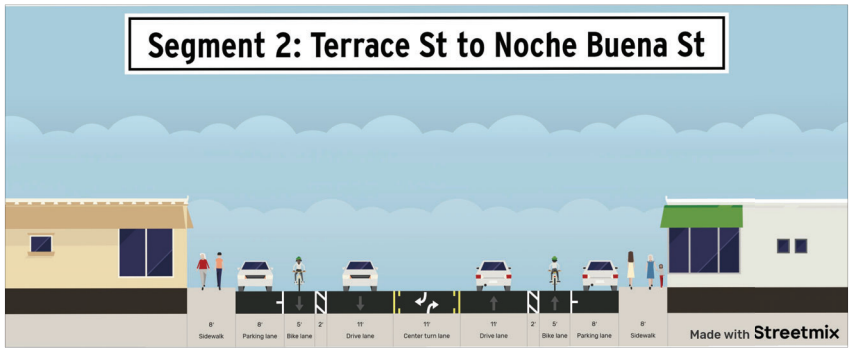
Figure 4: Broadway Avenue Corridor Conceptual Design

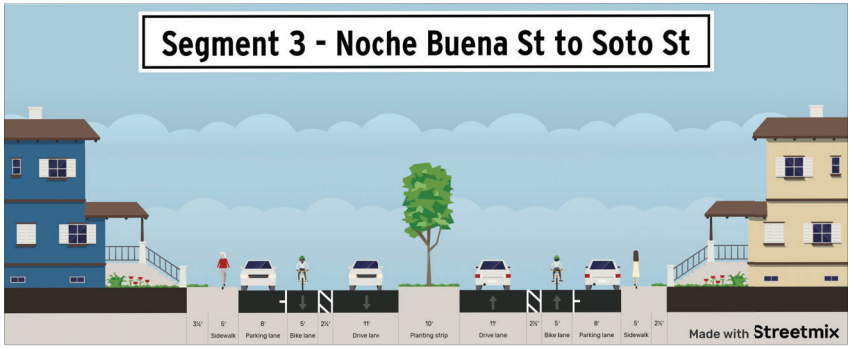
City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

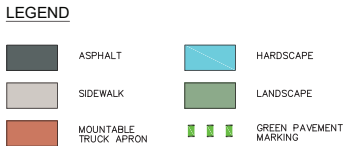
Not to scale

Kimley»Horn
Expect More. Experience Better.









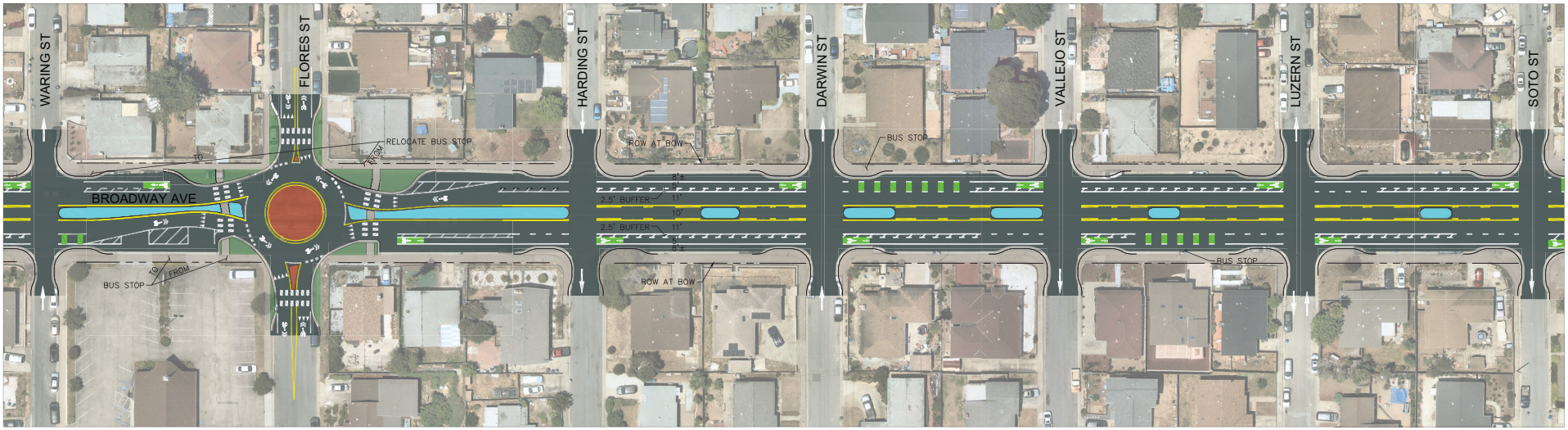
Source: Kimley-Horn, 2020

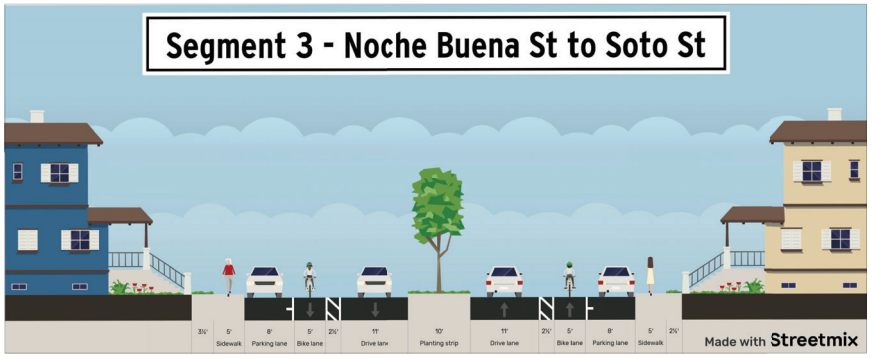
Figure 5: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.





LEGEND

- ASPHALT
- SIDEWALK
- MOUNTABLE TRUCK APRON
- HARDSCAPE
- LANDSCAPE
- GREEN PAVEMENT MARKING

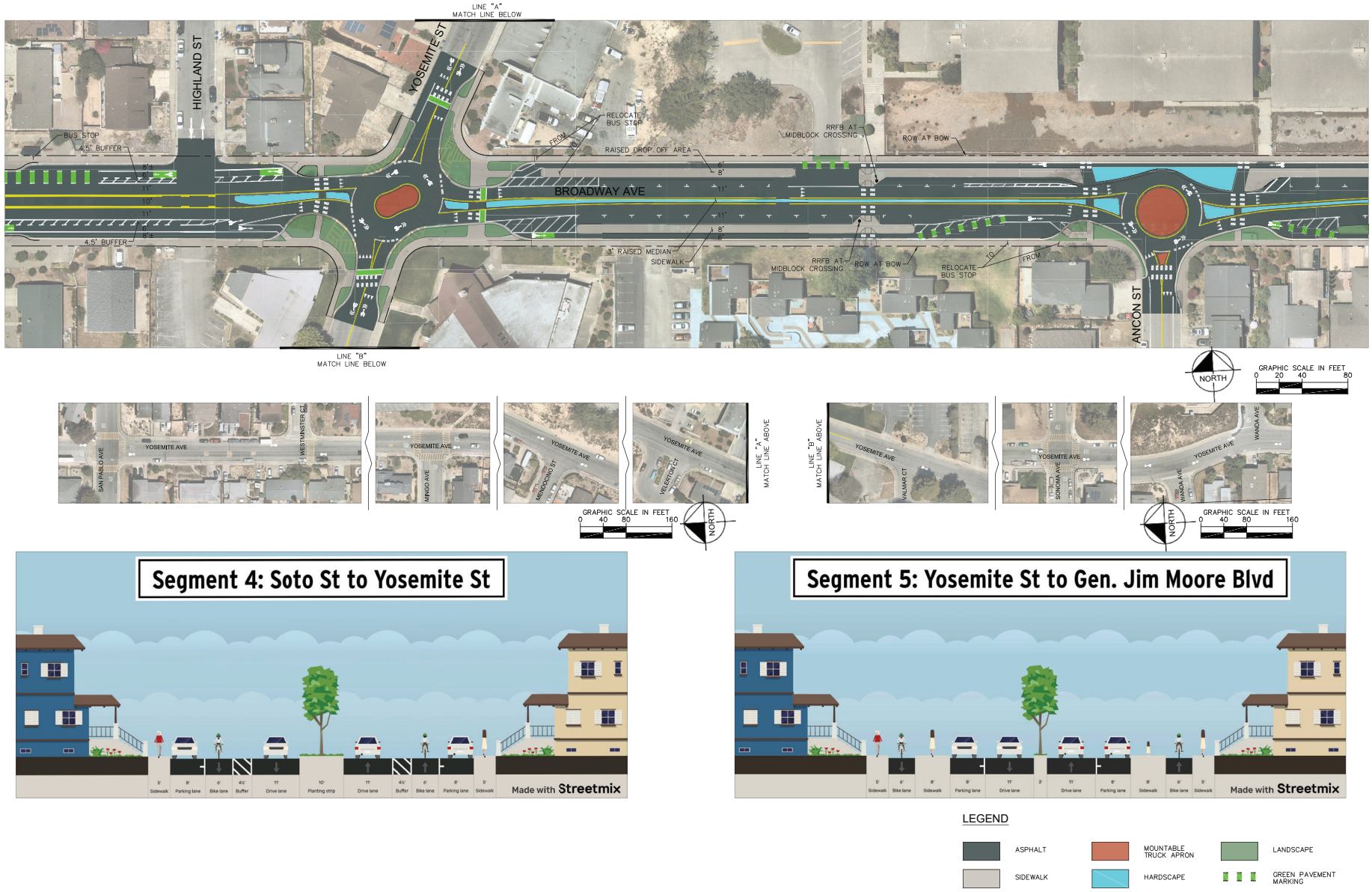
Source: Kimley-Horn, 2020

Figure 6: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.



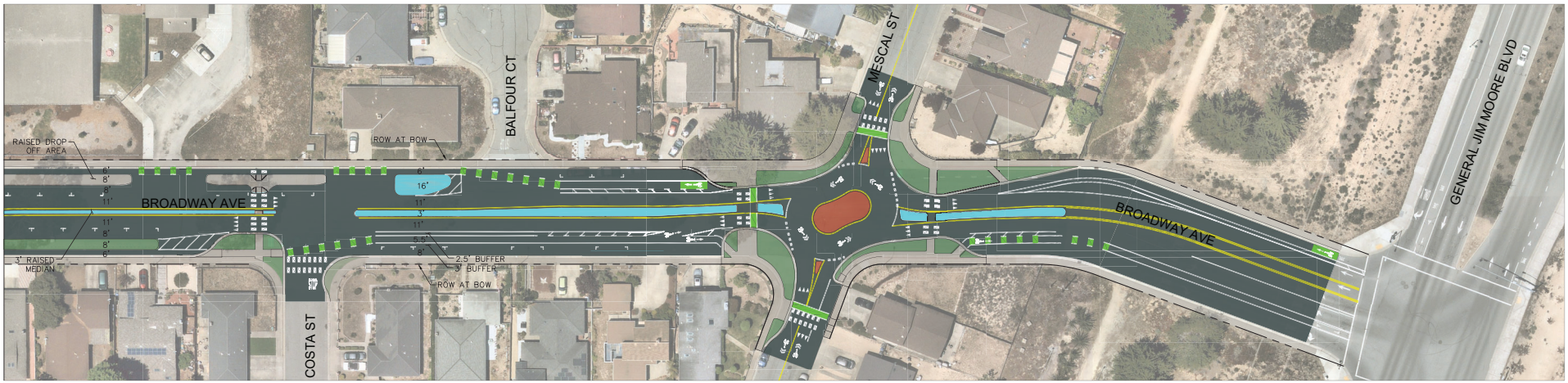
Source: Kimley-Horn, 2020

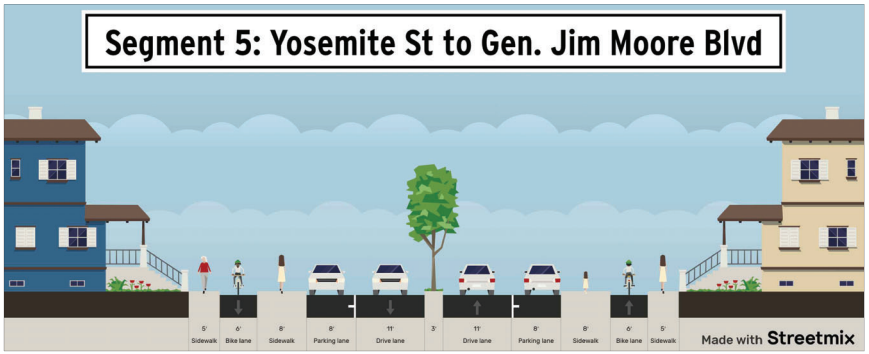
Figure 7: Broadway Avenue Corridor Conceptual Design

