Draft Initial Study and Mitigated Negative Declaration Artesia Boulevard Corridor Specific Plan

Lead Agency:

City of Artesia
18747 Clarkdale Avenue
Artesia, California 90701

Contact:

Okina Dor, Redevelopment/Planning Director
(562) 865-6262 ext. 227

Consultant to the City:

Hogle-Ireland, Inc.
2860 Michelle Drive, Ste. 100
Irvine, CA 92606

November 2011

- This Page Intentionally Left Blank -

Table of Contents

Section 1: Project Description 5
1.1 – Project Title 5
1.2 – Lead Agency Name and Address 5
1.3 – Contact Person and Phone Number 5
1.4 – Project Location 5
1.5 – Project Sponsor's Name and Address 5
1.6 – General Plan Land Use Designation 5
1.7 – Zoning District 5
1.8 – Project Description 8
1.9 – Background Information 16
1.10 – Project Objectives 16
1.11 – Surrounding Land Uses 17
1.12 – Environmental Setting 17
1.13 – Required Approvals 17
1.14 – Other Public Agencies Whose Approval is Required 17
1.15 – Framework for Environmental Analysis 17
Section 2: Determination 19
2.1 – Environmental Factors Potentially Affected 19
2.2 – Determination 19
Section 3: Evaluation of Environmental Impacts 21
3.1 – Aesthetics 21
3.2 – Agriculture and Forest Resources 23
3.3 – Air Quality 25
3.4 – Biological Resources 31
3.5 – Cultural Resources 33
3.6 – Geology and Soils 35
3.7 – Greenhouse Gas Emissions 38
3.8 – Hazards and Hazardous Materials 43
3.9 – Hydrology and Water Quality 46
3.10 – Land Use and Planning 50
3.11 – Mineral Resources 52
3.12 – Noise 53
3.13 – Population and Housing 56
3.14 – Public Services 59
3.15 – Recreation 62
3.16 – Transportation and Traffic 63
3.17 – Utilities and Service Systems 68
3.18 – Mandatory Findings of Significance 71
Section 4: References 73
4.1 – List of Preparers 73
4.2 – Document References 73
Section 5: Summary of Mitigation Measures 75
Appendix Materials 77

List of Tables

Table 1-1: Design Standards Quick Reference Table 14
Table 1-2: General Plan 2030 and Artesia Boulevard Corridor Specific Plan Growth Assumptions 16
Table 3.3-1: South Coast Air Basin Attainment Status 27
Table 3.3-2: Existing Emissions 27
Table 3.3-3: Future (Net Increase) 28
Table 3.3-4: Carbon Monoxide Concentrations 30
Table 3.7-1: Greenhouse Gas Emissions Inventory: Existing Emissions 39
Table 3.7-2: Greenhouse Gas Emissions Inventory: Future Emissions – Net Increase, Business as Usual 39
Table 3.7-3: Greenhouse Gas Emissions Inventory: Future - Net Increase, with 'Mitigation' 41
Table 3.7-4: Greenhouse Gas Emissions Significance Threshold Summary 41
Table 3.13-1: Specific Plan and 2030 General Plan Housing Capacity 57
Table 3.13-2: Specific Plan and 2030 General Plan Employment Capacity 57
Table 3.16-1: Existing Traffic Conditions 64
Table 3.16-2: Future Without Project Traffic Conditions 65
Table 3.16-3: Future With Project Traffic Conditions 65

List of Figures

Figure 1-1: Regional Location and Vicinity Map 6
Figure 1-2: Project Limits 7
Figure 1-3: Specific Plan Quadrants 9
Figure 1-4: Quadrant 1 Existing Conditions 10
Figure 1-5: Quadrant 2 Existing Conditions 11
Figure 1-6: Quadrant 3 Existing Conditions 12
Figure 1-7: Quadrant 4 Existing Conditions 13

Section 1: Project Description

1.1 – Project Title

City of Artesia: Artesia Boulevard Corridor Specific Plan

1.2 – Lead Agency Name and Address

City of Artesia
18747 Clarkdale Avenue
Artesia, California 90701

1.3 – Contact Person and Phone Number

Okina Dor, Redevelopment/Planning Director
(562) 865-6262 ext. 227

1.4 – Project Location

The City of Artesia (City) is located in southeast Los Angeles County, 19 miles southeast of the City of Los Angeles, and 10 miles northwest of the City of Anaheim. The City is bordered by the City of Norwalk to the north, and the City of Cerritos to the south, east, and west. Regional access to the City is provided via the SR-91 (Artesia Freeway) and the I-605 (San Gabriel River Freeway). See Figure 1-1.

The proposed project affects properties totaling approximately 21 acres along Artesia Boulevard, from Gridley Road extending east approximately half a mile almost reaching Pioneer Boulevard. The project limits are indicated in Figure 1-2.

1.5 – Project Sponsor's Name and Address

None. The proposed General Plan Amendments and Specific Plan have been initiated by the City of Artesia.

1.6 – General Plan Land Use Designation

The existing General Plan Land Use designation for the areas within the project limits is Gateway Community Commercial, with the exception of two properties that are designated Low Density Residential. The proposed General Plan Land Use designation for properties within the project limits is Artesia Boulevard Corridor Specific Plan.

1.7 – Zoning District

Properties within the project limits are predominately zoned Commercial General (CG). Two properties are zoned Medium Density Residential (MDR), four are zoned Commercial Transition (CT), and one large parcel is zoned Heavy Manufacturing and Industrial (M-2). Proposed zoning for the project limits is Artesia Boulevard Corridor Specific Plan.

Figure 1-1: Regional Location and Vicinity Map

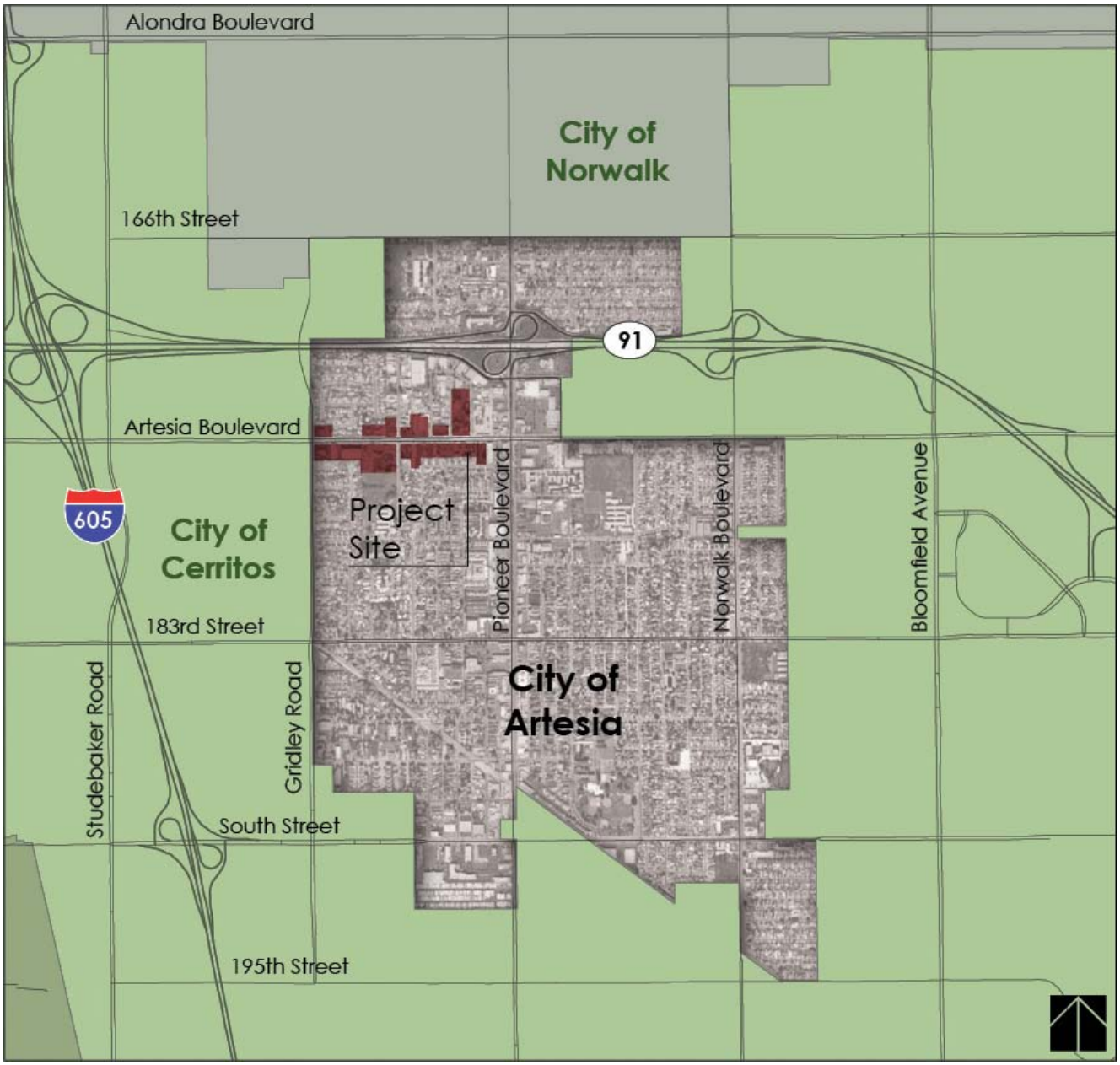


Figure 1-2: Project Limits

1.8 – Project Description

The project consists of the adoption and implementation of the Artesia Boulevard Corridor Specific Plan and related amendments to the General Plan Land Use Map and Zoning Map. The Artesia Boulevard Corridor Specific Plan is a policy-level, City-initiated Specific Plan, which does not authorize any specific development or construction projects. Future development projects will be required to receive City approval and conduct appropriate environmental review.

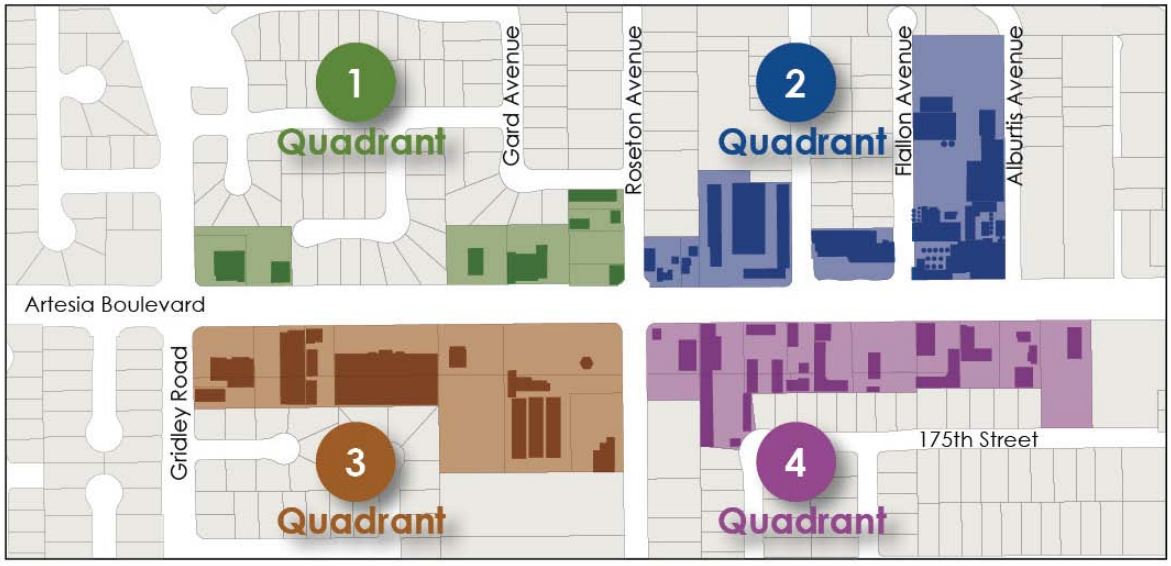
The Artesia Boulevard Corridor Specific Plan provides guidance for implementing development within the project limits. The Specific Plan provides required development standards and allowable uses for properties within the Specific Plan area. The Specific Plan also includes an implementation action plan that identifies near and long term actions necessary to achieve the Plan's goals and objectives. The Specific Plan furthers the objectives of the General Plan by providing a more detailed planning document for development of specific sites, mobility, and infrastructure.