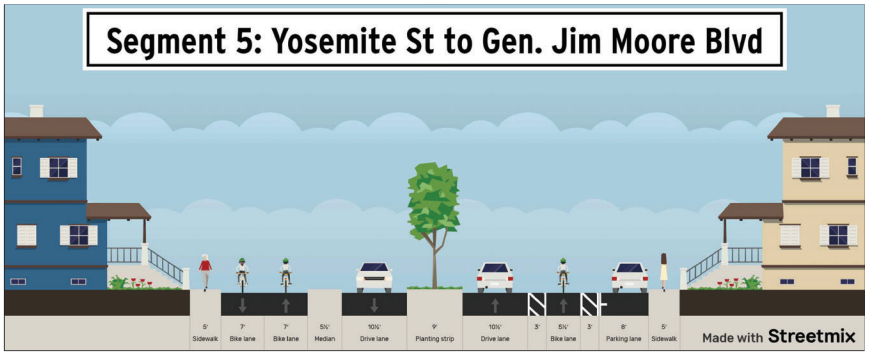
City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.







LEGEND

ASPHALT
SIDEWALK
MOUNTABLE TRUCK APRON
HARDSCAPE
LANDSCAPE
GREEN PAVEMENT MARKING

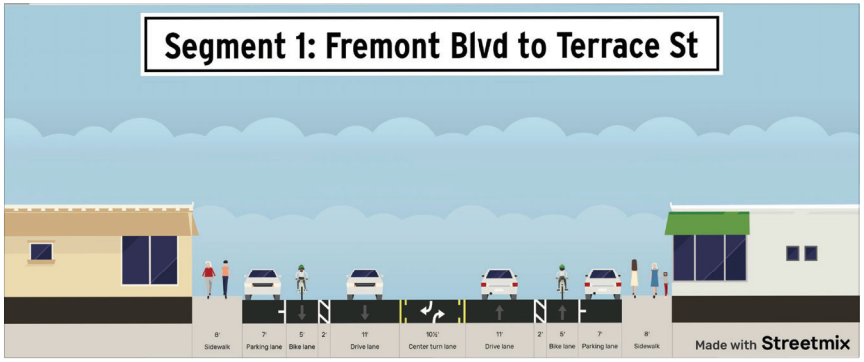
Source: Kimley-Horn, 2020

Figure 8: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.



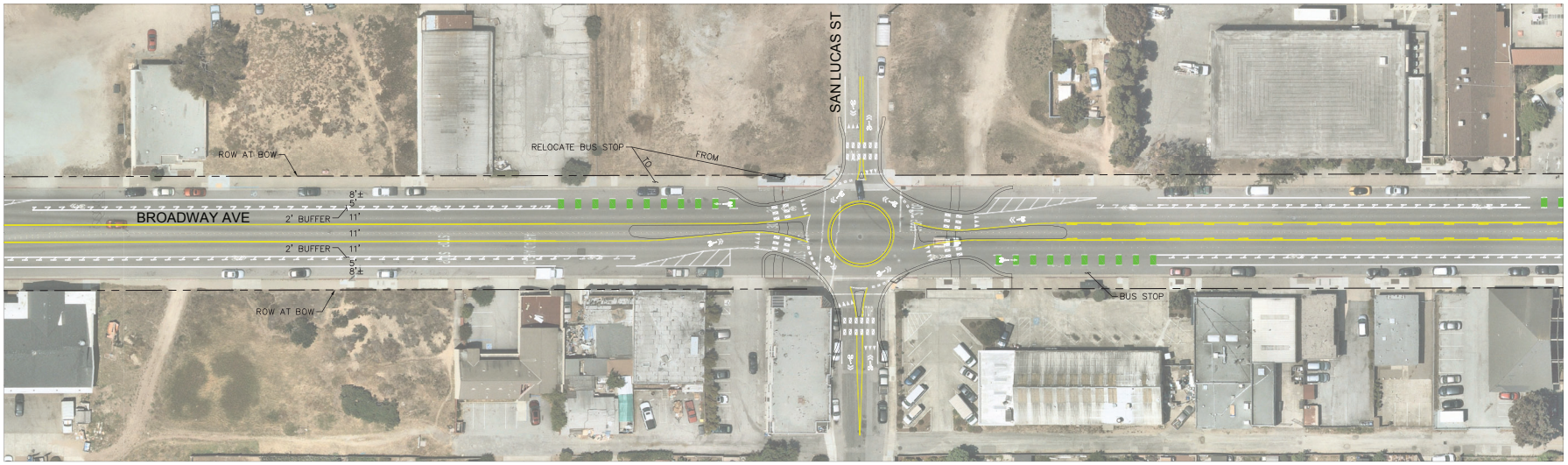
Source: Kimley-Horn, 2020

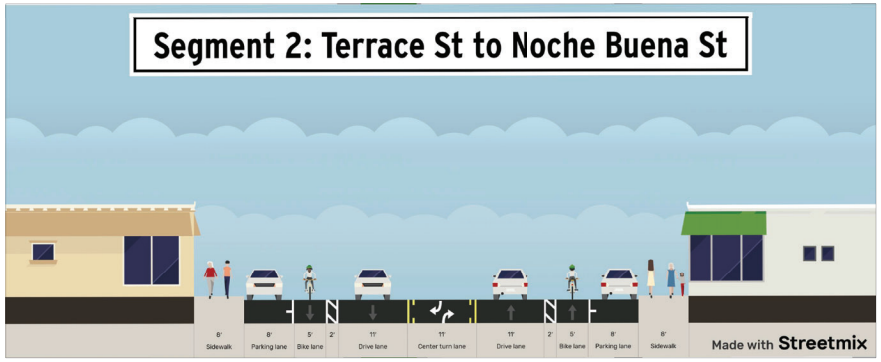
Figure 9: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.





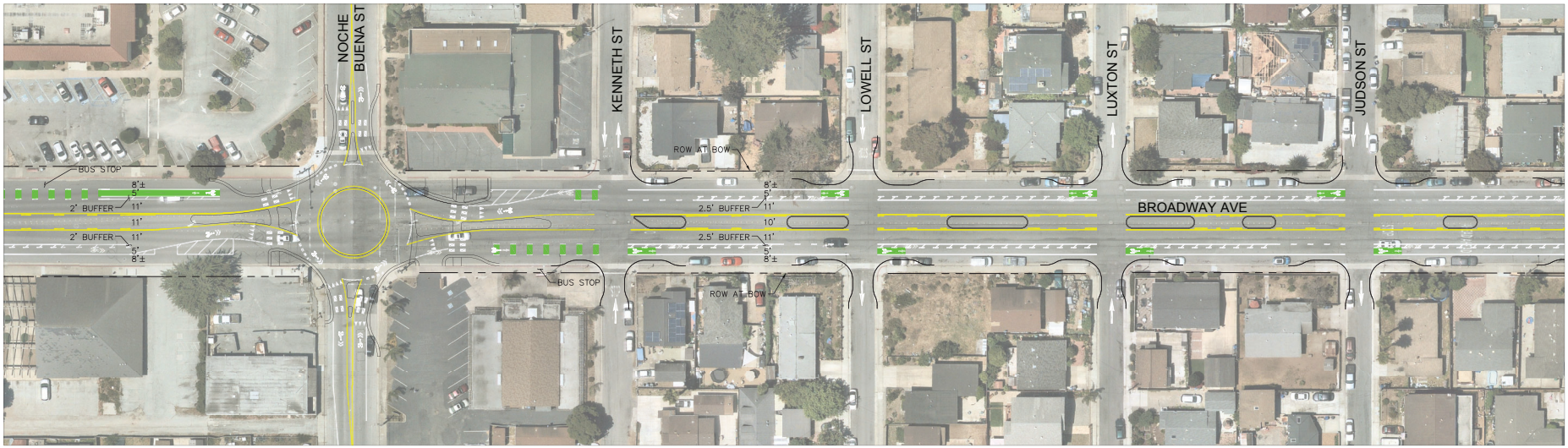
Source: Kimley-Horn, 2020

Figure 10: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.



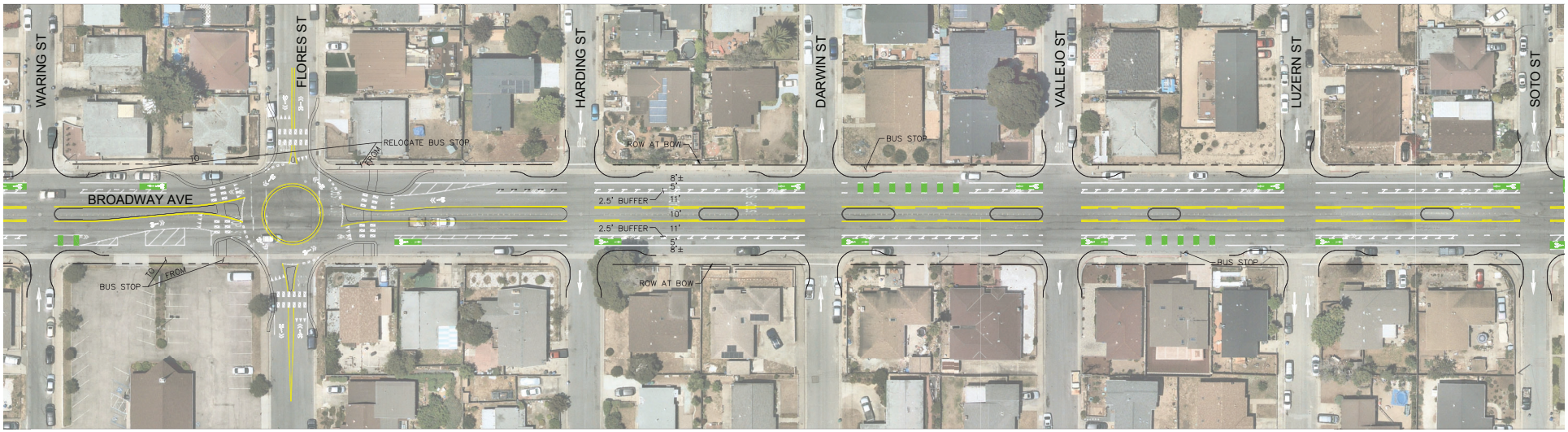
Source: Kimley-Horn, 2020

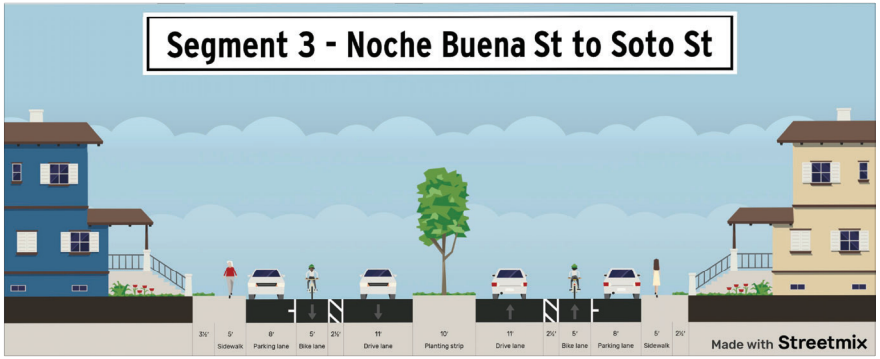
Figure 11: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.





LEGEND

- ASPHALT
- SIDEWALK
- MOUNTABLE TRUCK APRON
- HARDSCAPE
- LANDSCAPE
- GREEN PAVEMENT MARKING

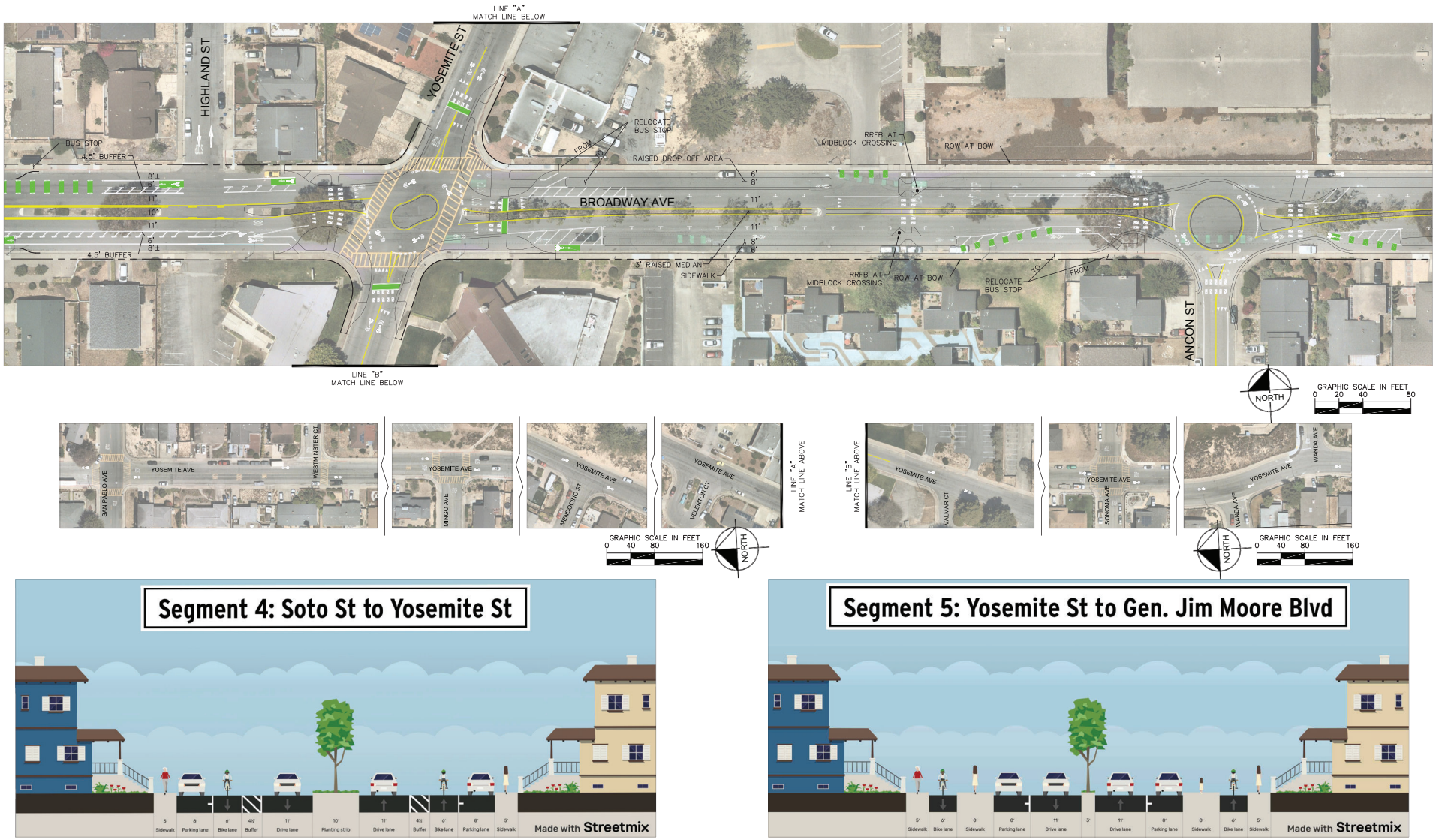
Source: Kimley-Horn, 2020

Figure 12: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.



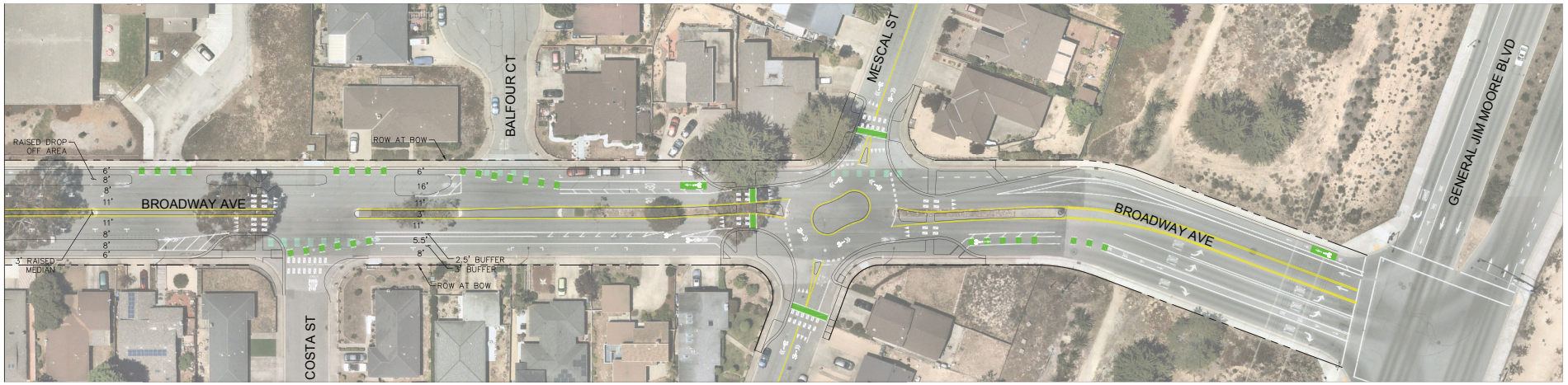
Source: Kimley-Horn, 2020

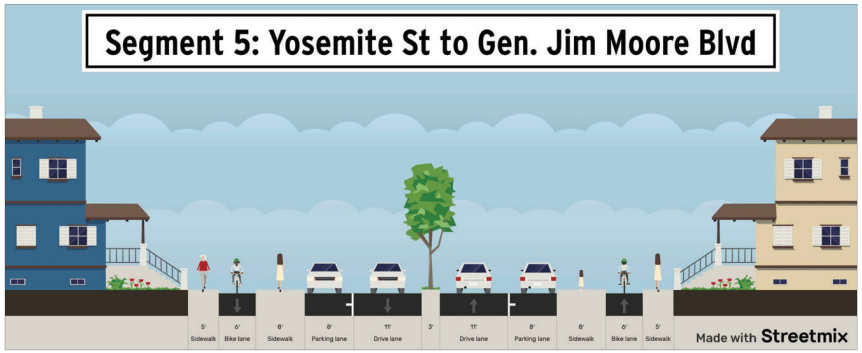
Figure 13: Broadway Avenue Corridor Conceptual Design

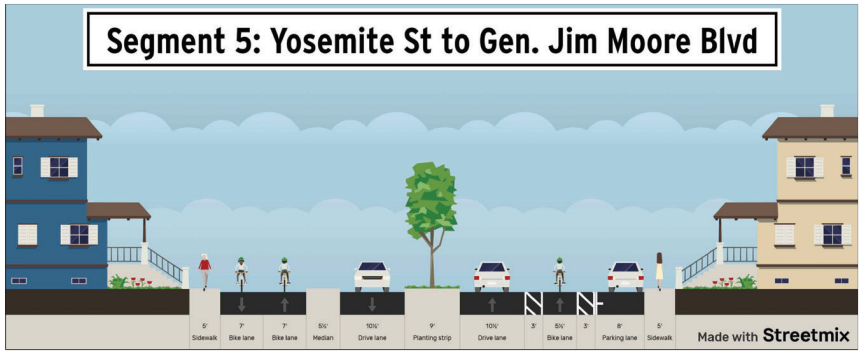
City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.







Source: Kimley-Horn, 2020

Figure 14: Broadway Avenue Corridor Conceptual Design

City of Seaside Broadway Corridor Complete Street Improvements Project
Initial Study

Not to scale

Kimley»Horn
Expect More. Experience Better.

Appendix A

Air Quality and Greenhouse Gas Analysis

Air Quality and Greenhouse Gas Analysis

To: Tad Stearn, Kimley-Horn

From: Noemi Wyss AICP, Environmental Analyst
Tanay Pradhan, Environmental Analyst
Kimley-Horn and Associates, Inc.

Date: November 15, 2022

Subject: Broadway Avenue Complete Street Corridor Improvement – Air Quality and Greenhouse Gas Analysis

---

Project Description

The Project includes the design and construction of a 1.3-mile road diet on Broadway Avenue from Fremont Boulevard to General Jim Moore Boulevard and safe routes to school improvements on Yosemite Ave from San Pablo Avenue to Wanda Avenue. The road diet will transform the 4-lane roadway to a 2-lane roadway with curb extensions, buffered and protected bike facilities, roundabouts, and Safe Routes to School improvements including off-set crosswalk, rectangular rapid flashing beacons, and accessible design. Improvements on Yosemite Avenue will include bicycle pavement markings, signage, curb extensions and high visibility crosswalks.

Regulatory Framework and Thresholds

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan (CARB, 2017b). The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

Executive Order S-3-05

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Monterey Bay Air Resources District

The Monterey Bay Air Resource District (MBARD) regulates air quality in North Central Coast Air Basin (NCCAB) and is responsible for attainment planning related to criteria air pollutants, as well as for district rule development and enforcement. The district also reviews air quality analyses prepared for CEQA assessments and published the CEQA Air Quality Guidelines document (last revised February 2016) for use in evaluation of air quality impacts.

The MBARD has developed CEQA Air Quality Guidelines that are intended to facilitate the review and evaluation of air quality impacts for projects subject to CEQA. The advisory document provides lead agencies, consultants and project proponents with standardized procedures for assessing potential air quality impacts associated with a project and for preparation of the environmental air quality section of environmental review documents. The following significance criteria for air quality was derived from MBARD's 2008 CEQA Air Quality Guidelines (MBARD, 2008) and is summarized below.

Short-term construction emission thresholds, as stated in MBARD's 2008 *CEQA Air Quality Guidelines*, involve identifying the level of construction activity that could result in significant temporary impacts if not mitigated. Construction activities (e.g., excavation, grading, on-site vehicle movements) that directly exceed MBARD criterion for PM_{10} would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors (MBARD, 2008). Regarding ozone, construction projects using typical equipment that temporarily emits ozone precursors are accommodated in the emission inventories of State and federally required air quality management plans and would not have a significant impact on ozone concentrations (MBARD, 2008). As mentioned previously, the guidelines were updated in 2016 and included emission thresholds for nitrogen oxides (NO_x), reactive organic gases (ROG), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and carbon monoxide (CO). See **Table 1: MBARD Pollutant Thresholds** below for the allowable emission thresholds.