The anticipated horizon year for the Specific Plan correlates to the General Plan (2030). Growth assumptions conducted as part of the Specific Plan process indicate that the Specific Plan could result in the addition of approximately 95 new dwelling units, and approximately 238,282 square feet of nonresidential structures. The Plan, its relationship to the General Plan, and other related actions are discussed in more detail below.

Adoption and Implementation of the Artesia Boulevard Corridor Specific Plan
The Artesia Boulevard Corridor Specific Plan includes a 21-acre area along Artesia Boulevard, between Gridley Road and Pioneer Boulevard. Artesia Boulevard is a key east-west corridor in the City of Artesia. Despite recent street enhancements and some new development projects, many properties along the corridor are vacant and/or underutilized.

The proposed project divides the Specific Plan area (project limits) into four quadrants to focus redevelopment efforts by quadrant (or block) to enhance existing uses, address compatibility with surrounding uses, and establish specific development standards and design guidelines for each quadrant (see Figure 1-3).

Figure 1-3: Specific Plan Quadrants



The proposed project provides the following stated intents for each quadrant:

- **Quadrant 1 Intent:** Given Quadrant 1's location at a highly visible intersection on the border of Artesia and Cerritos, this quadrant serves as a gateway into the City of Artesia and is intended to foster the development of commercial, retail, office, and/or residential uses. Uses can be integrated into mixed use development projects or operate independently as standalone developments. Live/Work units are encouraged in Quadrant 1 to provide neighborhood-serving uses such as markets, coffee shops, art studios, and professional offices. Live/Work units will help to reduce vehicular traffic by integrating residential and commercial uses and promote pedestrian activity.

- **Quadrant 2 Intent:** The primary intent of Quadrant 2 is to establish a retail, commercial, and industrial center. These uses are intended to be flexible while maintaining compatibility with the existing commercial and industrial uses located to the north and east of this quadrant. In support of creating a commercial, retail, and industrial center in Quadrant 2, no residential uses shall be permitted within this quadrant.

- **Quadrant 3 Intent:** Quadrant 3 is envisioned to build upon the success of the East West Ice Palace and capitalize upon the redevelopment potential of the former Armstrong Nursery site. Future development is intended to complement and enhance the existing East West Ice Palace by providing the opportunity to integrate support services including hotels/motels, training facilities, small fitness studios, entertainment facilities, sporting good stores, specialty retail, as well as the ability to expand the existing East West Ice Palace facility. By building upon the success of the East West Ice Palace and encouraging complementary uses in the creation of a "Sports Village", Quadrant 3 will serve as a catalyst in the revitalization of the entire corridor. Mixed use development including commercial, retail, and high density residential (up to 30 dwelling units per acre) are also permitted within this quadrant. Uses can be integrated into mixed use development projects or operate independently as standalone developments.

- **Quadrant 4 Intent:** Implementation of this Specific Plan will transform this predominately auto-related quadrant into a mixed use block. Commercial, retail, and residential uses including Live/Work units shall be permitted within this quadrant whereas auto-related uses are neither the highest and best use, nor compatible with surrounding uses and should be phased out. Uses can be integrated into mixed use development projects or operate independently as standalone developments. In order to establish a healthy and diverse business corridor that is compatible with the existing surrounding uses, auto-related uses are encouraged to relocate to other areas in the City and surrounding communities which feature more intense commercial and light industrial uses. Relocation of these auto-related uses will help to create a positive synergy among compatible uses and avoid issues related to noise, traffic, and aesthetics that can arise.

Currently, the project limits are characterized by a variety of business types, some newer uses, and multiple vacant properties available for redevelopment. Figures 1-4 to 1-7 provide photographs of the existing conditions.

Figure 1-4: Quadrant 1 Existing Conditions

Image (top left): Sonora Mexican restaurant, located toward the north east corner of Artesia Boulevard and Gridley Road, is a long-standing restaurant.

Image (bottom, left): The Benjamin Moore paint store located along Artesia Boulevard is a newer establishment featuring meandering sidewalks and new landscaping.

Image (bottom, right): An approximately half acre site with a vacant building at the corner of Artesia Boulevard and Gridley Road.

Figure 1-5: Quadrant 2 Existing Conditions

Image (top left): A newly constructed multitenant retail center with a variety of restaurants and small tenant stores.

Image (top right): A scrap metal yard located at the intersection of Artesia Boulevard and Roseton Avenue.

Image (middle and bottom right): The California Dairies facility, a prominent business located in Quadrant 2.

Image (bottom left): Single-family residential uses abut public storage.

Figure 1-6: Quadrant 3 Existing Conditions

Quadrant 3 – Existing Conditions

Image (top left): The former Armstrong Nursery site, located towards the southwest corner of Artesia Boulevard and Roseton Avenue, is currently vacant.

Image (bottom left): A vacant retail site along Artesia Boulevard.

Image (right): The East West Ice Palace along Artesia Boulevard is a highly successful business that is intended to serve as a catalyst for the future redevelopment of this quadrant.

Figure 1-7: Quadrant 4 Existing Conditions

Quadrant 4 – Existing Conditions

Image (top left): Albertos Mexican restaurant, located at the southeast corner of the Specific Plan area.

Image (top right): A vacant sales lot adjacent to existing auto repair businesses also in Quadrant 4.

Image (bottom left): Jasper's Auto Service, located along Artesia Boulevard, is one of many auto related businesses within this quadrant.

The key elements of the Specific Plan are to:

- Change land use patterns by introducing residential and mixed use to the area. Allowable densities and intensities are increased, along with improved connectivity and walkability. Parking alternatives, such as shared parking arrangements, are also allowed.
- Introduce new programs and incentives for area revitalization, including a specific plan recovery fee, lot consolidation program, and open space incentives.
- Market the corridor through business attraction and retention, creation of a corridor association, and completion of a market analysis and return on investment analysis.

The Specific Plan contains seven sections:

- **Introduction**: The introductory chapter provides general information about the Specific Plan, the history and location of study area, a project summary, and discussion of consistency with State law and local governing documents.

- **Land Use Plan:** The Land Use Plan introduces unique development approaches for the Specific Plan area. The Land Use plan provides a Land Use Map and Table of Permitted Uses.

- **Design Guidelines and Standards:** The Design Guidelines and Standards chapter provides specific standards for how buildings in the Specific Plan area can be developed, including setbacks, parking requirements, as well as guidelines to enhance the architectural style of existing and future buildings. This chapter also provides guidelines for design features including: streetscapes, signage, lighting, rooflines, and other design elements that will be encouraged along the corridor. Table 1-1 provides an overview of development standards by quadrant.

Table 1-1: Design Standards Quick Reference Table

Design Standards & Guidelines	Quadrant 1	Quadrant 2	Quadrant 3	Quadrant 4
Maximum Floor Area Ratio	1.0 FAR	1.5 FAR	2.0 FAR	1.0 FAR
Maximum Height Limit	2 stories / 35 ft	3 stories / 45 ft	3 stories / 45 ft	2 stories / 35 ft
Maximum Density	10 du/ac	Not Permitted	30 du/ac	10 du/ac
Minimum Unit Sizes	Live/Work – 400 sq. ft. One Bedroom – 600 sq. ft. Two Bedrooms – 750 sq. ft. Three Bedrooms – 1,000 sq. ft.			
Street Setback	5'-0" Minimum*	5'-0" Minimum*	5'-0" Minimum*	5'-0" Minimum*
Interior property line not abutting residentially zoned property	0'0" Minimum	0'0" Minimum	0'0" Minimum	0'0" Minimum
Interior property line abutting residentially zoned property	10'-0" landscaped with trees – building setback** 8'-0" landscaped with trees – parking lot setback – See Section 3.4.5			
Open Space Requirements[1]	Minimum Usable Common Open Space - 150 sq. ft./unit Minimum Private Outdoor Space - 50 sq. ft./unit			

*Where the building fronts the street along its side and/or front property lines, the first twenty (20') feet in height of a structure shall be setback a minimum of five (5') feet from the side and/or front property line. The building shall step back a minimum of fifteen (15') feet from the adjacent side and/or front property line at a height above twenty (20') feet.

** Where a building abuts or adjoins residentially zoned property along its side and/or rear property lines, the first twenty (20') feet in height of a structure shall be set back a minimum of ten (10') feet from the side and/or rear property line. The building shall step back a minimum of twenty-two (22') feet from the adjacent side/or rear property line at a height above twenty (20') feet. The building shall step back a minimum of thirty-four 34" feet from the adjacent side/or rear property line at a height above thirty-five (35').

[1] Open space requirements pertain to Quadrants 1, 3 and 4 as residential uses are not permitted in Quadrant 2.

- **Mobility Plan:** The Mobility chapter identifies established and planned conditions for roadways within the Specific Plan area, including contextual exhibits and

conceptual street sections. This chapter will also explore options for alternative forms of transportation, including bicycles, buses, and walking.

- **Infrastructure Plan:** The Infrastructure chapter provides information about accessibility to key utilities and public services including water, sewer, energy, police, fire, and other services necessary to develop the corridor.

- **Administration and Implementation:** The Administration and Implementation chapter identifies strategies to execute the recommendations put forth in the Specific Plan. This chapter also includes the necessary steps to implement the Specific Plan document and the actions required to modify the Plan.

- **Appendices:** Three appendices accompany the Specific Plan. The first compares the goals and policies of the adopted Artesia General Plan 2030 to the goals and guidelines found in the Specific Plan. The second appendix provides definitions of terms used in the document and the third appendix provides the methodology for the Specific Plan recovery fee.

Growth Assumptions

This Initial Study is based upon several assumptions about growth and existing conditions, consistent with the General Plan Final Program EIR. The General Plan Final Program EIR assumed that development pursuant to the 2030 General Plan would total 416,017 square feet of nonresidential development and 338 housing units.

The development standards set forth in the Specific Plan (see Table 1-1 above) vary slightly from that which was analyzed in the General Plan Final Program EIR. Gateway Community Commercial was the land use designation for the vast majority of the project limits (only two parcels were designated otherwise). The maximum intensity for nonresidential development within the Gateway Community Commercial designation is 1.0 FAR. Two quadrants within the project limits (Quadrant 2 and Quadrant 3) are proposed to exceed this maximum FAR, allowing 1.5 FAR and 2.0 FAR, respectively. In addition, the Gateway Community Commercial designation did not permit residential development. Quadrants 1, 3, and 4 permit residential uses at varying densities (see Table 1-1). The two parcels in Quadrant 4 that were not designated Gateway Community Commercial were designated Low Density Residential in the General Plan; these parcels would, with the proposed project, allow commercial development at 1.0 FAR in addition to the permitted residential uses.

As part of the Specific Plan analysis, the project limits were surveyed to determine likely redevelopment sites. Conservatively, it was assumed that 75 percent of the area within the project limits would redevelop. Residential uses were assumed to occupy 30 percent of the redeveloped areas, and nonresidential uses were assumed to occupy 70 percent of the redeveloped areas. To allow for the possibility of a larger-scale residential or mixed use development, it was assumed that an additional 60 units may develop in Quadrant 3 beyond the above assumptions, given the higher allowable density for that quadrant. The resulting analysis of these cumulative assumptions concluded that estimated development within the project limits would be approximately 238,282 net square feet of new nonresidential development and approximately 95 net new housing units. As indicated in Table 1-2, although the Artesia Boulevard Corridor Specific Plan does increase allowable intensities in two quadrants and allow additional residential development in three quadrants, the assumed Specific Plan development levels would not exceed growth assumptions put forth in the General Plan Final Program EIR.