Table 1: MBARD Pollutant Thresholds

Pollutant	MBARD Threshold
Reactive Organic Gases (ROG)	137 pounds per day
Inhalable Particulates (PM_{10})	82 pounds per day
Fine Particulates ($PM_{2.5}$)	55 pounds per day
Carbon Monoxide (CO)	550 pounds per day
Nitrogen Dioxide (NO_X)	137 pounds per day
Source: MBARD, *Guidelines for Implementing the California Environmental Quality Act (Draft)*, February 2016.	

MBARD regulates GHG emissions from new developments in the NCAAB. In 2016, an emission threshold of 10,000 MT of CO_2 from stationary source projects was adopted by the air district. However, that threshold does not apply to the Project as it does not propose a stationary source of GHG emissions. Therefore, under CEQA Guidelines Section 15064.79(c), "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies."

Monterey Bay Air Resources District Air Quality Management Plan

In accordance with the California Clean Air Act, MBARD has developed the *2017 Air Quality Management Plan for the Monterey Bay Region* (2017 AQMP). The 2012-2015 AQMP is a transitional plan shifting focus of MBARD's efforts from achieving the 1- hour component of the California Ambient Air Quality Standard for ozone to achieving the 8-hour requirement California Ambient Air QS for ozone. The plan includes an updated air quality trends analysis, which reflects both the 1- and 8-hour standards, as well as an updated emission inventory, which includes the latest information on stationary, area and mobile emission sources.

AMBAG Metropolitan Transportation Plan and Sustainable Communities Strategy

The Association of Monterey Bay Area Governments (AMBAG) is the metropolitan planning organization for the Monterey Bay area. AMBAG coordinates the development of the Metropolitan Transportation Plan (MTP)/ Sustainable Communities Strategy (SCS) with the Regional Transportation Planning Agencies (RTPAs) (San Benito County Council of Governments, the Santa Cruz County Regional Transportation Commission, and the Transportation Agency for Monterey County), transit providers (San Benito County Local Transit Authority, Monterey Salinas Transit, and Santa Cruz METRO Transit District), and the MBARD. AMBAG also coordinates transportation planning and programming activities with the three counties and eighteen local jurisdictions within the tri-county Monterey Bay Region. The intent of the SCS is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips in the area. AMBAG adopted the 2040 MTP/SCS on June 13, 2019. The MTP/SCS complies with SB 375, which mandates both a reduction in GHG emissions from passenger vehicles and the provision of adequate housing for the region's 24-year projected population growth.

2004 City of Seaside General Plan

The 2004 General Plan addresses air quality in the Conservation/Open Space and Circulation Elements. The plan encourages projects to support public transportation methods and to integrate air quality planning into their developments. The 2005 General Plan does not establish air quality thresholds for the City.

The General Plan also contains goals and policies that address GHG emissions in the Circulation Element. Goal C-3 states the City aims to promote the increased use of multi-modal transportation and encourage Bicycle and Pedestrian facilities. The City of Seaside does not establish a quantitative threshold for GHG emissions.

City of Seaside Municipal Code

The City of Seaside Municipal Code limits the air pollutants and dust emissions generated from construction in section 17.30.080. Part C of section 17.30.080 prohibits construction from emitting air pollutants at a level higher than the regional air quality standards. Part E of section 17.30.080 limits the dust emissions generated through construction to the maximum extent feasible and lists the following dust management methods.

1. Scheduling. Grading shall be designed and grading activities shall be scheduled to ensure that repeat grading will not be required, and that completion of the dust-generating activity (e.g., construction, paving, or planting) will occur as soon as possible.
2. Operation during high winds. Clearing, earth-moving, excavation operations or grading activities shall cease when the wind speed exceeds 25 miles per hour averaged over one hour.
3. Limiting the area of disturbance. The area disturbed by clearing, demolition, earth-moving, excavation operations, or grading shall be minimized at all times.
4. Dust Control. Dust emissions shall be controlled by watering a minimum of two times each day, paving, or other treatment of permanent on-site roads and construction roads, the covering of trucks carrying loads with dust content, and/or other dust-preventive measures (e.g., hydroseeding).
5. Revegetation. Graded areas shall be revegetated as soon as possible, but within no longer than 30 days, to minimize dust and erosion. Disturbed areas of the construction site that are to remain inactive longer than three months shall be seeded and watered until grass cover is grown and maintained.
6. Containment. Appropriate facilities shall be constructed to contain dust within the site as required by the Zoning Administrator.

The City of Seaside Municipal Code does not contain any applicable GHG emission policies, goals, or regulations that would apply to the Project.

Discussion

Air Quality

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

Less than significant impact. The most recent air quality plan for Monterey County is the 2012-2015 Air Quality Management Plan (AQMP) which was adopted in March 2017. A project would conflict with or obstruct implementation of the AQMP and *2012 Triennial Plan Revision* (2012 AQMP Revision) if it is inconsistent with the plan's growth assumptions, in terms of population, employment, or regional growth in VMT. The plan would also be inconsistent with the AQMP if its air quality emissions that exceed the State's or nation's ambient air quality standards. The NCCAB is currently in non-attainment for State ozone and PM_{10} standards which represents an existing cumulatively significant impact within the NCCAB. Ozone precursors include reactive organic gases (ROG) and NO_X.

As shown under air quality Threshold B, the Project would not exceed quantitative thresholds of both the State's and nation's ozone precursors. Similarly, PM_{10} thresholds also would not be exceeded for construction or operation of the Project. As discussed below in air quality Threshold C and Threshold D, the Project would not expose sensitive land uses to toxic air contaminants and odors. The Project is a roadway improvement and therefore does not include any structures or vehicle trips. Operation of the Project would not add any facilities that would result in population growth, employment growth, or a regional growth in VMT. Therefore, the Project would not contribute to existing and cumulative impacts and would not conflict with MBARD's AQMP. Impacts would be less than significant and no mitigation is required.

b) Would the Project result in a cumulatively considerable net increase in any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard?

The MBARD's 2008 CEQA Air Quality Guidelines and 2016 update provide criteria for determining cumulative impacts and consistency. The CEQA Air Quality Guidelines note that a project would have a significant cumulative impact on regional air quality if the project's air quality emissions exceed the pollutant emission levels listed in **Table 1**.

The proposed Project would construct curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and accessible designs. These additions provide alternative options for transportation in the City of Seaside. The Project would boost pedestrian and bicycle activities and reduce vehicle trips along Broadway Avenue and Yosemite Avenue. As mentioned previously, MBARD has established emission thresholds for both construction and the operation of new developments in the region.

Construction

Less than significant impact. Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the MBARD's thresholds of significance.

Construction results in the temporary generation of emissions during demolition of the existing roadway, site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

To analyze air quality emissions, the Project's construction-related emissions were calculated using the California Emission Estimator Model (CalEEMod) 2022.4.0 computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. The proposed Project intends to demolish approximately 1.3 miles (300,000 square feet) of existing road on Broadway Avenue. The Project would then reconstruct approximately 250,000 square feet of road and construct approximately 50,000 square feet of curb extensions, roundabouts, and sidewalk improvements. The construction is anticipated to last 24 months. For this analysis, a nine-month construction timeline was utilized to be conservative. See Appendix A: CalEEMod Outputs for additional information regarding the construction assumptions used in this analysis. **Table 2: Maximum Daily Construction Emissions (lbs/day)** displays the maximum daily emissions in pounds per day that are expected to be generated from the construction of the proposed Project in comparison to the daily thresholds established by the MBARD.

Table 2: Maximum Daily Construction Emissions (lbs/day)

Construction Year	Pollutant (maximum pounds per day)[1]				
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Respirable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
2023	6.54	55.14	40.13	15.51	7.30
MBARD Significance Threshold[1]	*137*	*137*	*550*	*82*	*55*
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**	**No**

1. MBARD, *Guidelines for Implementing the California Environmental Quality Act (Draft)*, updated February 2016.
Source: Refer to the CalEEMod outputs provided in Appendix A, CalEEMod Outputs.

As shown in **Table 2**, all criteria pollutant emissions would remain below their respective thresholds. The proposed Project's construction would not worsen ambient air quality, create additional violations of federal and State standards, or delay the air district's goal for meeting attainment standards. Therefore, impacts would be less than significant and no mitigation is required.

Operation

Less than significant impact. As mentioned previously, the Project would construct curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and accessible designs and would alter the road on Broadway Avenue from a four-lane road to a two-lane road. The Project does not propose any new significant sources of air pollutants and would encourage alternate forms of transportation in the City of Seaside. The Project would not generate any additional traffic and population growth. Therefore, the operation of the Project would not generate significant pollutant emissions and impacts would be less than significant. No mitigation is required.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Construction

Less than significant impact. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust which is a known Toxic Air Contaminants (TAC). Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. However, the use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the Project site. Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five

minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. Additionally, the, grading operations would take approximately 20 days, which further limits the intensity and duration of heavy-duty equipment use. The majority of time would be spent on less intensive phases of the Project. The nearest sensitive receptor would be adjacent to the construction site. However, DPM generated by the Project construction activities would be minimal and would not expose sensitive receptors to substantial amounts of air toxics. Therefore, impacts associated with construction activities would be less than significant and no mitigation is required.

Operation

Less than significant impact. The Project would result in the addition of curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and accessible designs along Broadway Avenue and Yosemite Avenue. The Project would not generate additional traffic, population growth, or stationary sources. Operation of the Project would not result in TAC emissions. The Project would also extend the distance between sensitive receptors and the future roadway. Therefore, operational TAC emissions would be less than significant and no mitigation is required.

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

According to the MBARD, land uses associated with odor complaints typically include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries. The Project does not include any uses identified by the MBARD as being associated with odors.

Construction

Less than significant impact. Construction activities associated with the Project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Any construction-related odors would be short-term in nature and cease upon project completion. As a result, impacts to existing adjacent land uses from construction-related odors would be limited and therefore would be less than significant and no mitigation is required.

Operation

Less than significant impact. Operation of the Project would not include any of MBARD classified land uses associated with odor. The additional roadway diets and infrastructure improvements would not substantially produce any emissions with substantial odor. Therefore, impacts associated with odor would be less than significant and no mitigation is required.

MBARD also has standard construction conditions that would impact air quality emissions. The standard construction conditions are noted below.

Standard Conditions and Requirements

AQ SC-1: **MBARD Rule 400 – Visible Emissions.** Project applicants shall not discharge of visible air pollutant emissions into the atmosphere from any emission source for a period or periods aggregating more than three minutes in any one hour, as observed using an appropriate test method, is prohibited.

AQ SC-2: **MBARD Fugitive Dust Control.** Although the project would not exceed thresholds of significance for PM_{10}, MBARD recommends the use of the following Best Management Practices for the control of short-term construction generated emissions in any event:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads on construction sites. Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time.

Greenhouse Gas

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

As mentioned previously, MBARD does not have a GHG threshold adopted that would apply to the Project. However, other California air districts contain thresholds that would be applicable to the Project. For instance, the San Luis Obispo Air Pollution Control District (SLOAPCD) is located south of the MBARD and has adopted a 1,150 metric tons of CO_2 per year ($MTCO_2e$/year) threshold in 2012 for land use development projects.[1] The SLOAPCD requires construction GHG emissions to be amortized over the life of a project and added to the yearly operational GHG emissions. To the north, the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Placer County Air Quality Control District (PCAPCD) both have an adopted construction threshold of 1,100 metric tons of CO_2 per year ($MTCO_2e$/year).[2, 3]

Since MBARD has not adopted a GHG threshold applicable to the Project, a conservative 1,100 $MTCO_2e$/year threshold will be utilized as the threshold for significance for the Project as it is the threshold adopted by the SMAQMD and the PCAQMD and is slightly below the SLOAPCD threshold.

Construction

Less than significant impact. Construction of the proposed Project would result in direct emissions of CO_2, N_2O, and CH_4 from the operation of construction equipment and the transport of materials and construction workers to and from the Project site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of construction workers. Neither the City of Seaside nor MBARD have an adopted threshold of significance for construction-related GHG emissions. Therefore, a 1,100 $MTCO_2e$/year threshold would be substituted to determine significance (allowable under CEQA Guidelines 15064.79(c)). The proposed Project construction is anticipated to last 24 months. The CalEEMod analysis for the Project used a conservative construction timeline of approximately 9 months and calculated emissions associated with project construction to be 405 $MTCO_2e$/year which is below the 1,100 $MTCO_2e$/year threshold. Furthermore, construction would be a temporary condition (a total of 24 months) and would not result in a permanent increase in GHG emissions. Therefore, construction-related GHG emissions would be less than significant and no mitigation is required.

---

[1] San Luis Obispo Air Pollution Control District, CEQA Air Quality Handbook, April 2012. Available at https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20MemoTable1-1_July2021%29_LinkedwithMemo.pdf

[2] Sacramento Metropolitan Air Quality Management District, Greenhouse Gas Threshold for Sacramento County, June 2020. Available at https://www.airquality.org/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf

[3] Placer County Air Pollution Control District, California Environmental Quality Act Thresholds of Significance Justification Report, October 2016. Available at https://www.placer.ca.gov/DocumentCenter/View/2061/Threshold-Justification-Report-PDF

Operation

Less than significant impact. The Project would result in curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and accessible designs. The Project would not generate additional traffic, population growth, or stationary sources. Operation of the Project would not result in GHG emissions. Therefore, operational GHG emissions would be less than significant and no mitigation is required.

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

Less than significant impact. The Project would provide additional bike lanes, new roundabouts, crosswalks and accessibility designs which would encourage non-motorized transportation and enhance public safety consistent with the local city general plan policies and MBARD polices. The proposed Project would comply with all MBARD applicable rules and regulations during construction and would not interfere with the State's goals of reducing GHG emission to 1990 levels by 2020 as stated in AB 32; a 40 percent reduction below 1990 levels by 2030 as noted in SB 32; and an 80 percent reduction in GHG emissions below 1990 levels by 2050 as stated in EO S-3-05.

The Project would also be required to comply with policies established in the 2040 AMBAG MTP/SCS which aims to reduce GHG emissions in the Monterey Bay. As mentioned previously, the intent of the SCS is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips in the area. The proposed Project would align with this plan as it would provide facilities that foster environmentally friendly transportation methods and would encourage alternate forms of transportation. The Project would also provide a safer transportation system for the City of Seaside. Therefore, the proposed Project would be consistent with all applicable plans and policies and would have a less than significant impact and no mitigation is required.

References

1. Association of Monterey Bay Area Governments, *2045 Metropolitan Transportation Plan/Sustainable Communities Strategy*, 2022.
2. City of Seaside, *General Plan,* 2004.
3. City of Seaside, *2040 General Plan,* 2022.
4. City of Seaside, *Municipal Code*, 2021.
5. Monterey Bay Air Resource District, *Air Quality Management Plan*, 2017.
6. Monterey Bay Air Resource District, *CEQA Air Quality Guidelines*, 2008.
7. Monterey Bay Air Resource District, *Guidelines for Implementing the California Environmental Quality Act,* 2016.
8. Placer County Air Pollution Control District, *California Environmental Quality Act Thresholds of Significance*, 2016.
9. San Luis Obispo Air Pollution Control District, *CEQA Air Quality Handbook*, 2012.
10. Sacramento Metropolitan Air Quality Management District, *Greenhouse Gas Thresholds for Sacramento County*, 2020.

Appendix A

CalEEMod Outputs

BroadwaySeasideDiet - Monterey County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

BroadwaySeasideDiet

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	250.00	1000sqft	5.74	250,000.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Engineers Enstimates, Conservative square footage used

Construction Phase - Construction aniticpated to take 24 months

Off-road Equipment -

Off-road Equipment - Large equipment is not necassary

Off-road Equipment -

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment -

Demolition -

Grading - No soil material export/import anticipated

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating -

Construction Off-road Equipment Mitigation - MBARD Rule Compliance

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	50.00
tblConstructionPhase	NumDays	20.00	90.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	0.2726	2.0563	2.2042	4.4700e-003	0.5010	0.0918	0.5927	0.1627	0.0848	0.2475	0.0000	398.7922	398.7922	0.1020	9.8700e-003	404.2827
Maximum	**0.2726**	**2.0563**	**2.2042**	**4.4700e-003**	**0.5010**	**0.0918**	**0.5927**	**0.1627**	**0.0848**	**0.2475**	**0.0000**	**398.7922**	**398.7922**	**0.1020**	**9.8700e-003**	**404.2827**

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					
2023	0.2726	2.0563	2.2042	4.4700e-003	0.2325	0.0918	0.3242	0.0745	0.0848	0.1593	0.0000	398.7919	398.7919	0.1020	9.8700e-003	404.2823
Maximum	**0.2726**	**2.0563**	**2.2042**	**4.4700e-003**	**0.2325**	**0.0918**	**0.3242**	**0.0745**	**0.0848**	**0.1593**	**0.0000**	**398.7919**	**398.7919**	**0.1020**	**9.8700e-003**	**404.2823**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**53.59**	**0.00**	**45.30**	**54.18**	**0.00**	**35.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2023	4-30-2023	0.9696	0.9696
2	5-1-2023	7-31-2023	0.8257	0.8257
3	8-1-2023	9-30-2023	0.4697	0.4697
		Highest	0.9696	0.9696

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0260	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0260**	**3.0000e-005**	**3.8300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.4500e-003**	**7.4500e-003**	**2.0000e-005**	**0.0000**	**7.9300e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0260	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0260**	**3.0000e-005**	**3.8300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.4500e-003**	**7.4500e-003**	**2.0000e-005**	**0.0000**	**7.9300e-003**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2023	4/11/2023	5	50	
2	Site Preparation	Site Preparation	4/11/2023	4/24/2023	5	10	
3	Grading	Grading	4/25/2023	5/22/2023	5	20	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	5/23/2023	9/25/2023	5	90	
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 40

Acres of Paving: 6.89

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 18,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,997.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2023

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					0.2261	0.0000	0.2261	0.0342	0.0000	0.0342	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0567	0.5371	0.4911	9.7000e-004		0.0249	0.0249		0.0232	0.0232	0.0000	84.9802	84.9802	0.0238	0.0000	85.5752
Total	**0.0567**	**0.5371**	**0.4911**	**9.7000e-004**	**0.2261**	**0.0249**	**0.2510**	**0.0342**	**0.0232**	**0.0574**	**0.0000**	**84.9802**	**84.9802**	**0.0238**	**0.0000**	**85.5752**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5100e-003	0.1484	0.0315	6.1000e-004	0.0170	1.2700e-003	0.0182	4.6600e-003	1.2100e-003	5.8700e-003	0.0000	59.4694	59.4694	1.0600e-003	9.3900e-003	62.2946
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	1.2200e-003	9.5000e-004	0.0106	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5572	2.5572	9.0000e-005	8.0000e-005	2.5829
Total	**3.7300e-003**	**0.1494**	**0.0422**	**6.4000e-004**	**0.0199**	**1.2900e-003**	**0.0212**	**5.4500e-003**	**1.2300e-003**	**6.6800e-003**	**0.0000**	**62.0266**	**62.0266**	**1.1500e-003**	**9.4700e-003**	**64.8775**

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					0.0966	0.0000	0.0966	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0567	0.5371	0.4911	9.7000e-004		0.0249	0.0249		0.0232	0.0232	0.0000	84.9801	84.9801	0.0238	0.0000	85.5751
Total	**0.0567**	**0.5371**	**0.4911**	**9.7000e-004**	**0.0966**	**0.0249**	**0.1216**	**0.0146**	**0.0232**	**0.0378**	**0.0000**	**84.9801**	**84.9801**	**0.0238**	**0.0000**	**85.5751**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5100e-003	0.1484	0.0315	6.1000e-004	0.0162	1.2700e-003	0.0175	4.4700e-003	1.2100e-003	5.6800e-003	0.0000	59.4694	59.4694	1.0600e-003	9.3900e-003	62.2946
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	1.2200e-003	9.5000e-004	0.0106	3.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.5572	2.5572	9.0000e-005	8.0000e-005	2.5829
Total	**3.7300e-003**	**0.1494**	**0.0422**	**6.4000e-004**	**0.0190**	**1.2900e-003**	**0.0203**	**5.2200e-003**	**1.2300e-003**	**6.4500e-003**	**0.0000**	**62.0266**	**62.0266**	**1.1500e-003**	**9.4700e-003**	**64.8775**

3.3 Site Preparation - 2023

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	2.9000e-004	2.3000e-004	2.5500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6137	0.6137	2.0000e-005	2.0000e-005	0.6199
Total	**2.9000e-004**	**2.3000e-004**	**2.5500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6137**	**0.6137**	**2.0000e-005**	**2.0000e-005**	**0.6199**

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					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0420**	**6.3300e-003**	**0.0484**	**0.0216**	**5.8200e-003**	**0.0274**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.3000e-004	2.5500e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.6137	0.6137	2.0000e-005	2.0000e-005	0.6199
Total	**2.9000e-004**	**2.3000e-004**	**2.5500e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6137**	**0.6137**	**2.0000e-005**	**2.0000e-005**	**0.6199**

3.4 Grading - 2023

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					0.1417	0.0000	0.1417	0.0685	0.0000	0.0685	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0278	0.2972	0.1955	4.5000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	39.3768	39.3768	0.0127	0.0000	39.6952
Total	**0.0278**	**0.2972**	**0.1955**	**4.5000e-004**	**0.1417**	**0.0125**	**0.1541**	**0.0685**	**0.0115**	**0.0800**	**0.0000**	**39.3768**	**39.3768**	**0.0127**	**0.0000**	**39.6952**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	5.0000e-004	5.6600e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3638	1.3638	5.0000e-005	4.0000e-005	1.3776
Total	**6.5000e-004**	**5.0000e-004**	**5.6600e-003**	**1.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.6000e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3638**	**1.3638**	**5.0000e-005**	**4.0000e-005**	**1.3776**

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					0.0606	0.0000	0.0606	0.0293	0.0000	0.0293	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0278	0.2972	0.1955	4.5000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	39.3767	39.3767	0.0127	0.0000	39.6951
Total	**0.0278**	**0.2972**	**0.1955**	**4.5000e-004**	**0.0606**	**0.0125**	**0.0730**	**0.0293**	**0.0115**	**0.0408**	**0.0000**	**39.3767**	**39.3767**	**0.0127**	**0.0000**	**39.6951**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	5.0000e-004	5.6600e-003	1.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3638	1.3638	5.0000e-005	4.0000e-005	1.3776
Total	**6.5000e-004**	**5.0000e-004**	**5.6600e-003**	**1.0000e-005**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3638**	**1.3638**	**5.0000e-005**	**4.0000e-005**	**1.3776**

3.5 Paving - 2023

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	0.0930	0.9173	1.3126	2.0500e-003		0.0459	0.0459		0.0422	0.0422	0.0000	180.2418	180.2418	0.0583	0.0000	181.6991
Paving	7.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1005**	**0.9173**	**1.3126**	**2.0500e-003**		**0.0459**	**0.0459**		**0.0422**	**0.0422**	**0.0000**	**180.2418**	**180.2418**	**0.0583**	**0.0000**	**181.6991**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3800e-003	3.4000e-003	0.0382	1.0000e-004	0.0107	7.0000e-005	0.0108	2.8500e-003	7.0000e-005	2.9200e-003	0.0000	9.2059	9.2059	3.2000e-004	2.8000e-004	9.2986
Total	**4.3800e-003**	**3.4000e-003**	**0.0382**	**1.0000e-004**	**0.0107**	**7.0000e-005**	**0.0108**	**2.8500e-003**	**7.0000e-005**	**2.9200e-003**	**0.0000**	**9.2059**	**9.2059**	**3.2000e-004**	**2.8000e-004**	**9.2986**