Table 1-2: General Plan 2030 and Artesia Boulevard Corridor Specific Plan Growth Assumptions

Description	General Plan Buildout	Artesia Boulevard Corridor Specific Plan	Remaining General Plan Capacity
Residential Uses (dwelling units)	338	95	243
Nonresidential Development (square feet)	416,017	238,282	177,735

General Plan Land Use Map and Zoning Map Amendments

To achieve consistency with the General Plan and Zoning Map, the Artesia Boulevard Corridor Specific Plan designation will replace existing zoning and General Plan land use designations on these respective maps.

1.9 – Background Information

The City of Artesia recently updated their General Plan (adopted September 2010). Subsequent to General Plan adoption, the City initiated the Artesia Boulevard Corridor Specific Plan. Outreach conducted for the Artesia Boulevard Corridor Specific Plan, including visioning workshops, surveys, and interviews with stakeholders, revealed a slightly different vision for this area than what was identified in the General Plan. Specifically, as part of the Artesia Boulevard Corridor Specific Plan visioning process, some areas within the project limits were identified to allow residential uses in addition to commercial and industrial uses. This is a deviation from the General Plan policy for this area, which did not allow any residential uses. Furthermore, in order to incentivize redevelopment, development intensities for nonresidential development in Quadrants 2 and 3 were increased to 1.5 FAR and 2.0 FAR, respectively. As such, the General Plan requires an amendment to achieve consistency with the new Specific Plan; the new land use designation for the project limits will be Artesia Boulevard Corridor Specific Plan.

1.10 – Project Objectives

The Artesia Boulevard Corridor Specific Plan was initiated by the City to guide growth and development along Artesia Boulevard, encourage economic revitalization, and create a lively center of activity for the City. The Artesia Boulevard Corridor Specific Plan is intended to present a coherent strategy to coordinate significant public and private investment to overcome an existing decline in character, property values, business district strength, and neighborhood vitality. The overarching objectives for the Artesia Boulevard Corridor Specific Plan are to:

- Develop strategies for the reuse of underutilized parcels, development of vacant properties and incentivize lot consolidation;
- Encourage mixed use buildings and mixed use sites for greater economic diversity and more “eyes on the street”;
- Remove barriers and impediments to pedestrians, bicyclists and transit riders to provide safe and attractive access;
- Enhance and leverage existing corridor assets;
- Promote adaptive reuse of existing sound and unique properties;

- Encourage higher densities and mixture of land uses with more specific site and building design standards to promote sustainable development and allow expanded transportation options;
- Enhance crime prevention through education, physical improvements and expanded/targeted resources;
- Create a transit-focused corridor with enhanced density supporting future transit development/expansion; and
- Develop and implement of a comprehensive corridor marketing strategy.

1.11 – Surrounding Land Uses

The properties surrounding the project limits are predominantly residential to the north and south of Artesia Boulevard and west of Roseton Avenue. Mixed in among the existing single-family homes is Burbank Elementary School. The school is located just south of the study area along Roseton Avenue with fields backing up to a vacant former retail nursery site, which is located within the project limits. To the northeast of the project limits are business park developments and light industrial uses, including a Ready-Mix cement factory located between Alburtis and Corby Avenues near Pioneer Boulevard. Along Pioneer Boulevard, the properties fronting the street are zoned for General Commercial uses. Across Pioneer Boulevard to the east of the study area is a shopping center with retail and commercial businesses, and Faye Ross Junior High School.

1.12 – Environmental Setting

The Artesia Boulevard Corridor Specific Plan is a comprehensive planning document that will be applied to the approximately 21-acre area identified in the Project Description above. These areas are highly urbanized, with limited topography changes or existing vegetation. The area is composed of existing or abandoned commercial and industrial uses and is surrounded by land currently developed as residential, commercial, public, and industrial uses.

1.13 – Required Approvals

Specific Plan adoption, as well as the related General Plan Amendment, Zoning Map Amendment, and Specific Plan Recovery Fee are subject to the approval of the City of Artesia City Council.

1.14 – Other Public Agencies Whose Approval is Required

None.

1.15 – Framework for Environmental Analysis

This Initial Study has been prepared to analyze the potential effects resulting from adoption and implementation of the Artesia Boulevard Corridor Specific Plan, which involves both a Zoning Code and a General Plan amendment. The action of adopting amendments to these regulatory and policy documents will not directly create any environmental impact, as adoption will not result directly in any construction activity. The provisions of the Specific Plan will be applied to land use and development proposals either on a ministerial or discretionary basis, as dictated by the terms of the Specific Plan. No direct physical impacts on the environment are related to instituting

the new standards within the Specific Plan. Development proposals by land owners and their authorized agents will introduce the potential for physical impacts. Thus, the Specific Plan could facilitate projects, the construction of which could produce environmental effects. Potential impacts are analyzed in this Initial Study within this framework.

Tiering upon the General Plan Program EIR

Tiering involves the incorporation by reference of generalized discussions from a previous Environmental Impact Report (EIR) into a subsequent environmental document in order to focus the discussion within the subsequent document on issues specific to the action under review. Section 15152 of the CEQA Guidelines states clearly that agencies are encouraged to tier environmental analyses to avoid repetitive discussion within subsequent environmental documents and focus on issues directly related to the topic of evaluation. Using the tiering process does not allow for avoidance of a discussion related to issues directly affected by an action, but does limit the examination of issues to those that were not addressed in a previous EIR, and should incorporate measures designed to reduce or avoid environmental impacts. Tiering is appropriate in situations where the proposed action is generally consistent with the General Plan.

This Initial Study tiers upon the certified Final Program EIR (FEIR) for the 2010 City of Artesia General Plan Update (State Clearinghouse No. 2010041003). The Specific Plan has been prepared to implement General Plan goals, policies, and implementation programs. Thus, the impacts associated with the long-term implementation of the General Plan through the Specific Plan largely have been analyzed in the prior General Plan FEIR. Where the Specific Plan deviates from the General Plan policy with regard to increased FARs and allowance for residential development for certain quadrants, those impacts will be analyzed in this Initial Study. This Initial Study also focuses on assessing any changed conditions since 2010 certification of the General Plan FEIR that may result in new environmental effects not previously identified.

Section 2: Determination

2.1 – Environmental Factors Potentially Affected

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

2.2 – Determination

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☑	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Okina Dor, Redevelopment/Planning Director _____ Date _____

- This Page Intentionally Left Blank -

Section 3: Evaluation of Environmental Impacts

3.1 – Aesthetics

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

a) **No Impact.** No scenic vistas or other scenic resources have been identified within the City of Artesia.[1] The project does not propose the construction of any new structures that could block views. New development standards and regulations in the Specific Plan are intended to facilitate a safe and attractive environment and provide a distinct corridor identity. The proposed project would have no impact on scenic vistas.

b) **No Impact.** No scenic vistas or other scenic resources have been identified within the City.[2] The California Department of Transportation (Caltrans) does not list any highways within the City as officially designated scenic highways.[3] The project does not involve the removal or alteration of any scenic resources. Adoption and implementation of the project would have no impact on scenic resources within view of any State Scenic Highway.

c) **Less than Significant Impact.** The proposed project would establish site and architectural design regulations for future development projects within the project limits. These new regulations are intended to enhance the attractiveness of the corridor's streetscape and create a distinct identity for the area, implementing General Plan policies

[1] City of Artesia, City of Artesia General Plan 2030 EIR. September 2010. p. 5.3-3.
[2] Ibid.
[3] California Department of Transportation. California Scenic Highway Mapping System. (http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm) Consulted 6/29/2011.

regarding enhanced streetscape experiences for pedestrians, high-quality building design, and compatibility between new and existing uses and structures (Policy Action LU 1.3.1 and 1.3.2).[4] The proposed project would not affect any text in the General Plan relative to urban design. The visual character of the City will not be degraded through implementation of the proposed project; in fact one of the goals of the project is to enhance the visual character and economic appeal of the area.

The General Plan Program EIR considered short-term construction impacts and long-term impacts that could degrade the existing visual character or quality of the city. The analysis concluded that short-term construction impacts could be mitigated with Mitigation Measure AES-1, whereby staging of construction equipment for all non-residential development projects adjacent to residentially zoned properties shall be parked within the project site and screened. The proposed project would not affect this mitigation measure; future projects pursuant to the Specific Plan would also be subject to this measure. With regard to long-term impacts, the General Plan Program EIR concluded that following compliance with the proposed General Plan Update Policies and Policy Actions, the Code standards and regulations, and City's Design Review Approval process, future developments would result in less than significant impacts to the existing visual character of the development sites and their surroundings. The Specific Plan would not revise any of these policies; impacts associated with the Specific Plan would also be less than significant. The Specific Plan furthermore includes extensive design guidelines intended to provide for graceful transitions between uses, such as setbacks and stepback requirements that are increased for properties abutting a residentially zoned property. The proposed project also includes design guidelines for parking lots and parking structures, rooflines, enhanced street intersections, streetscapes, accessory structures, and open spaces and plazas. The effect of these design guidelines would serve to enhance the visual character of properties and public space within the project limits.

With regard to shade and shadow impacts, the General Plan Program EIR indicated that through the City's Design Review Approval process, subsequent development projects would be reviewed to evaluate building design and height limitations, and ensure that the City Code standards and regulations are met.[5] Compliance with local regulations would reduce impacts related to shade and shadow effects to less than significant.

d) **No Impact.** The proposed project does not involve any construction project. As noted in the General Plan Program EIR, the land uses anticipated to occur in Artesia consistent with the General Plan would involve primarily infill development of similar nature and scale as existing uses. Therefore, future development is not anticipated to create substantial light and glare, which would result in an appreciable difference from existing levels.[6] The Specific Plan implements General Plan land use policy and would not introduce new uses that would not otherwise have been allowed in the City and analyzed in the General Plan Program EIR. Furthermore, the Artesia Boulevard Corridor Specific Plan includes comprehensive development standards for lighting, including a requirement that spotlighting or glare from any site lighting from adjacent properties, and direct lighting at a specific object or target area is shielded. Any future development project undertaken will require review by designated review authorities to enforce these standards, as outlined in Section 6.3 (Administration) of the Artesia Boulevard Corridor Specific Plan. No impact would result.

[4] City of Artesia General Plan 2030. Land Use Sub-Element (p. LU-14).
[5] City of Artesia, City of Artesia General Plan 2030 EIR. September 2010. p. 5.3-15.
[6] City of Artesia, City of Artesia General Plan 2030 EIR. September 2010. p. 5.3-14.

3.2 – Agriculture and Forest Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 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?	☐	☐	☐	☑

The project occurs in a fully developed urban area that does not contain any agricultural, farmland, or forest uses. All properties located within or adjacent to the proposed Artesia Boulevard Corridor Specific Plan are zoned for commercial, industrial, or residential uses. No agricultural areas remain in the City of Artesia. The 16 parcels designated Agriculture-Single Family Residential (A-1) on the south side of the city, which have General Plan designations of Low Density Residential, are occupied with low density residential uses.

a-b) No Impact. There are no agricultural lands or uses in Artesia, including the project limits. The project limits are not identified as containing any farmland resources per the

Farmland Mapping and Monitoring Program.[7] There is no existing zoning for an agricultural use on or near the project limits. No Williamson Act contracts are active for parcels located adjacent to the project limits.[8] No impact would occur.

c) **No Impact.** There is no existing zoning for forest land on or near the project limits. All affected and adjacent properties are zoned for commercial, industrial, or residential uses. According to the California Department of Forestry and Fire Land Cover Mapping and Monitoring Program, no area within the project limits is designated as forest or timberland;[9] therefore, no impact to these resources would occur.

d) **No Impact.** There is no forest land located in or around the project limits; therefore, no impact to these resources would occur.

e) **No Impact.** The project limits and surrounding area is fully urbanized. There are no agriculture or forest land uses in this area. Therefore, no conversion of farmland or forest land to non-agricultural or non-forest uses will occur.

[7] California Department of Conservation. Farmland Mapping and Monitoring Program, 2008.
[8] California Department of Conservation. Williamson Act Program, 2004.
[9] California Department of Forestry and Fire Protection. Land Cover Mapping and Monitoring Program: Los Angeles County.2006.

3.3 – Air Quality

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑

a) Less than Significant Impact. A significant impact could occur if the proposed project conflicts with or obstructs implementation of the South Coast Air Basin 2007 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2007 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

The proposed project is a policy document designed to guide future development within the planning area over the long term. Development associated with implementation of the Specific Plan would result in short-term construction and long-term pollutant emissions. All future development projects would be required to comply with General Plan Goals, Policies, and Policy Actions, as well as General Plan EIR Mitigation Measure AQ-1 requiring

compliance with SCAQMD regulations and permitting requirements. The proposed Specific Plan is consistent with the recently updated General Plan. Although the proposed Specific Plan does increase allowable intensities in two quadrants and allow additional residential development in three quadrants, the assumed Specific Plan development levels would not exceed growth assumptions put forth in the General Plan Final Program EIR. The General Plan Final Program EIR concluded that the project would not conflict with an Air Quality Plan or contribute to new air quality violations, as the development levels permitted by the new General Plan were less than that permitted in the old General Plan, upon which the AQMP development projections were based. Furthermore, the proposed project provides the foundation for reducing vehicle miles traveled (VMT), which would thereby reduce overall criteria pollution due to the mixed use, pedestrian-orientation of the proposed Specific Plan. The allowance for mixed use in certain quadrants of the Specific Plan will allow the City to take advantage of the benefits afforded by a mix of residential and commercial uses to achieve a reduction in the need to travel by car for everyday trips and errands. By locating different land uses in close proximity to one another, air emissions from vehicles are minimized and sprawl is reduced. More information on sustainability and reduction of VMT is provided in Response to Checklist Item 3.7 (Greenhouse Gas Emissions). Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP and impacts will be less than significant.

b) Less than Significant Impact. A project may have a significant impact if project related emissions would exceed Federal, State, or regional standards or thresholds, or if project-related emissions would substantially contribute to an existing or project air quality violations. The proposed Project is located within the South Coast Air Basin, where efforts to attain state and federal air quality standards are governed by the South Coast Air Quality Management District (SCAQMD). Both the state of California (State) and the Federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as 'criteria pollutants'). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead. The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS are more stringent than the national AAQS.

Air pollution levels are measured at monitoring stations located throughout the air basin. Areas that are in nonattainment with respect to federal or state AAQS are required to prepare plans and implement measures that will bring the region into attainment. Table 3.3-1 (South Coast Air Basin Attainment Status) summarizes the attainment status in the Basin for the criteria pollutants. Discussion of potential impacts related to short-term construction impacts and long-term area source and operational impacts are presented below.

Construction Emissions

Future development and redevelopment could result in pollutant emissions from demolition and construction activities. The most common construction related emission is particulate matter caused by grading activities. Another common emission is the ozone precursor NO_X that is generated through combustion of diesel fuel in construction equipment. Emissions of reactive organic gases, another ozone precursor, are common from painting and other coating activities.

Table 3.3-1: South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	N/A	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Pb	Attainment	Attainment

Sources: CARB 2010, USEPA 2010

The proposed project, a policy document, does not authorize any specific development activity. As such, it is not reasonable to analyze construction impacts of unknown development projects. Future individual development projects would be evaluated on a project-by-project basis to through the City's standard CEQA review process; therefore no new or more significant impacts relative to construction impacts associated with air quality standards would result from implementation of the proposed project.

Operational Emissions

Long-term operational emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the project area. CalEEMod model was utilized to estimate emissions for existing land uses and future conditions, based on potential buildout of the proposed Specific Plan. Trip generation is based on the traffic analysis prepared by Kimley Horn & Associates (see Appendix B). Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed warehouses. Energy demand emissions result from use of electricity and natural gas. Emissions from area sources were estimated using CalEEMod using program default values for area and energy demand emissions. These emissions estimates are summarized in Table 3.3-2 and 3.3-3 and provided in detail in Appendix A: Air Quality Analysis.

Table 3.3-2: Existing Emissions

Source	ROG	NO_X	CO	SO_2	PM^{10}	$PM^{2.5}$
Summer						
Area Sources	7.02	0.05	3.35	0.01	0.43	0.43
Energy Demand	0.10	0.91	0.75	0.01	0.07	0.07
Mobile Sources	40.03	84.10	370.59	0.46	50.83	3.46
Summer Total	*47.15*	*85.06*	*374.69*	***0.48***	*51.33*	*3.96*
Winter						
Area Sources	7.02	0.05	3.35	0.01	0.43	0.43
Energy Demand	0.10	0.91	0.75	0.01	0.07	0.07
Mobile Sources	41.33	90.98	376.04	0.42	50.88	3.51
Winter Total	***48.45***	***91.94***	***380.14***	*0.44*	***51.38***	***4.01***

Source: Hogle-Ireland, 2011.

Table 3.3-3: Future (Net Increase)

Source	ROG	NO_X	CO	SO_2	PM^{10}	$PM^{2.5}$
Summer						
Area Sources	18.82	0.56	39.85	0.08	5.13	5.13
Energy Demand	0.01	0.58	0.29	0.00	0.05	0.05
Mobile Sources	20.92	51.50	142.20	0.48	50.47	2.83
Summer Total	*39.81*	*52.64*	*182.34*	***0.56***	*55.65*	*8.01*
Winter						
Area Sources	18.82	0.56	39.85	0.08	5.13	5.13
Energy Demand	0.07	0.58	0.29	0.00	0.05	0.05
Mobile Sources	20.96	51.18	150.17	0.44	50.49	2.84
Winter Total	***39.85***	***52.32***	***190.31***	*0.52*	***55.67***	***8.02***
Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Significant?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Hogle-Ireland, 2011.

Based on the buildout estimates, total future emissions would increase, but increases would not be significant. The model preliminarily estimated that total emissions of NO_x would increase above the level of significance. However, there are a number of features of the Specific Plan, as well as other regulatory requirements, which will reduce anticipated levels of NO_x to a less than significant level. The California Air Pollution Control Officers Association (CAPCOA) has published a guidance document to assist in the quantification of design features and mitigation measures that reduce greenhouse gas emissions.[10] These mitigation measures are also applicable to the reduction of NOx, resulting from mobile emissions. Specifically, LUT-1, LUT-3, LUT-5, and SDT-1, as outlined in Checklist response 3.7a, are in place to reduce mobile emissions of NOx within the Plan area below the applicable threshold. Adjusting for these measures, impacts associated with all criteria pollutants would be less than significant.

c) **Less than Significant Impact.** As identified above, cumulative short-term, construction-related emissions and long-term, operational emissions from the project would not contribute considerably to any potential cumulative air quality impact as emissions would not exceed any SCAQMD daily threshold. Furthermore, any projects occurring in the project area as well as other concurrent construction projects and operations in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements. Impacts will be less than significant.

d) **Less than Significant Impact.** Sensitive receptors are those segments of the population that are most susceptible to poor air quality such as children, the elderly, the sick, and athletes who perform outdoors. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The nearest land use that could be considered as a "sensitive receptor" is Burbank Elementary School and local existing and future residential uses. In general, the proposed project would not generate toxic or criteria pollutant emissions, as limited no new industrial uses are permitted, pursuant to Table 2-2 of the Specific Plan, Permitted Uses by Quadrant. As noted in the responses to Checklist item 3.2b-c, above, long-term emissions associated with project buildout would be below the daily thresholds for all criteria pollutants. The

[10] California Air Pollution Control Officers Association. Quantifying Greenhouse Gas Mitigation Measures. August 2010.

proposed project, therefore, would have a less than significant impact on sensitive receptors due to criteria pollutant emissions.

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. In general, SCAQMD and the California Department of Transportation *Project-Level Carbon Monoxide Protocol* (CO Protocol) recommend analysis of CO hotspots when a project increases traffic volumes at an intersection that is operating at LOS D or worse by more than two percent.[11] In addition, the SCAQMD *Air Quality Handbook* provides a method for estimating carbon monoxide levels at impacts intersections in Section 5.3 of the Handbook. Based on the initial screening procedures (see Appendix A), potentially significant impacts related to carbon monoxide emissions were identified at the intersections of Artesia Boulevard at Gridley Road and Artesia Boulevard at Pioneer Boulevard; therefore, carbon monoxide emissions were modeled in accordance with the CO Protocol.

Carbon monoxide increases based on the peak evening cumulative traffic increases from ambient traffic volumes and the proposed project in the year 2030 at the intersections of Artesia Boulevard at Gridley Road and Artesia Boulevard at Pioneer Boulevard were modeled using the CALINE4 (CL4) software as recommended by the Caltrans CO Protocol. CL4 is a linear dispersion model that uses roadway geometry, worst-case meteorological parameters, anticipated traffic volumes, and sensitive receptor positions to predict carbon monoxide concentrations in addition to ambient carbon monoxide levels.[12] Peak evening traffic volumes were utilized because this represents the greatest traffic contribution from the project. The resulting concentrations levels are compared to the State and Federal one-hour carbon monoxide standards to determine if a localized violation would occur, 20 ppm and 35 ppm respectively, and the State and Federal eight-hour standard of 9 ppm (based on a persistence factor of 0.73). It must be noted that this model assumes that a northbound right-turn lane will be converted to a thru/right lane on Pioneer Boulevard as identified in the project traffic study and Mitigation Measure T-1.

CT-EMFAC2007, a modified version of EMFAC2007 developed for Caltrans projects, was utilized to estimate average hourly emissions, as recommended by the CO Protocol. Meteorological inputs include an ambient temperature of 26.2 C that includes a +5 degree evening increase pursuant to the Caltrans CO Protocol, a worst-case wind angle assessment with a standard deviation of 10 degrees, and a wind speed of 0.5 meters per second. Average ambient carbon monoxide levels are set at 5.1 ppm based on projected future year 1-hour concentrations for the South Coastal Los Angeles County Source Receptor Areas (SRA) provided by SCAQMD.

Four receptors were modeled at each corner of each intersection at 3 meters from curb to identify 'worst-case' emissions impacts. Table 3.3-4 identifies the receptor, the project intersections, carbon monoxide increase from the cumulative traffic volumes, and the total carbon monoxide concentration accounting for ambient levels. The results of the model indicate that a maximum increase of 0.5 parts per million (ppm) will occur at any intersection and that no sensitive receptor will be exposed to carbon monoxide levels that exceed the 1-hr or 8-hr State or Federal AAQS. Impacts will be less than significant.

[11] California Department of Transportation. Transportation Project-Level Carbon Monoxide Protocol. 1997
[12] California Department of Transportation. Users' Guide for CL4. June 1998

Table 3.3-4: Carbon Monoxide Concentrations

Intersection	Receptor	Concentration Increase (ppm)	1-hr Concentration (ppm)	8-hr Concentration (ppm)
Artesia @ Gridley	R1	0.2	5.3	3.9
	R2	0.3	5.4	3.9
	R3	0.3	5.4	3.9
	R4	0.3	5.4	3.9
Artesia @ Pioneer	R1	0.4	5.5	4.0
	R2	0.5	5.6	4.1
	R3	0.5	5.6	4.1
	R4	0.4	5.5	4.0

Source: Hogle-Ireland, 2011.

e) **No Impact.** With regard to existing conditions, agricultural uses are identified as land use associated with odor complaints.[13] It should be noted that there are no agricultural uses in the project limits. The California Dairy, currently located within the project limits, is an active condensing and bulk fluid plant and does not contain live animals onsite. No odor impacts associated with agricultural uses would occur.