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	0.0930	0.9173	1.3126	2.0500e-003		0.0459	0.0459		0.0422	0.0422	0.0000	180.2416	180.2416	0.0583	0.0000	181.6989
Paving	7.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1005**	**0.9173**	**1.3126**	**2.0500e-003**		**0.0459**	**0.0459**		**0.0422**	**0.0422**	**0.0000**	**180.2416**	**180.2416**	**0.0583**	**0.0000**	**181.6989**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3800e-003	3.4000e-003	0.0382	1.0000e-004	0.0102	7.0000e-005	0.0102	2.7200e-003	7.0000e-005	2.7800e-003	0.0000	9.2059	9.2059	3.2000e-004	2.8000e-004	9.2986
Total	**4.3800e-003**	**3.4000e-003**	**0.0382**	**1.0000e-004**	**0.0102**	**7.0000e-005**	**0.0102**	**2.7200e-003**	**7.0000e-005**	**2.7800e-003**	**0.0000**	**9.2059**	**9.2059**	**3.2000e-004**	**2.8000e-004**	**9.2986**

3.6 Architectural Coating - 2023

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	0.0626					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**0.0645**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	8.1000e-004	6.3000e-004	7.0800e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7048	1.7048	6.0000e-005	5.0000e-005	1.7220
Total	**8.1000e-004**	**6.3000e-004**	**7.0800e-003**	**2.0000e-005**	**1.9900e-003**	**1.0000e-005**	**2.0000e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7048**	**1.7048**	**6.0000e-005**	**5.0000e-005**	**1.7220**

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	0.0626					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**0.0645**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	8.1000e-004	6.3000e-004	7.0800e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.2000e-004	0.0000	1.7048	1.7048	6.0000e-005	5.0000e-005	1.7220
Total	**8.1000e-004**	**6.3000e-004**	**7.0800e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.9000e-003**	**5.0000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.7048**	**1.7048**	**6.0000e-005**	**5.0000e-005**	**1.7220**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264
Other Non-Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0260	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-003
Unmitigated	0.0260	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-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	6.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-003
Total	**0.0260**	**3.0000e-005**	**3.8300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.4500e-003**	**7.4500e-003**	**2.0000e-005**	**0.0000**	**7.9300e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4500e-003	7.4500e-003	2.0000e-005	0.0000	7.9300e-003
Total	**0.0260**	**3.0000e-005**	**3.8300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.4500e-003**	**7.4500e-003**	**2.0000e-005**	**0.0000**	**7.9300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

BroadwaySeasideDiet - Monterey County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

BroadwaySeasideDiet

Monterey County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	250.00	1000sqft	5.74	250,000.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Engineers Enstimates, Conservative square footage used

Construction Phase - Construction aniticpated to take 24 months

Off-road Equipment -

Off-road Equipment - Large equipment is not necassary

Off-road Equipment -

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment -

Demolition -

Grading - No soil material export/import anticipated

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating -

Construction Off-road Equipment Mitigation - MBARD Rule Compliance

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	50.00
tblConstructionPhase	NumDays	20.00	90.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

2.0 Emissions Summary

BroadwaySeasideDiet - Monterey County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	6.5315	54.7887	40.1308	0.1038	29.6687	2.3159	31.9847	11.7350	2.1428	13.8778	0.0000	10,317.0135	10,317.0135	2.2969	0.4209	10,499.8632
Maximum	**6.5315**	**54.7887**	**40.1308**	**0.1038**	**29.6687**	**2.3159**	**31.9847**	**11.7350**	**2.1428**	**13.8778**	**0.0000**	**10,317.0135**	**10,317.0135**	**2.2969**	**0.4209**	**10,499.8632**

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					
2023	6.5315	54.7887	40.1308	0.1038	13.1924	2.3159	15.5083	5.1562	2.1428	7.2989	0.0000	10,317.0135	10,317.0135	2.2969	0.4209	10,499.8632
Maximum	**6.5315**	**54.7887**	**40.1308**	**0.1038**	**13.1924**	**2.3159**	**15.5083**	**5.1562**	**2.1428**	**7.2989**	**0.0000**	**10,317.0135**	**10,317.0135**	**2.2969**	**0.4209**	**10,499.8632**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.53**	**0.00**	**51.51**	**56.06**	**0.00**	**47.41**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**	**0.0000**	**0.0700**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**	**0.0000**	**0.0700**

BroadwaySeasideDiet - Monterey County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2023	4/11/2023	5	50	
2	Site Preparation	Site Preparation	4/11/2023	4/24/2023	5	10	
3	Grading	Grading	4/25/2023	5/22/2023	5	20	
4	Paving	Paving	5/23/2023	9/25/2023	5	90	
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 40

Acres of Paving: 6.89

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 18,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,997.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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					9.0426	0.0000	9.0426	1.3694	0.0000	1.3694			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**9.0426**	**0.9975**	**10.0402**	**1.3694**	**0.9280**	**2.2974**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.1033	5.7072	1.2536	0.0243	0.6980	0.0506	0.7486	0.1913	0.0484	0.2397		2,620.8719	2,620.8719	0.0467	0.4139	2,745.3793
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
Worker	0.0495	0.0331	0.4498	1.1600e-003	0.1232	8.0000e-004	0.1240	0.0327	7.3000e-004	0.0334		119.0225	119.0225	3.7400e-003	3.1900e-003	120.0654
Total	**0.1528**	**5.7404**	**1.7034**	**0.0255**	**0.8212**	**0.0514**	**0.8726**	**0.2240**	**0.0492**	**0.2731**		**2,739.8944**	**2,739.8944**	**0.0505**	**0.4171**	**2,865.4447**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8657	0.0000	3.8657	0.5854	0.0000	0.5854			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**3.8657**	**0.9975**	**4.8633**	**0.5854**	**0.9280**	**1.5134**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.1033	5.7072	1.2536	0.0243	0.6663	0.0506	0.7169	0.1835	0.0484	0.2319		2,620.8719	2,620.8719	0.0467	0.4139	2,745.3793
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
Worker	0.0495	0.0331	0.4498	1.1600e-003	0.1168	8.0000e-004	0.1176	0.0311	7.3000e-004	0.0318		119.0225	119.0225	3.7400e-003	3.1900e-003	120.0654
Total	**0.1528**	**5.7404**	**1.7034**	**0.0255**	**0.7831**	**0.0514**	**0.8345**	**0.2146**	**0.0492**	**0.2638**		**2,739.8944**	**2,739.8944**	**0.0505**	**0.4171**	**2,865.4447**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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
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
Worker	0.0594	0.0398	0.5397	1.4000e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		142.8270	142.8270	4.4800e-003	3.8200e-003	144.0784
Total	**0.0594**	**0.0398**	**0.5397**	**1.4000e-003**	**0.1479**	**9.6000e-004**	**0.1488**	**0.0392**	**8.8000e-004**	**0.0401**		**142.8270**	**142.8270**	**4.4800e-003**	**3.8200e-003**	**144.0784**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.4034**	**1.2660**	**9.6694**	**4.3188**	**1.1647**	**5.4835**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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
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
Worker	0.0594	0.0398	0.5397	1.4000e-003	0.1402	9.6000e-004	0.1411	0.0373	8.8000e-004	0.0382		142.8270	142.8270	4.4800e-003	3.8200e-003	144.0784
Total	**0.0594**	**0.0398**	**0.5397**	**1.4000e-003**	**0.1402**	**9.6000e-004**	**0.1411**	**0.0373**	**8.8000e-004**	**0.0382**		**142.8270**	**142.8270**	**4.4800e-003**	**3.8200e-003**	**144.0784**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					14.1652	0.0000	14.1652	6.8495	0.0000	6.8495			0.0000			0.0000
Off-Road	2.7790	29.7160	19.5497	0.0448		1.2466	1.2466		1.1469	1.1469		4,340.5469	4,340.5469	1.4038		4,375.6424
Total	**2.7790**	**29.7160**	**19.5497**	**0.0448**	**14.1652**	**1.2466**	**15.4118**	**6.8495**	**1.1469**	**7.9963**		**4,340.5469**	**4,340.5469**	**1.4038**		**4,375.6424**

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
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
Worker	0.0660	0.0442	0.5997	1.5500e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		158.6967	158.6967	4.9800e-003	4.2500e-003	160.0871
Total	**0.0660**	**0.0442**	**0.5997**	**1.5500e-003**	**0.1643**	**1.0600e-003**	**0.1654**	**0.0436**	**9.8000e-004**	**0.0446**		**158.6967**	**158.6967**	**4.9800e-003**	**4.2500e-003**	**160.0871**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					6.0556	0.0000	6.0556	2.9282	0.0000	2.9282			0.0000			0.0000
Off-Road	2.7790	29.7160	19.5497	0.0448		1.2466	1.2466		1.1469	1.1469	0.0000	4,340.5469	4,340.5469	1.4038		4,375.6424
Total	**2.7790**	**29.7160**	**19.5497**	**0.0448**	**6.0556**	**1.2466**	**7.3022**	**2.9282**	**1.1469**	**4.0750**	**0.0000**	**4,340.5469**	**4,340.5469**	**1.4038**		**4,375.6424**

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
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
Worker	0.0660	0.0442	0.5997	1.5500e-003	0.1557	1.0600e-003	0.1568	0.0415	9.8000e-004	0.0425		158.6967	158.6967	4.9800e-003	4.2500e-003	160.0871
Total	**0.0660**	**0.0442**	**0.5997**	**1.5500e-003**	**0.1557**	**1.0600e-003**	**0.1568**	**0.0415**	**9.8000e-004**	**0.0425**		**158.6967**	**158.6967**	**4.9800e-003**	**4.2500e-003**	**160.0871**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

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	2.0655	20.3833	29.1684	0.0456		1.0204	1.0204		0.9388	0.9388		4,415.1683	4,415.1683	1.4280		4,450.8672
Paving	0.1671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2326**	**20.3833**	**29.1684**	**0.0456**		**1.0204**	**1.0204**		**0.9388**	**0.9388**		**4,415.1683**	**4,415.1683**	**1.4280**		**4,450.8672**

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
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
Worker	0.0991	0.0663	0.8996	2.3300e-003	0.2464	1.5900e-003	0.2480	0.0654	1.4700e-003	0.0668		238.0450	238.0450	7.4700e-003	6.3700e-003	240.1307
Total	**0.0991**	**0.0663**	**0.8996**	**2.3300e-003**	**0.2464**	**1.5900e-003**	**0.2480**	**0.0654**	**1.4700e-003**	**0.0668**		**238.0450**	**238.0450**	**7.4700e-003**	**6.3700e-003**	**240.1307**

BroadwaySeasideDiet - Monterey County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

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	2.0655	20.3833	29.1684	0.0456		1.0204	1.0204		0.9388	0.9388	0.0000	4,415.1683	4,415.1683	1.4280		4,450.8672
Paving	0.1671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2326**	**20.3833**	**29.1684**	**0.0456**		**1.0204**	**1.0204**		**0.9388**	**0.9388**	**0.0000**	**4,415.1683**	**4,415.1683**	**1.4280**		**4,450.8672**