The Artesia Boulevard Corridor Specific Plan creates new development and land use regulations for the properties within the project limits. The allowable uses generally will consist of residential, commercial, and public/institutional uses, none of which would be expected to create unusual substantial odors. All future uses and activities will be required to comply with City regulations and policies regarding odor control.

Potential operational airborne odors could be created by cooking activities associated with the residential and commercial (i.e., food service) uses within the project limits. These odors would be similar to existing residential and food service uses throughout the City and would be confined to the immediate vicinity of the new buildings. Restaurants are also typically required to provide ventilation systems that avoid substantial adverse odor impacts. The other potential source of odors would be new waste receptacles within the community. The receptacles would be stored in areas and in containers, as required by City and County Health Department regulations, and be emptied on a regular basis, before potentially substantial odors have developed.

[13] South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993

3.4 – Biological Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑

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

a) **No Impact.** The City of Artesia, including the project limits, is highly urbanized and built out, with no forest, river, wildlife, or similar resources. Biological resources in Artesia are almost nonexistent due to the urban nature of the city and surrounding area. There are essentially no areas within the city that have been undisturbed.[14] The proposed project does not propose to allow development on any area that is not already urbanized; all development will consist of infill development.

No rare or endangered plant or animal species have been identified within the city. There are no significant natural habitats in the city. Wildlife species present in the city are typical of any disturbed, highly urbanized setting and are not considered rare, endangered, or threatened.[15] Therefore, the project will have no impact on endangered, threatened, or rare species or their habitats; or locally designated species.

b,c) **No Impact.** The city is highly urbanized and built out. What open space does exist is in the form of managed parks and recreational areas. The city is devoid of wetland and riparian habitat. The city's most significant plant resources are imported trees and ornamental plants.[16] No impact would occur.

d) **No Impact.** Given its built-out, urban character and the fact that Artesia is surrounded by urban communities, no wildlife dispersal or migration corridors or wildlife nursery sites pass through or exist within Artesia, including the project limits. Thus, the project will have no impacts on the migration of native or wildlife species.

e,f) **No Impact.** No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applies to any property within the project limits.[17, 18] The project will have no impact on preservation or conservation plans.

[14] City of Artesia General Plan 2030. Open Space and Conservation Sub-Element (p. OS-2).
[15] City of Artesia General Plan 2030. Open Space and Conservation Sub-Element (p. OS-8).
[16] City of Artesia General Plan 2030. Open Space and Conservation Sub-Element (p. OS-8).
[17] California Department of Fish and Game. Natural Community Conservation Planning. (http://www.dfg.ca.gov/habcon/nccp/status/) Consulted 7/26/2011.
[18] U.S. Fish and Wildlife Services. Habitat Conservation Plans: Regional Summary Report. (http://ecos.fws.gov/conserv_plans/) Consulted 7/26/2011.

3.5 – Cultural Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☑	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑

The adoption of the Artesia Boulevard Corridor Specific Plan and amendments to General Plan and Zoning Maps will not authorize construction or physically disturb any site within the City. The Community Culture and Economy Sub-Element in the City's General Plan contains policies to enhance and protect resources that have cultural and historic significance. In addition to General Plan policies, the General Plan FEIR includes mitigation measures that would reduce potential impacts to undocumented archaeological resources and human remains to less than significant levels. The proposed project would have no impact on these policies or implementation measures.

a) **No Impact.** The 2010 General Plan EIR reported that no historic resources have been identified within the city.[19] This project would not change or have any effect upon the City's existing preservation objectives or policies. This project would not authorize any adverse impacts to a historical resource.

b) **Less than Significant Impact with Mitigation Incorporation.** No archaeological resources have been identified within the City. In the event a material of potential archaeological significance is uncovered during construction, regulatory requirements and mitigation from the General Plan EIR are in place (Mitigation Measures CR-1 and CR-2).[20] The proposed project would not change or have any effect on these existing regulations or mitigation measures. To ensure that ground disturbance activities associated with construction of future new development do not cause a substantial adverse change in the significance of a previously unknown archeological resource, the following mitigation measure is included:

Mitigation Measure

[19] City of Artesia General Plan 2030 Final Program EIR (p. 5.10-10).
[20] City of Artesia General Plan 2030 Final Program EIR (p. 5.10-10).

C-1 In the event that archeological resources are unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-meter radius of the area of discovery and shall retain a qualified archaeologist to evaluate the significance of the finding and appropriate course of action. Salvage operation requirements pursuant to Section 15064.5 of the *CEQA Guidelines* shall be followed. After the find has been appropriately mitigated, work in the area may resume.

If, during construction phases of future projects within the plan area, any archeological resources are unearthed, General Plan EIR mitigation measures and the above mitigation measure would reduce any impacts on archeological resources to a less than significant level.

c) No Impact. The city does not contain unique geologic features and is not known to contain documented paleontological resources. It is unlikely that unknown paleontological resources would exist within the City given its geology, and furthermore, properties within the City and the project limits have been subject to extensive ground disturbance and/or development. As such any paleontological resources, which may have existed within the City, have likely been disturbed.[21] The Specific Plan does not propose to change the General Plan land use designation or the zoning for any parcel that was previously identified for preservation or open space; no impacts to paleontological resources are anticipated.

d) No Impact. This project would not authorize any plans for development/construction or redevelopment; therefore, it would have no impact on human remains. Procedures to notify the County Coroner and Native American representatives are implemented in accordance with California Health and Safety Code Section 7050.5 for all development projects within the city. This requirement is furthermore reinforced through General Plan EIR Mitigation Measure CR-3.[22] The proposed project would have no effect on this existing regulatory standard or General Plan EIR mitigation measures; therefore, this project would have no effect involving potential disturbance or recovery of human remains.

[21] City of Artesia General Plan 2030 Final Program EIR (p. 5.10-10).
[22] City of Artesia General Plan 2030 Final Program EIR (p. 5.10-12).

3.6 – Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☑	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☑	☐
ii) Strong seismic ground shaking?	☐	☐	☑	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☑	☐
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit 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?	☐	☐	☑	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☐	☑	☐
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?	☐	☐	☐	☑

a) **Less than Significant Impact.** There are no mapped surface or subsurface faults that traverse the city and the city is not listed within a State designated Alquist-Priolo Earthquake Fault Zone.[23] Therefore, surface fault rupture is unlikely to occur in the project limits. A less than significant impact is anticipated in this regard.

The proposed project consists of regulations and policies that will not directly result in any new construction. Based on the project's location within the seismically active Southern California region, existing and future structures would be susceptible to ground shaking events. Any future construction will be required to employ building standards set forth in the City's Building Code, including specific provisions for seismic design of structures. The General Plan FEIR concluded that impacts associated with seismic-related ground shaking would be reduced to less than significant due to mandatory compliance with building codes, policies contained in the Artesia General Plan, and mitigation measures GEO-1 and GEO-2. These mitigation measures require site-specific geologic investigation of seismic and geotechnical hazards potential for new development projects within the city.

The entire City of Artesia (including the project limits) is subject to liquefaction. The General Plan 2030 Program FEIR concluded that impacts associated with liquefaction would be reduced to a less-than-significant level due to mitigation measures GEO-1 and GEO-2 and Community Safety Element policies and policy actions.

The proposed project would not change or have any effect on these existing regulations or mitigation measures; no new impacts associated with ground shaking or liquefaction would occur with implementation of the Specific Plan or related General Plan and Zoning Map amendments.

The topography of the project limits is relatively flat, with no canyons or steep topographic incisions. Impacts involving landslides or mudflows would not occur.

b) **Less than Significant Impact.** The project consists of adoption of regulatory and policy documents that will not result directly in the construction of any development. The City of Artesia and the project limits in particular are highly urbanized, with very few vacant parcels that have the potential to generate significant erosion or topsoil loss. Areas available for new development or redevelopment consist of infill sites currently covered by disturbed vegetation or impermeable surfaces. No new areas previously identified for open space or preservation are proposed to allow new development; the project limits consists solely of areas previously identified for development. The proposed project will not put any policies in place that would increase soil erosion or result in the loss of topsoil. Moreover, all future development projects would be subject to compliance with Artesia Municipal Code Title 6 Chapter 7, *Storm Water Management and Discharge Control*, which requires compliance with NPDES standards and implementation of Best Management Practices (BMP), in order to minimize short- and long-term erosion. Impacts would be less than significant in this regard.

c) **Less than Significant Impact.** The conditions favorable for hazards associated with unstable geologic unit or soil (landslides or subsidence/collapse) are not present in Artesia.[24] The proposed project will not directly result in the construction of buildings within any area susceptible to liquefaction, subsidence, landslide, or soil collapse hazards. All development projects constructed pursuant to the Specific Plan will be required to

[23] City of Artesia General Plan 2030 Final Program EIR (p. 5.7-5).
[24] City of Artesia General Plan 2030 Final Program EIR (p. 5.7-16).

adhere to the standards contained in the City's Building Code to prevent hazardous soil conditions that could lead to building failure. The project does not involve any changes to these regulations. Impact from liquefaction, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

d) **Less than Significant Impact.** The soils present within Artesia are sand, silt, and clay silt soils, which have a high expansion potential.[25] Artesia General Plan Mitigation Measure GEO-1 requires that all new development have a site-specific geology investigation of seismic and geotechnical hazards; this will ensure that impacts related to expansive soils impacts are evaluated on a project-by-project basis. Impacts involving expansive soils creating risk would be less than significant.

e) **No Impact.** The proposed project does not involve septic tanks or other soil-based wastewater disposal systems. Future development within the project limits would connect to the existing wastewater infrastructure. As sewers are available for the disposal of wastewater, the use of septic tanks or alternative wastewater disposal systems would not be required. No impact would occur.

[25] City of Artesia General Plan 2030 Final Program EIR (p. 5.7-19).

3.7 – Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

a) Less Than Significant Impact. Climate change is the distinct change in measures of climate for a long period of time.[26] Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of greenhouse gases (GHG) and changes to the planet's surface. Greenhouse gases differ from other emissions in that they contribute to the "greenhouse effect". The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

GHG emissions for the project were quantified utilizing the California Emissions Estimator Model (CalEEMod) version 2011.1.1 to determine if the project could have a cumulatively considerable impact related to greenhouse gas emissions (see Appendix A, Air Quality Modeling Data). A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the South Coast Air Quality Management District (SCAQMD). AB 32 (the California Global Warming

[26] United States Environmental Protection Agency. Frequently Asked Questions About Global Warming and Climate Change. Back to Basics. April 2009.

Solutions Act of 2006) requires the reduction of GHG emissions to 1990 levels, which would require a minimum 28.5 percent reduction in "business as usual" GHG emissions for the entire State. The General Plan EIR utilized this reduction as a threshold of significance; should the project reduce its GHG emissions by 28.5 percent or greater, impacts would be less than significant. To maintain consistency with the General Plan EIR analysis, the analysis summarized below for the proposed project utilizes the same threshold.

Table 3.7-1 (Greenhouse Gas Emissions Inventory: Existing Emissions) summarizes annual greenhouse gas emissions based on existing conditions and uses within the plan area. Table 3.7-2 (Greenhouse Gas Emissions Inventory: Future Emissions – Net Increase, Business as Usual) summarizes annual greenhouse gas emissions based on future build-out estimates for the Specific Plan area. Table 3.7-2 assumes that development will occur under the "business as usual" scenario, without accounting for sustainability measures inherent in the Specific Plan that would actually reduce emissions.