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
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
Worker	0.0991	0.0663	0.8996	2.3300e-003	0.2336	1.5900e-003	0.2352	0.0622	1.4700e-003	0.0637		238.0450	238.0450	7.4700e-003	6.3700e-003	240.1307
Total	**0.0991**	**0.0663**	**0.8996**	**2.3300e-003**	**0.2336**	**1.5900e-003**	**0.2352**	**0.0622**	**1.4700e-003**	**0.0637**		**238.0450**	**238.0450**	**7.4700e-003**	**6.3700e-003**	**240.1307**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	6.2573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**6.4489**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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
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
Worker	0.0826	0.0552	0.7496	1.9400e-003	0.2054	1.3300e-003	0.2067	0.0545	1.2200e-003	0.0557		198.3709	198.3709	6.2300e-003	5.3100e-003	200.1089
Total	**0.0826**	**0.0552**	**0.7496**	**1.9400e-003**	**0.2054**	**1.3300e-003**	**0.2067**	**0.0545**	**1.2200e-003**	**0.0557**		**198.3709**	**198.3709**	**6.2300e-003**	**5.3100e-003**	**200.1089**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	6.2573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**6.4489**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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
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
Worker	0.0826	0.0552	0.7496	1.9400e-003	0.1947	1.3300e-003	0.1960	0.0518	1.2200e-003	0.0531		198.3709	198.3709	6.2300e-003	5.3100e-003	200.1089
Total	**0.0826**	**0.0552**	**0.7496**	**1.9400e-003**	**0.1947**	**1.3300e-003**	**0.1960**	**0.0518**	**1.2200e-003**	**0.0531**		**198.3709**	**198.3709**	**6.2300e-003**	**5.3100e-003**	**200.1089**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264
Other Non-Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Unmitigated	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700

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	0.0343					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8400e-003	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**		**0.0700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0343					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8400e-003	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**		**0.0700**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

BroadwaySeasideDiet - Monterey County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

BroadwaySeasideDiet

Monterey County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	250.00	1000sqft	5.74	250,000.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Engineers Enstimates, Conservative square footage used

Construction Phase - Construction aniticpated to take 24 months

Off-road Equipment -

Off-road Equipment - Large equipment is not necassary

Off-road Equipment -

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment - Anticipated Construction Equipment

Off-road Equipment -

Demolition -

Grading - No soil material export/import anticipated

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating -

Construction Off-road Equipment Mitigation - MBARD Rule Compliance

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	50.00
tblConstructionPhase	NumDays	20.00	90.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

2.0 Emissions Summary

BroadwaySeasideDiet - Monterey County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	6.5363	55.1433	40.1301	0.1037	29.6687	2.3160	31.9847	11.7350	2.1429	13.8779	0.0000	10,305.0481	10,305.0481	2.2975	0.4226	10,488.4064
Maximum	**6.5363**	**55.1433**	**40.1301**	**0.1037**	**29.6687**	**2.3160**	**31.9847**	**11.7350**	**2.1429**	**13.8779**	**0.0000**	**10,305.0481**	**10,305.0481**	**2.2975**	**0.4226**	**10,488.4064**

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					
2023	6.5363	55.1433	40.1301	0.1037	13.1924	2.3160	15.5084	5.1562	2.1429	7.2990	0.0000	10,305.0481	10,305.0481	2.2975	0.4226	10,488.4064
Maximum	**6.5363**	**55.1433**	**40.1301**	**0.1037**	**13.1924**	**2.3160**	**15.5084**	**5.1562**	**2.1429**	**7.2990**	**0.0000**	**10,305.0481**	**10,305.0481**	**2.2975**	**0.4226**	**10,488.4064**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.53**	**0.00**	**51.51**	**56.06**	**0.00**	**47.41**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**	**0.0000**	**0.0700**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**	**0.0000**	**0.0700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2023	4/11/2023	5	50	
2	Site Preparation	Site Preparation	4/11/2023	4/24/2023	5	10	
3	Grading	Grading	4/25/2023	5/22/2023	5	20	
4	Paving	Paving	5/23/2023	9/25/2023	5	90	
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 40

Acres of Paving: 6.89

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 18,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,997.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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					9.0426	0.0000	9.0426	1.3694	0.0000	1.3694			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**9.0426**	**0.9975**	**10.0402**	**1.3694**	**0.9280**	**2.2974**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0969	6.0433	1.2740	0.0244	0.6980	0.0507	0.7487	0.1913	0.0485	0.2398		2,623.9232	2,623.9232	0.0464	0.4144	2,748.5708
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
Worker	0.0524	0.0416	0.4402	1.1000e-003	0.1232	8.0000e-004	0.1240	0.0327	7.3000e-004	0.0334		112.1967	112.1967	4.1700e-003	3.7100e-003	113.4070
Total	**0.1493**	**6.0848**	**1.7142**	**0.0255**	**0.8212**	**0.0515**	**0.8727**	**0.2240**	**0.0492**	**0.2732**		**2,736.1199**	**2,736.1199**	**0.0506**	**0.4181**	**2,861.9779**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8657	0.0000	3.8657	0.5854	0.0000	0.5854			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**3.8657**	**0.9975**	**4.8633**	**0.5854**	**0.9280**	**1.5134**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0969	6.0433	1.2740	0.0244	0.6663	0.0507	0.7170	0.1835	0.0485	0.2320		2,623.9232	2,623.9232	0.0464	0.4144	2,748.5708
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
Worker	0.0524	0.0416	0.4402	1.1000e-003	0.1168	8.0000e-004	0.1176	0.0311	7.3000e-004	0.0318		112.1967	112.1967	4.1700e-003	3.7100e-003	113.4070
Total	**0.1493**	**6.0848**	**1.7142**	**0.0255**	**0.7831**	**0.0515**	**0.8346**	**0.2146**	**0.0492**	**0.2638**		**2,736.1199**	**2,736.1199**	**0.0506**	**0.4181**	**2,861.9779**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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
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
Worker	0.0629	0.0499	0.5283	1.3200e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		134.6361	134.6361	5.0000e-003	4.4500e-003	136.0884
Total	**0.0629**	**0.0499**	**0.5283**	**1.3200e-003**	**0.1479**	**9.6000e-004**	**0.1488**	**0.0392**	**8.8000e-004**	**0.0401**		**134.6361**	**134.6361**	**5.0000e-003**	**4.4500e-003**	**136.0884**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.4034**	**1.2660**	**9.6694**	**4.3188**	**1.1647**	**5.4835**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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
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
Worker	0.0629	0.0499	0.5283	1.3200e-003	0.1402	9.6000e-004	0.1411	0.0373	8.8000e-004	0.0382		134.6361	134.6361	5.0000e-003	4.4500e-003	136.0884
Total	**0.0629**	**0.0499**	**0.5283**	**1.3200e-003**	**0.1402**	**9.6000e-004**	**0.1411**	**0.0373**	**8.8000e-004**	**0.0382**		**134.6361**	**134.6361**	**5.0000e-003**	**4.4500e-003**	**136.0884**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					14.1652	0.0000	14.1652	6.8495	0.0000	6.8495			0.0000			0.0000
Off-Road	2.7790	29.7160	19.5497	0.0448		1.2466	1.2466		1.1469	1.1469		4,340.5469	4,340.5469	1.4038		4,375.6424
Total	**2.7790**	**29.7160**	**19.5497**	**0.0448**	**14.1652**	**1.2466**	**15.4118**	**6.8495**	**1.1469**	**7.9963**		**4,340.5469**	**4,340.5469**	**1.4038**		**4,375.6424**

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
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
Worker	0.0699	0.0554	0.5870	1.4600e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		149.5956	149.5956	5.5600e-003	4.9500e-003	151.2094
Total	**0.0699**	**0.0554**	**0.5870**	**1.4600e-003**	**0.1643**	**1.0600e-003**	**0.1654**	**0.0436**	**9.8000e-004**	**0.0446**		**149.5956**	**149.5956**	**5.5600e-003**	**4.9500e-003**	**151.2094**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					6.0556	0.0000	6.0556	2.9282	0.0000	2.9282			0.0000			0.0000
Off-Road	2.7790	29.7160	19.5497	0.0448		1.2466	1.2466		1.1469	1.1469	0.0000	4,340.5469	4,340.5469	1.4038		4,375.6424
Total	**2.7790**	**29.7160**	**19.5497**	**0.0448**	**6.0556**	**1.2466**	**7.3022**	**2.9282**	**1.1469**	**4.0750**	**0.0000**	**4,340.5469**	**4,340.5469**	**1.4038**		**4,375.6424**

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
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
Worker	0.0699	0.0554	0.5870	1.4600e-003	0.1557	1.0600e-003	0.1568	0.0415	9.8000e-004	0.0425		149.5956	149.5956	5.5600e-003	4.9500e-003	151.2094
Total	**0.0699**	**0.0554**	**0.5870**	**1.4600e-003**	**0.1557**	**1.0600e-003**	**0.1568**	**0.0415**	**9.8000e-004**	**0.0425**		**149.5956**	**149.5956**	**5.5600e-003**	**4.9500e-003**	**151.2094**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

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	2.0655	20.3833	29.1684	0.0456		1.0204	1.0204		0.9388	0.9388		4,415.1683	4,415.1683	1.4280		4,450.8672
Paving	0.1671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2326**	**20.3833**	**29.1684**	**0.0456**		**1.0204**	**1.0204**		**0.9388**	**0.9388**		**4,415.1683**	**4,415.1683**	**1.4280**		**4,450.8672**

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
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
Worker	0.1049	0.0831	0.8805	2.1900e-003	0.2464	1.5900e-003	0.2480	0.0654	1.4700e-003	0.0668		224.3934	224.3934	8.3300e-003	7.4200e-003	226.8141
Total	**0.1049**	**0.0831**	**0.8805**	**2.1900e-003**	**0.2464**	**1.5900e-003**	**0.2480**	**0.0654**	**1.4700e-003**	**0.0668**		**224.3934**	**224.3934**	**8.3300e-003**	**7.4200e-003**	**226.8141**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

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	2.0655	20.3833	29.1684	0.0456		1.0204	1.0204		0.9388	0.9388	0.0000	4,415.1683	4,415.1683	1.4280		4,450.8672
Paving	0.1671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2326**	**20.3833**	**29.1684**	**0.0456**		**1.0204**	**1.0204**		**0.9388**	**0.9388**	**0.0000**	**4,415.1683**	**4,415.1683**	**1.4280**		**4,450.8672**

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
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
Worker	0.1049	0.0831	0.8805	2.1900e-003	0.2336	1.5900e-003	0.2352	0.0622	1.4700e-003	0.0637		224.3934	224.3934	8.3300e-003	7.4200e-003	226.8141
Total	**0.1049**	**0.0831**	**0.8805**	**2.1900e-003**	**0.2336**	**1.5900e-003**	**0.2352**	**0.0622**	**1.4700e-003**	**0.0637**		**224.3934**	**224.3934**	**8.3300e-003**	**7.4200e-003**	**226.8141**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	6.2573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**6.4489**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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
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
Worker	0.0874	0.0693	0.7337	1.8300e-003	0.2054	1.3300e-003	0.2067	0.0545	1.2200e-003	0.0557		186.9945	186.9945	6.9400e-003	6.1900e-003	189.0117
Total	**0.0874**	**0.0693**	**0.7337**	**1.8300e-003**	**0.2054**	**1.3300e-003**	**0.2067**	**0.0545**	**1.2200e-003**	**0.0557**		**186.9945**	**186.9945**	**6.9400e-003**	**6.1900e-003**	**189.0117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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	6.2573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**6.4489**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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
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
Worker	0.0874	0.0693	0.7337	1.8300e-003	0.1947	1.3300e-003	0.1960	0.0518	1.2200e-003	0.0531		186.9945	186.9945	6.9400e-003	6.1900e-003	189.0117
Total	**0.0874**	**0.0693**	**0.7337**	**1.8300e-003**	**0.1947**	**1.3300e-003**	**0.1960**	**0.0518**	**1.2200e-003**	**0.0531**		**186.9945**	**186.9945**	**6.9400e-003**	**6.1900e-003**	**189.0117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264
Other Non-Asphalt Surfaces	0.510318	0.050449	0.193738	0.161754	0.029476	0.007237	0.010177	0.006627	0.001593	0.000511	0.023353	0.001504	0.003264

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Unmitigated	0.1434	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700

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	0.0343					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8400e-003	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**		**0.0700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0343					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8400e-003	2.8000e-004	0.0306	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0657	0.0657	1.7000e-004		0.0700
Total	**0.1434**	**2.8000e-004**	**0.0306**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0657**	**0.0657**	**1.7000e-004**		**0.0700**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Noise and Vibration Analysis

Noise and Vibration Analysis

To: Tad Stearn, Kimley-Horn

From: Noemi Wyss AICP, Environmental Planner
Tanay Pradhan, Environmental Analyst
Kimley-Horn and Associates, Inc.