Table 3.7-1: Greenhouse Gas Emissions Inventory: Existing Emissions

Source	Emissions (MT/year)*			
	CO2	CH4	N20	CO2E
Areas sources	5.95	0.00	0.00	6.04
Energy Sources	944.51	0.04	0.02	950.39
Mobile Sources	6,750.54	0.42	0.00	6,759.32
Waste Sources	896.83	53.00	0.00	2,009.86
Water Usage	1,528.55	12.11	0.32	1,883.66
TOTAL	10,126.38	65.57	0.34	11,609.27

*Please note that slight addition errors may occur due to rounding

Source: Hogle-Ireland, 2011.

Table 3.7-2: Greenhouse Gas Emissions Inventory: Future Emissions – Net Increase, Business as Usual

Source	Emissions (MT/year)*			
	CO2	CH4	N20	CO2E
Areas sources	71.53	0.03	0.00	72.67
Energy Sources	1,273.81	0.05	0.02	1,281.77
Mobile Sources	7,585.64	0.22	0.00	7,590.34
Waste Sources	59.77	3.53	0.00	133.95
Water Usage	138.59	0.74	0.02	160.40
TOTAL	9,129.34	4.57	0.04	9,239.13

*Please note that slight addition errors may occur due to rounding

Source: Hogle-Ireland, 2011.

However, there are a number of features of the Specific Plan, as well as other regulatory requirements, which will reduce anticipated GHG emissions associated with the proposed project. The California Air Pollution Control Officers Association (CAPCOA) has published a guidance document to assist in the quantification of design features and mitigation measures that reduce greenhouse gas emissions.[27] Specifically, the proposed project would further sustainability and reduce greenhouse gas emissions in the following ways (note titles of each paragraph correlate to mitigation measures identified in the CAPCOA document):

[27] California Air Pollution Control Officers Association. Quantifying Greenhouse Gas Mitigation Measures. August 2010.

Increase Density (LUT-1)
The proposed Specific Plan will result in an increase in jobs within the Plan area. Increased density reduces the distance people travel and provides greater options for their mode of travel. With a net increase of approximately 353 new jobs, an increase of 27.76 jobs per acre would occur. This is a 7.6 jobs per acre increase when compared to typical development, as identified in the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures*.

Increase Diversity (LUT-3)
The proposed Specific Plan supports higher-density, vertical (up to 3-stories), mixed-used development in an area currently characterized by single- or two-story, separated lands uses. Having different types of land uses near one another can decrease vehicle miles traveled (VMT) since trips between lands use types are shorter and may be accommodated by non-auto modes of transport. The increase in diversity is supported first by the Specific Plan Vision (see Page 34) that supports an eclectic and interesting mix of land uses with flexible development standards while ensuring compatibility and connectivity to adjacent land uses. Specifically, the Land Use Plan envisions Quadrants 1, 3, and 4 as mixed-use areas and permits live/work land uses (Section 2.5.1). Mixed-use development is guided by the Plan's design standards (Section 3.2.9) to include integrated, vertical structures tied together with pedestrian linkages.

Increase Transit Accessibility (LUT-5)
The proposed Specific Plan and associated increase in population and employment densities will result in an increase in the number of people with access to bus facilities. The use of transit reduces VMT. Norwalk Transit provides transit service within the Specific Plan area (Route 8). Route 8 begins at the Whittier Historic Depot and travels south to the Norwalk/Santa Fe Metrolink Station, then proceeds south and west through the project area, ending at the Cerritos Mall. Headways at each stop are approximately one hour throughout the day (with no weekend service). In addition, the Metropolitan Transit Authority (Metro) provides bus service within the vicinity of the Specific Plan area. A bus stop for Route 62 is located at the corner of Pioneer Boulevard at Artesia Avenue which is located on the eastern boundary of the Plan area. This route has approximately 15 minute headways from approximately 6:00 A.M. to 11:00 P.M. during the weekday between Downtown Los Angeles and Hawaiian Gardens. Norwalk Route 2 also travels along Pioneer Boulevard along the project area boundary, with bus stops on either side of Artesia Boulevard.

Improve Pedestrian Network (SDT-1)
The proposed Specific Plan supports pedestrian mobility both within the project area and as it connects to the greater vicinity. Providing an integrated pedestrian network within the Plan area supports walking instead of driving and thereby reducing VMT. This is supported in the Enhanced Intersections standards of the Specific Plan (Section 3.2.7) that are designed to provide ease of access and safety to pedestrians at the three major intersections within the Plan area. Improving safety and access at the Plan's outer intersections would promote walkability for both persons entering and leaving the Plan area on foot. The Streetscape standards (Section 3.2.13) of the Specific Plan are designed to provide shaded pedestrian pathways and meandering sidewalks and landscape protection to pedestrians.

Install Low-Flow Water Fixtures (WUW-1)
The proposed Specific Plan supports use of green construction methods and technologies in future development (Section 3.2.23.A). This is consistent with the recent California Building Code (CBC) CALGREEN sustainability requirements that went into effect in

January 2011. Based on the requirements of CBC and the standards of the Specific Plan, all future development is assumed to include low-flow bathroom faucets, kitchen faucets, toilets, and showers. Use of low-flow fixtures directly reduces water demand and indirectly reduces the energy required to transport water to the Plan area.

Use Water Efficient Landscape Systems (WUW-4)
The proposed Specific plan supports installation of drought tolerant and native landscaping within the Plan area (Section 3.2.23.B). This type of landscaping is assumed to include water-efficient irrigation systems, consistent with the State *Water Conservation in Landscaping Act*. Use of water-efficient irrigation systems directly reduces water demand and indirectly reduces the energy required to transport water to the Plan area.

Institute Recycling Services (SW-1)
Pursuant to the State *Integrated Waste Management Act* (AB939) and the upcoming mandatory commercial recycling requirement of AB32 (effective January 2012), all uses within the Specific Plan area are assumed to recycle a minimum of 50 percent of olid waste. Recycling helps reduce GHG emissions by reducing solid waste transportation demand and decomposition of solid waste in landfills.

Table 3.7-3 (Greenhouse Gas Emissions Inventory: Future Emissions – Net Increase, with 'Mitigation') summarizes annual greenhouse gas emissions based on future build-out estimates for the Specific Plan area, and considering the above inherent design features of the Specific Plan that serve as mitigation.

Table 3.7-3: Greenhouse Gas Emissions Inventory: Future - Net Increase, with 'Mitigation'

Source	Emissions (MT/year)*			
	CO2	CH4	N20	CO2E
Areas sources	71.53	0.03	0.00	72.67
Energy Sources	1,273.81	0.05	0.02	1,281.77
Mobile Sources	4,985.84	0.16	0.00	4,989.12
Waste Sources	29.88	1.77	0.00	66.97
Water Usage	117.50	0.59	0.02	134.99
TOTAL	6,478.56	2.60	0.04	6,545.52

*Please note that slight addition errors may occur due to rounding
Source: Hogle-Ireland, 2011.

Table 3.7-4 (Greenhouse Gas Emissions Significance Threshold Summary) compares greenhouse gas emissions under the business as usual scenario to those emissions under the 'Mitigation' scenario that considers the Specific Plan's sustainability features.

Table 3.7-4: Greenhouse Gas Emissions Significance Threshold Summary

Source	Emissions (MT/year)*			
	CO2	CH4	N20	CO2E
BAU	9,129.34	4.57	0.04	9,239.13
'Mitigated'	6,478.56	2.60	0.04	6,545.52
Total Reduction	2,650.78	1.97	0.00	2,693.61
Percentage (%)	29.04	43.11	0.00	29.15

*Please note that slight addition errors may occur due to rounding
Source: Hogle-Ireland, 2011.

The proposed project would not change or conflict with any General Plan policies that would reduce greenhouse gas emissions; the project would, in fact, implement these

policies. Allowing for mixed-use development within the project limits will facilitate an integrated planning approach designed to connect residential uses and everyday goods and service needs in central locations, thereby reducing the vehicle trips associated with shopping, entertainment, and dining; reducing air quality impacts and greenhouse gas emissions; promoting healthier lifestyles; and lessening the impact on the surrounding circulation system.

The proposed project does not include any regulations or other policies that would encourage inefficient building practices. The proposed project would result in development levels generally consistent with those analyzed in the General Plan EIR. The proposed project does not authorize any specific development project; thus, adoption would not directly generate any greenhouse gas emissions. Review of future projects will continue to be carried out to ensure that the projects are consistent with all General Plan goals, policies, and policy actions including those that help the City contribute to air quality and regional greenhouse gas reduction efforts. Adherence to such policies and guidelines and considering the inherent Specific Plan design factors itemized above in relation to the CAPCOA greenhouse gas mitigation guidance would reduce potential impacts to a less-than-significant level.

b) **Less Than Significant Impact.** Standards and regulations passed by the California legislature either directly or indirectly affect greenhouse gas emissions and climate change. Of those regulations, Assembly Bill 32, the California Climate Solutions Act of 2006 (AB 32), is considered the most important legislation designed to decrease greenhouse gas emissions. AB 32 requires that statewide greenhouse gas emissions be reduced to 2000 levels by the year 2010, 1990 levels by the year 2020, and to 80 percent less than 1990 levels by year 2050. These reductions will be accomplished through an enforceable statewide cap on greenhouse gas emissions that will be phased in starting in 2012. In 2008, Senate Bill 375 (SB 375) was adopted in part to implement AB 32 goals for reduction of transportation-based greenhouse gas emissions through the direct linkage between regional transportation and land use/housing planning.

As discussed in the response to Section 3.7a above, the proposed project will implement General Plan policy and will introduce mixed uses along the Artesia Boulevard Corridor. Due to the mix of uses allowed and encouraged by the Specific Plan, the project will help achieve the goals of reducing vehicular trips and thereby help reduce total vehicular-based greenhouse gas emissions. The project is consistent with the City's General Plan and does not conflict with AB 32, SB 375, or any plans or programs that have been adopted to achieve those legislative mandates. In addition, the City is participating with SCAG in the development of the regionwide Sustainable Communities Strategy to implement SB 375 by reducing vehicular-based greenhouse gas emissions. Impact would be less than significant.

3.8 – Hazards and Hazardous Materials

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☑	☐

a) **No Impact.** The proposed project consists of regulatory and policy documents that will not directly result in any new construction. The proposed changes generally implement General Plan policies and programs. The new development standards in the Specific Plan establish requirements for future projects regarding the appearance, location, and allowable uses within the four quadrants that comprise the Specific Plan area. Adoption and implementation of the new standards will not provide exceptions to existing laws governing the use and disposal of any hazardous materials. As noted in the General Plan Program EIR, compliance with measures established by Federal, State, and local regulatory agencies is considered adequate to offset the negative effects related to the use, storage, and transport of hazardous materials in the City.[28] In addition, policies and policy actions in the General Plan address hazardous materials and safety. The project would not conflict with any of these policies, and would not exempt any future development from the City's programs to control and safely dispose of hazardous materials and wastes. With implementation of standard City practices and Federal, State, and local policies regarding hazardous waste and hazardous materials, no impact from the use, transport, or disposal of hazardous wastes or materials is anticipated.

b) **Less than Significant Impact.** The proposed project does not involve any development activity. The General Plan Final Program EIR concluded that compliance with measures established by Federal, State, and local regulatory agencies is considered adequate to offset the negative effects related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the City. Additional General Plan goals, policies, and implementation measures, as well as mitigation measures contained in the General Plan Final Program EIR (HAZ-1 through HAZ-4), further reduce accidental release of hazardous materials impacts to a less-than-significant level.[29] The proposed project does not revise any of these policies and does not allow uses generally associated with hazardous materials, beyond general hazards associated with residential and commercial development. Individual development projects will be required to comply with City, Federal, and State requirements and any other applicable City regulations relating to hazardous materials. Impact would be less than significant.

c) **Less than Significant Impact.** Schools are located near and adjacent to the project limits, including Luther Burbank Elementary School located just south of the project limits on Roseton Avenue. Although residential development would be allowed in areas where it was previously not allowed, the proposed Specific Plan would not authorize any new kinds

[28] City of Artesia General Plan 2030 Final Program EIR (p. 5.9-19 to 5.9-21).
[29] City of Artesia General Plan 2030 Final Program EIR (p. 5.9-21 to 5.9-27).

of land uses in the City or any new or more dangerous processes that involve use, transport, storage, generation or disposal of hazardous substances or wastes. All land uses that would be permitted as a result of the proposed Specific Plan were anticipated citywide by the General Plan and the General Plan Program EIR. Impacts to existing or proposed schools would be less than significant.

d) **No Impact.** The Geographic Environmental Information Management System (GEIMS) is a data warehouse that tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies using GeoTracker. As of July 26, 2011, the GeoTracker search results indicate two sites within the project limits, both of which are listed as "closed" cases, indicating that cleanup has been completed.[30] The California Department of Toxic Substances Control's EnviroStor database provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. As of July 26, 2011, the EnviroStor search results indicate there are no sites within the City of Artesia or the project limits in particular.[31] Since the proposed project involves no physical ground-disturbing activities or hazardous activities, and no known hazardous sites exist in the project limits, no impact on a site listed on the Cortese database will occur. Any future development project that occurs pursuant to Specific Plan regulations would be evaluated on a project-by-project basis to determine if such development is occurring on a site listed on a current regulatory hazardous materials site list. No impact will result from the proposed project.

e, f) **No Impact.** There are no public airports or public use airports located within 2.0 miles of the City of Artesia. Additionally, there are no private airstrips within the vicinity of the city.[32] The two closest air facilities to the City are the Los Alamitos Armed Air Forces Reserve Center located approximately nine miles to the south, and the Fullerton Municipal Airport located approximately nine miles to the east. Therefore, there would be no safety hazards associated with airports or airstrips for people residing or working in the project limits. No impact would occur in this regard.

g) **No Impact.** The Artesia Emergency Operations Plan outlines emergency response actions in the event of a large-scale disaster, such as a hazardous materials emergency. The proposed project will not directly result in any new construction. All future development in the City would be subject to compliance with the General Plan Policies and Policy Actions. The General Plan Program EIR requires traffic control plans for new development to ensure that construction would not interfere with emergency response/evacuation plans (Mitigation Measure HAZ-5). No change or interference with these emergency response plans or related policies will occur as associated with the project. The Specific Plan does not propose any changes to the primary circulation system that could affect evacuation plans. No impact would occur in this regard.

h) **Less than Significant Impact.** The areas within the project limits are fully urbanized with little natural open space and vegetation. Surrounding areas within Artesia and surrounding cities of Cerritos and Norwalk are entirely urbanized as well; therefore, wildland fire hazards within the project limits are minimal. The Specific Plan does not propose to allow any new development in areas formerly identified for open space or preservation. Impact from wildland fire would be less than significant.

[30] GeoTracker. https://geotracker.waterboards.ca.gov/ Accessed July 26, 2011.
[31] EnviroStor. http://www.envirostor.dtsc.ca.gov/public/ Accessed July 26, 2011.
[32] City of Artesia General Plan 2030 Final Program EIR (p. 5.9-19).

3.9 – Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☑	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☑	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☑	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☑	☐
f) Otherwise substantially degrade water quality?	☐	☐	☑	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☑	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☑	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

a) **No Impact.** The proposed project does not involve any development activity and thus will not involve any discharges to water bodies. Development projects will be required to comply with the City's local procedures (Artesia Municipal Code Title 6 Chapter 7, Storm Water Management and Discharge Control), as well as requirements of the National Pollutant Discharge Elimination System (NPDES) permit program of the Federal Clean Water Act to control storm water runoff and prevent violations of regional water quality standards. No impact on water quality standards or waste discharges would occur. Compliance with these standards and the General Plan Policy Action CFI 3.1.4, which requires continued participation in the NPDES program, would minimize potential construction-related water quality impacts to a less than significant level.

b) **Less than Significant Impact.** The City of Artesia receives it potable water service from the Golden State Water Company (GSWC), which owns and operates the Artesia System. The Artesia System serves most residents in the Cities of Artesia and Hawaiian Gardens, and portions of the Cities of Lakewood and Long Beach.[33] According to the 2010 Urban Water Management Plan, GSWC currently obtains its water supply for the Artesia System from three primary sources: imported water, recycled water, and GSWC operated groundwater wells. The majority of the water supply for the Artesia System, in 2010, came from groundwater (92 percent). GSWC's water supply is projected to increase by about 27 percent from 2010 to 2035 to meet projected water demands which will be met by groundwater (use of which is projected to decrease between 2010 and 2015 from 5,166 ac-ft/yr to 5,000 ac-ft/yr and then remain constant between 2015 and 2035), the expected implementation of conjunctive use groundwater storage programs, and by increases in imported water. GSWC has adjudicated allowed groundwater pumping allocations in the Central Basin as well as the ability to lease groundwater rights when they are available. The Artesia Systems also has a connection with GSWC's own Orange County System, which also relies on both local groundwater and imported water obtained from Metropolitan.[34]

The Artesia System is supplied by five active wells in the Central Basin of the Coastal Plain of Los Angeles County Groundwater Basin. These wells have a current total active normal year capacity of 4,880 gpm (7,872 ac-ft/yr). Historically, the total groundwater pumping

[33] City of Artesia General Plan 2030 Final Program EIR (p. 5.8-5).
[34] Golden State Water Company. Draft Report 2010 Urban Water Management Plan: Artesia. September 2011. p. 4-2.

for the Artesia System has ranged from 3,712 ac-ft/yr to 5,434 ac-ft/yr between 2005 and 2010. As noted above, the project groundwater pumping amounts in the Artesia System between 2010 and 2035 are anticipated to remain constant at 5,000 ac-ft/yr, which is significantly less than the well capacity. However, it is important to note that GSWC's groundwater rights and future leases within the Central Basin are shared among all GSWC systems in the basin. Therefore, the actual pumping amounts for wells in each of their systems could vary based on GSWC's overall system management. Their access to local groundwater and imported water affords GSWC flexibility to meet demands in all of its systems.[35]

As noted in more detail in Checklist Response 3.13, although the Artesia Boulevard Corridor Specific Plan does increase allowable intensities in two quadrants and allow additional residential development in three quadrants, which was not considered in the General Plan Program EIR, the assumed Specific Plan development levels would not exceed growth assumptions put forth in the General Plan Final Program EIR, even including an increase in existing population, housing, and employment conditions over that which was previously analyzed. As such, water demand is not anticipated to exceed levels previously analyzed in the General Plan Program EIR. Furthermore, the 2010 UWMP concludes that water demands would increase only incrementally over 2005 baseline conditions, and that increases in water needs will be met with imported water, decreases in water losses, and water savings associated with SBX7-7 compliance. Given the existing capacity for groundwater in the Artesia System, impacts on groundwater supplies would be less than significant.

The project would not substantially increase impermeable surfaces to affect groundwater recharge. The adjudicated Central Basin Watermaster Service Area overlies about 227 square miles of the Central Basin in the southeastern part of the Los Angeles Coastal Plain in Los Angeles County. The Central Basin is subdivided into four areas: The Los Angeles Forebay, the Montebello Forebay, the Whittier area, and the Central Basin Pressure Area. Recharge occurs from percolation of precipitation, stream flow, and return flow of applied waters (e.g. irrigation), from artificial recharge activities at spreading grounds, and from injection of imported water into the Alamitos Barrier Project (a seawater intrusion barrier located in the southeastern part of the Basin).[36]

Implementation of the proposed project would not appreciably increase the net area of permeable surfaces within the project limits because most of the parcels are currently covered by concrete paving for parking areas or existing structures. The proposed Specific Plan also calls for enhanced landscape areas that would allow for some groundwater percolation. Furthermore, the Specific Plan calls for use of water efficient technologies and drought-tolerant plants and trees. The project is not located in a spreading grounds area. Therefore, the proposed project would not substantially interfere with groundwater recharge and impacts would be less than significant.

c-e) **Less than Significant Impact.** The project limits are generally urbanized and have existing stormwater infrastructure. New development would not be permitted to occur in any manner that could significantly alter the drainage pattern of an area nor create any new sources of runoff. As indicated in the General Plan Final Program EIR, all future development would be required to incorporate adequate drainage that would transport

[35] Golden State Water Company. Draft Report 2010 Urban Water Management Plan: Artesia. September 2011. p. 4-7.
[36] Golden State Water Company. Draft Report 2010 Urban Water Management Plan: Artesia. September 2011. p. 4-4.

runoff to local catch basins and nearby storm channels. The EIR also notes that facilities providing drainage in the community are adequate and no new systems or alterations to the existing system are planned. Additionally, the proposed project would not create runoff water, which would exceed the capacity of the City's existing stormwater drainage system. The General Plan Community Facilities and Infrastructure Element and Community Safety Element policies and policy actions further protect community members from drainage and flooding harm.[37] The project consists of regulatory and policy documents and will not result directly in the construction of any development. As the proposed project does not affect any of these policies, impacts on drainage patterns and runoff levels are anticipated to be less than significant.

The proposed project would change the land use designations and zoning classifications on certain properties within the City. Although some of these include changes from residential to commercial uses and mixed use, given the already built-out nature of the project limits, new development will consist of infill and the redevelopment of previously developed sites. Any new development activity will be required to comply with NPDES requirements regarding the quality of storm water runoff. Impact would be less than significant.

f) **Less than Significant Impact.** The proposed project consists of regulatory and policy documents that will not directly result in any new construction. No new sources of runoff, waste discharges, or hazardous material sites would arise from adoption and implementation of the Specific Plan, General Plan Amendment, or Zoning Map changes. Any development project pursuant to these regulations will be required to comply with City, County, and State regulations that protect water quality. Project impacts on water quality would be less than significant.

g, h) **Less than Significant Impact.** The project limits and surrounding areas of the City of Artesia are not located within a 100-year flood hazard area.[38] Therefore, implementation of the proposed Specific Plan would not place structures or housing within a 100-year flood hazard area and a less than significant impact would occur in this regard.

i) **Less than Significant Impact.** The City, including the project limits, is subject to inundation of the Whittier Narrows Dam were to fail. However, as indicated in the General Plan Final Program EIR, inundation hazards are less than significant due to policies in the General Plan and the City's Emergency Operations Plan.[39] The proposed project does not authorize any development that would increase the risk of exposure of people or structures to dam inundation hazards beyond those identified in the General Plan Final Program EIR, as the properties within the project limits are already developed and previously zoned for habitable structures and uses. Impact would be less than significant.

j) **No Impact.** The project limits are not located near any body of water or water storage facility that would be considered susceptible to seiche.[40] Artesia is located inland from the Pacific Ocean and as such, is not subject to tsunami hazards. The project limits are relatively flat and fully urbanized and therefore not susceptible to mudflows. No impact would result.

[37] City of Artesia General Plan 2030 Final Program EIR (p. 5.8-17).
[38] City of Artesia General Plan 2030 Final Program EIR (p. 5.8-18).
[39] City of Artesia General Plan 2030 Final Program EIR (p. 5.8-22).
[40] City of Artesia General Plan 2030 Final Program EIR (p. 5.8-18).