Date: November 2, 2022

Subject: Broadway Avenue Complete Street Corridor Improvement – Noise and Vibration Analysis

---

Project Description

The Project includes the design and construction of a 1.3-mile road diet on Broadway Avenue from Fremont Boulevard to General Jim Moore Boulevard and safe routes to school improvements on Yosemite Ave from San Pablo Avenue to Wanda Avenue. The road diet will transform the 4-lane roadway to a 2-lane roadway with curb extensions, buffered and protected bike facilities, roundabouts, and Safe Routes to School improvements including off-set crosswalk, rectangular rapid flashing beacons, and accessible design. Improvements on Yosemite Ave will include bicycle pavement markings, signage, curb extensions and high visibility crosswalks.

Existing Setting

Existing Noise Sources

The City of Seaside (including the Project site) is impacted by various noise sources. Mobile sources, especially cars and trucks, are the most common and significant sources of noise in most communities. The 2004 Seaside General Plan evaluated noise contours along roadways in Figure N-1 of the noise element. Three segments on Broadway Avenue are classified as noise impacted areas with noise levels between 60 dBA CNEL and 65 dBA CNEL. Other sources of noise are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise.

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance.

The Project site is located along Broadway Avenue and Yosemite Street. Both of these roads contain multiple adjacent sensitive receptors including, multi-family residential housing, single-family residential

housing, churches, and schools. As shown in **Table 1: Sensitive Receptors**, sensitive receptors near the Project site would be as close as five feet away from active construction. These distances are from the Project site boundary to the sensitive receptor property line.

Table 1: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site[1]
Multi-family Residential Uses	8 feet south of Broadway Avenue
Single-Family Residential Uses	5 feet[2]
The Carpenter's House Church	10 feet north of Broadway Avenue
Seaside Community SDA Church	10 feet north of Broadway Avenue
Friendship Baptist Church	10 feet south of Broadway Avenue
Greater Victory Temple Church	5 feet south of Broadway Avenue
Martin Luther King Junior School of the Arts	8 feet north of Broadway Avenue
International School of Monterey	10 feet east of Yosemite Road
Highland Elementary School	10 feet east of Yosemite Road
Notes: 1. Distances are measured from the Project site boundary to the property line. 2. Single-family residents are surrounding Broadway Avenue and Yosemite Road. 5 feet is the closest distance to a single-family residential receptor.	
Source: Google Earth, 2022.	

Regulatory Framework and Thresholds

California Noise Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable", "normally unacceptable", and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

2004 City of Seaside General Plan

The 2004 General Plan identifies goals, policies, and implementations in the Noise Element. The Noise Element provides a basis for comprehensive local programs to regulate environmental noise and protect citizens from excessive exposure. **Table 2: Interior and Exterior Noise Standards** establishes the City's noise standard for different land uses. **Table 3: Land Use Compatibility Standards** specifies the acceptable and unacceptable noise levels for different land uses in the City of Seaside. The General Plan establishes construction noise standards for projects located near residential receptors. Construction shall not exceed 45 dBA CNEL when outdoor levels are above 60 dBA CNEL.

Table 2: Interior and Exterior Noise Standards

Land-Use Category	Noise Standards[1]	
	Exterior	Interior
Residential	65 dBA	45 dBA
Mixed Use Residential	70 dBA	45 dBA
Commercial	70 dBA	-
Office	70 dBA	50 dBA
Industrial	75 dBA	55 dBA
Public Facilities	70 dBA	50 dBA
Schools	50 dBA	50 dBA
Notes: 1. In Community Noise Level Equivalent (CNEL).		
Source: City of Seaside General Plan, 2004.		

Table 3: Land Use Compatibility Standards

Land-Use Category	Community Noise Equivalent Level (CNEL)					
	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA
Residential – Single Family, Multifamily, Duplex	A	B	B	C	-	-
Residential – Mobile Homes	A	B	C	C	-	-
Transient Lodging – Motels, Hotels	A	B	B	C	C	-
Schools, Libraries, Churches, Hospitals, Nursing Homes	A	B	C	C	-	-
Auditoriums, Concert Halls, Amphitheaters, Meeting Halls	B	C	C	-	-	-
Sports Arenas, Outdoor Spectator Sports, Amusement Parks	A	A	B	B	-	-
Playgrounds, Neighborhood Parks	A	A	B	C	-	-
Gold Courses, Riding Stables, Cemeteries	A	A	A	B	C	C
Office and Professional Buildings	A	A	B	B	C	-
Commercial Retail, Banks, Restaurants, Theaters	A	A	A	B	B	C
Industrial, Manufacturing, Utilities, Wholesale, Service Stations	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A
Notes: 1. A = Normally Acceptable – Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. 2. B = Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. 3. C = Normally Unacceptable – New construction or development should generally be discouraged. If it does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. 4. - = Clearly Unacceptable – New construction or development should generally not be undertaken.						
Source: City of Seaside General Plan, 2004.						

City of Seaside Municipal Code

The Seaside Municipal Code follows the 2004 General Plan Interior and Exterior Noise Standards and the Land Use Compatibility Standards (**Table 2** and **Table 3**). The municipal code restricts construction times between 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 7:00 p.m. on holidays, Saturday, and Sundays.[1] Furthermore, any construction, maintenance, and/or repair operations by public agencies and/or utilities or their contractors that are serving public interest and/or protecting public health, safety and general welfare is exempt from maximum allowable noise levels listed in **Table 2**. Section 17.30.080 of the municipal code establishes construction vibration standards that states ground vibration that is perceptible without instruments by a reasonable person at a property line is prohibited unless the vibration occurs from temporary construction or demolition activities including motor vehicle operations.

Discussion

a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Less than significant impact. Construction-related activities would temporarily increase ambient noise levels in the proposed Project vicinity. Construction-related noise levels at and near the Project site would fluctuate depending on the level and type of construction activity on a given day. During construction, exterior noise levels could affect the various uses surrounding the site. Project construction would occur directly adjacent to commercial uses, residential uses, schools, and churches. Noise impacts for mobile construction equipment are typically assessed as emanating from the center of the equipment activity or construction site. For the proposed Project, this center point would be approximately 40 feet from the nearest sensitive receptor property line to the roadway centerline. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery.

Construction activities associated with development of the Project would include demolition, site preparation, grading, paving, and architectural coating. Such activities would require concrete saws, excavators and bulldozers during demolition, bulldozers and tractors during site preparation; graders, dozers, and tractors during grading; pavers, rollers, and paving equipment during paving; and air compressors during architectural coating. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. The highest anticipated construction noise level is expected to occur during the demolition phase (jack hammer). The nearest sensitive uses may be exposed to elevated noise levels during project construction. These assumptions represent the worst-case noise scenario because construction activities would typically be spread out throughout the Project site, and thus some equipment would be farther away from the affected receptors. It should be noted that as

[1] Section 9.12.030.D, *City of Seaside Municipal Code*, October 2021.

Project construction would not use large heavy-duty pieces of construction equipment such as a cranes, pile-driving, or scrapers, noise levels would be less intense than typical construction projects. Since it is a roadway project, equipment would move in a linear fashion as opposed to operating adjacent to any one sensitive receptor for an extended period of time. The loudest equipment (used during demolition phase) would produce a noise level of 90 dBA at 40 feet. The other construction phases would utilize equipment that would produce a lower level of noise.

The thresholds shown in **Table 2** and **Table 3** above establish the allowable noise levels at various land uses. However, the thresholds do not apply for construction noise. The Project construction would be exempt from construction noise thresholds as it is adding pedestrian safety elements, bike facilities, and Safety to School improvements and Section 17.30.080 exempts construction by public agencies and and/or utilities or their contractors that are serving public interest and/or protecting public health, safety and general welfare is exempt from maximum allowable noise levels. The Project would be classified as a project by a public agency (or their contractor) that serves the public interest and the City's general welfare. Therefore, the Project's construction noise would be less than significant and no mitigation is required.

Operation

Less than significant impact. The Project would construct curb extensions, protected bike facilities, roundabouts, off-set crosswalks, rapid flashing beacons, and pedestrian accessibility improvements including ramps and mid-block crossing areas. Therefore, the Project would not result in an increase of existing operational noise. Broadway Avenue would transform the road from a 4-lane roadway to a 2-lane roadway which would reduce traffic noise along the road. The Project would not introduce any stationary noise sources in the area or result in additional traffic trips along the two road segments. Operational noise impacts would be less than significant and no mitigation is required.

b) Would the Project generate excessive groundborne vibration or groundborne noise levels?

Construction

Less than significant impact. Increases in groundborne vibration levels attributable to the Project would be primarily associated with construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. Section 17.30.080 in the City of Seaside Municipal Code states that ground vibration that that is readily perceptible to a reasonable person is permissible if generated by temporary construction or demolition activities including motor vehicle operations. Therefore, ground vibration due to construction of the Project would be allowable under the City's municipal code and groundborne vibration impacts would be less than significant.

The following analysis has been included solely for informational purposes. The FTA establishes that groundborne vibration would be cause human annoyance at a level of 0.20 peak particle velocity (PPV). **Table 4: Typical Construction Equipment Vibration Levels**, lists vibration levels at 15 feet and 25 feet for typical construction equipment. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 4**, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.007 to 0.192 in/sec PPV at 15 feet from the source of activity. The nearest sensitive receptor off-site structure is approximately 15 feet from the active construction zone. In general, other construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure.

Table 4: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity At 15 feet (in/sec)	Peak Particle Velocity At 25 feet (in/sec)
Large Bulldozer	0.1915	0.089
Loaded Trucks	0.1635	0.076
Rock Breaker	0.1269	0.059
Jackhammer	0.0753	0.035
Small Bulldozer/Tractors	0.0065	0.003
1. Calculated using the following formula: PPVequip = PPVref x (25/D)1.5, where: PPVequip = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPVref = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018; D = the distance from the equipment to the receiver.		
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.		

As shown in **Table 4**, the highest vibration levels are achieved with the large bulldozer operations. This construction activity is expected to take place during grading. As mentioned previously, the City of Seaside Municipal Code states that temporary construction related ground vibration is allowable. Therefore, vibration impacts associated with the Project would be less than significant and no mitigation is required.

Operation

Less than significant impact. The Project operation does not include any equipment or facilities that would generate groundborne vibration. Therefore, vibration impacts associated with Project operations would be less than significant and no mitigation is required.

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

Less than significant impact. The Project would not include any new residences or permanent areas of work. The nearest airport to the Project site is the Monterey Regional Airport located approximately 1 mile south of the Project site. The Project site lies outside of the 65 dBA CNEL noise contours shown in the Monterey Regional Airport Master Plan report published in October 2019.[2] Although aircraft-related noise would occasionally be audible at the Project site, noise from aircraft would not substantially increase ambient noise levels. Exterior noise levels resulting from aircraft would be compatible with the proposed Project. By ensuring compliance with the City's normally acceptable noise level standards, interior noise levels would also be considered acceptable with aircraft noise. Therefore, the Project would not expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

[2] Monterey Peninsula Airport District, *Monterey Regional Airport Master Plan,* October 2019.

References

1. City of Seaside, *General Plan,* 2004.
2. City of Seaside, *2040 General Plan,* 2022.
3. City of Seaside, *Municipal Code*, 2021.
4. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018.
5. Monterey Peninsula Airport District, *Monterey Regional Airport Master Plan*, 2019.