3.10 – Land Use and Planning

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

a) **No Impact.** The proposed project is the adoption and implementation of a new Specific Plan, and associated Zoning Map and General Plan Amendments. The Specific Plan encourages compatible uses and would not divide an established community. The corridor through the Specific Plan is envisioned to encourage infill development including a mix of commercial and retail uses, blended with residential and office units where appropriate. The flexibility presented in the Specific Plan allows Artesia Boulevard to grow into a pedestrian- and auto-friendly corridor, as it is designated in the General Plan. The Specific Plan also takes into consideration the surrounding properties, including existing neighborhoods and other sensitive uses, and is intended to create buffers and transitional areas when necessary. Furthermore, any future proposed projects would be required to evaluate, at a project specific level, the potential to disrupt or physically divide an established community including low-income or minority communities.[41] Therefore, no impact would result.

b) **No Impact.** The proposed project will not conflict with any applicable land use plan. With regard to consistency with Federal and State plans and policies, the General Plan contains policies and implementing actions such as the referral of plans to appropriate Federal and State agencies to ensure consistency between City and other agency regulations and requirements. Policies in the General Plan provide for implementation of and participation in area-wide planning efforts. As indicated in the General Plan Program EIR, the General Plan is consistent with Federal and State plans.[42] The proposed project would not affect any of these General Plan policies or implementing actions, and would therefore have no impact on the conclusions of the General Plan Program EIR. No impact would result.

[41] City of Artesia General Plan 2030 Final Program EIR (p. 5.1-13).
[42] City of Artesia General Plan 2030 Final Program EIR (p. 5.1-14).

With regard to consistency with relevant local plans and policies, the project includes a General Plan amendment to replace the existing land use designations for the project limits to the new Artesia Boulevard Corridor Specific Plan land use designation on the General Plan Land Use Map. The proposed project also includes a Zoning Map Amendment for the project limits to Artesia Boulevard Corridor Specific Plan, resulting in consistency between these two regulating maps. Furthermore, the Artesia Boulevard Corridor Specific Plan comprehensively analyzed consistency with the General Plan (Appendix A: General Plan Consistency) and found that the Specific Plan is consistent with and implements relevant goals and policies of the General Plan. No impact would result.

c) **No Impact.** As discussed in Checklist Response 3.4e-f, above, the proposed project limits and surrounding areas are not part of any habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. As such, no impact would occur.

3.11 – Mineral Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑

a-b) No Impact. The project limits, located within the fully urbanized City of Artesia, contain existing commercial and light industrial uses. No mineral resource areas exist in the immediate vicinity. Development pursuant to the proposed project will not result in the loss of a known mineral resource. No impact would result.

3.12 – Noise

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

a) **Less than Significant Impact.** The project will not result directly in any construction activity and thus will not result in the exposure of any persons to short-term construction noise or any long-term excessive noise conditions. However, development allowed pursuant to the Specific Plan could result in the exposure of future developments and residents to noise levels along Artesia Boulevard and associated with existing stationary uses that could exceed the City's Noise Standards (Municipal Code Title 5, Chapter 2). The General Plan Program EIR concluded that with adherence to the City's Noise Ordinance,

implementation of the Policies and Policy Actions in the General Plan and Mitigation Measures NOI-1, NOI-2, and NOI-3, impacts would be reduced to a less than significant level.[43] Future development pursuant to the proposed project would also be subject to these mitigation measures, and the proposed project would not change any General Plan policies associated with reduction of noise impacts. Impact would be less than significant.

b) **Less than Significant Impact.** The project will not result directly in any construction activity and thus will not result in the exposure of any persons to groundborne noise or vibration. Consistent with the General Plan, development under the Specific Plan would primarily involve commercial and residential uses, thus significant impacts are not anticipated for groundborne vibration. Impact would be less than significant.

c) **Less than Significant Impact.** The proposed project does not authorize any development activity, nor does the project allow for any new noise-intensive land uses in the project limits that would lead to the establishment of a noise environment different than that existing in the area today and the noise environment analyzed in the General Plan Program EIR. Permitted uses are generally commercial or residential in nature; new industrial land uses are not permitted within the project area. All land use activities will be required to comply with the noise regulations contained in Municipal Code Title 5, Chapter 2. Future development pursuant to the proposed project would also be subject to General Plan Policies, Policy Actions, and Mitigation Measures NOI-2 and NOI-3. While the proposed project does allow for residential development in areas previously reserved for commercial development, and also allows an incremental increase in commercial FAR within portions of the project limits, the proposed project would not substantially change or conflict with land use policies or any noise element policies. Impact would be less than significant.

d) **Less than Significant Impact.** The proposed project will not directly result in any new construction. The proposed changes implement policies and programs approved in the City of Artesia 2010 General Plan. Where land use changes are proposed as associated with the Specific Plan (allowing for more intense commercial uses and residential uses in areas the previously had been designated for commercial or industrial uses), the noise environment is anticipated to remain relatively consistent with existing conditions. Currently the area is typified by small- to large-scale commercial uses as well as some industrial uses such as the California Dairy. The project limits are also located immediately adjacent to a Ready-Mix cement factor. Development pursuant to the Specific Plan would not appreciably affect the noise environment beyond that analyzed in the General Plan Program EIR. The General Plan Program EIR concluded that compliance and/or adherence to the City's Noise Ordinance, policies and policy actions in the General Plan, and adherence to FEIR mitigation measure NOI-1 would reduce short-term construction noise impacts to less than significant levels.[44] The proposed project would not affect any of these policies and future development projects would be required to abide by them. Impact would be less than significant.

e, f) **No Impact.** The City of Artesia is not located within an airport land use plan and no public airports are located within two miles of the City. The nearest public airport to the project limits is the Long Beach Airport, located approximately 4.25 miles southwest of the City. The nearest airfield, the Los Alamitos Army Airfield, is located approximately 4.4 miles south of the City. The project limits are not within the 65 dBA CNEL noise contour of either the Long Beach Airport or the Los Alamitos Army Airfield. The General Plan Program EIR concluded that the project would not expose people residing or working in the City to

[43] City of Artesia General Plan 2030 Final Program EIR (p. 5.6-16).
[44] City of Artesia General Plan 2030 Final Program EIR (p. 5.6-14).

excessive noise levels from a public airport or private airstrip.[45] The proposed project would not introduce any new public airports or private airstrips within the City; no impact would result.

[45] City of Artesia General Plan 2030 Final Program EIR (p. 5.6-13).

3.13 – Population and Housing

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☑	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☑	☐

a) **Less than Significant Impact.** The Specific Plan consists of four quadrants that together would provide the potential for an estimated 95 new residential units and approximately 238,282 square feet of new commercial space. Implementation of the proposed project could result in a shift of uses within the project limits, as new housing and mixed-use developments would be allowed, and entertainment and local-serving commercial uses are encouraged.

A project could induce 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). The proposed project is located in an urbanized area currently served by existing roads and infrastructure. Indirect growth from extension of infrastructure would not be anticipated, as the proposed project would not add any new roadways and would be served by existing infrastructure with minor proposed upgrades to streetscapes proposed as part of the project. As a result, the proposed project would not be expected to result in any indirect infrastructural-related population impacts. The proposed project would, however, provide opportunities to redevelop existing uses and vacant properties with new homes and businesses, which would induce direct growth in the City's population.

If the estimated potential new housing units and commercial space allowed by the proposed project were to be built and occupied, this would yield an increase in residential

population of approximately 352 persons[46] and an additional employment base of approximately 562 persons.[47]

The General Plan Program EIR analyzed the impacts associated with assumed General Plan buildout against existing conditions. Existing population and housing unit conditions rely on estimates compiled by local, regional, and the federal governments. As the most recent comprehensive existing conditions data available is the 2010 United States Census data, which has a higher degree of accuracy than data estimates used in the General Plan Program EIR, the 2010 Census data is used here to assess the level of impact.

Table 3.13-1: Specific Plan and 2030 General Plan Housing Capacity

Description	Population	HH Size	Housing Units
General Plan Capacity	17,882	3.708	4,994
General Plan - Existing Conditions	17,094	3.708	4,610
Existing Conditions – 2010 Census	16,522	3.51	4,697
Specific Plan Additional Capacity	333	3.51	95
Total	16,855	3.51	4,792
Remaining General Plan Capacity	1,027	n/a	202

Table 3.13-2: Specific Plan and 2030 General Plan Employment Capacity

Description	Employment Factor	Square Feet	Employment
General Plan Capacity	Various	2,926,709	6,079
General Plan - Existing Conditions	Various	2,510,693	5,011
Existing Conditions	Various	2,510,693	5,011
Specific Plan Additional Capacity	424	238,282	562
Total	n/a	2,748,975	5,573
Remaining General Plan Capacity	n/a	177,734	506

As indicated in Table 3.13-1 and 3.13-2, although the Artesia Boulevard Corridor Specific Plan does increase allowable intensities in two quadrants and allow additional residential development in three quadrants that was not considered in the General Plan Program EIR, the assumed Specific Plan development levels would not exceed growth assumptions put forth in the General Plan Final Program EIR, even including an increase in existing population and housing conditions over that which was previously analyzed.

Furthermore, the General Plan accounts for increased growth and includes policies to reduce potential growth related impacts, such as Community Policy LU 1.1, LU 2.1, and SUS 3.3.[48] The proposed project would not revise any of these policies. Impact would be less than significant.

b) **Less than Significant Impact.** The proposed Specific Plan does not propose any policies that are intended to or that would indirectly result in displacement or demolition of any permanent or temporary residential structures. The proposed Specific Plan provides opportunities for existing properties to initiate redevelopment of existing uses with new housing and/or commercial development within the project limits. The proposed Specific

[46] Assumes a household size of 3.708, consistent with General Plan EIR analysis and Department of Finance 2010 estimates.
[47] Assumes an employment estimate of 424 square feet per employee for commercial general space, also consistent with General Plan EIR analysis (p. 5.2-7) and the Natelson Company's Employment Density Study completed for SCAG (2001).
[48] City of Artesia General Plan 2030 Final Program EIR (p. 5.2-9).

Plan could eventually result in development within the project limits resulting in an estimated 95 new residential units and approximately 238,282 square feet of new commercial space. Although future development constructed pursuant to the proposed project could result in demolition of existing structures, the proposed Specific Plan would replace them with new multi-family residential and new commercial and retail uses. Overall, the proposed project would provide a net increase in both housing and employment within the project area. Furthermore, existing structures might be removed due to deterioration or replaced by a more efficient and valuable land use; this could occur whether the proposed Specific Plan is adopted or not; therefore, the proposed plan would have no effect involving displacement of housing or businesses.

c) **Less than Significant Impact.** The proposed project would not displace people, as it does not authorize construction of any project or involve the demolition of any housing. Future development projects completed pursuant to Specific Plan regulations would be required to be consistent with the requirements of the California Relocation Assistance Act of 1970 (Govt. Code § 7260 *et seq*.), the State Relocation Guidelines (25 Cal. Code Regs § 6000, *et seq*.), and the California Redevelopment Law (Health & Safety Code § 33410 *et seq*.), as applicable. Impact with regard to housing displacement or displacement of persons would be less than significant.

3.14 – Public Services

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:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☑	☐
b) Police protection?	☐	☐	☑	☐
c) Schools?	☐	☐	☑	☐
d) Parks?	☐	☐	☑	☐
e) Other public facilities?	☐	☐	☑	☐

a) **Less than Significant Impact.** Implementation of the proposed project could result in an increase in residential and employment population within the project limits. There are no fire facilities fees in effect for the City. The Fire Department is funded by property tax and special tax revenue generated in the City. These revenues would continue to fund Fire Department services for future developments in the City. In the event additional resources are needed, the property tax growth within the City would provide funding to meet the increased demands.[49]

Assuming that the increase in call generation for fire protection services would be generally equivalent to the increase in population, the proposed project call volume from within the project area would incrementally increase. The addition to the existing call volume related to the proposed project (associated with an estimated 95 potential new housing units and 238,282 square feet of new commercial space) would be within the buildout capacity assumed for the General Plan. The General Plan Program EIR concluded that the existing fire protection staffing levels appear sufficient to meet service demands associated with the projected population growth permitted pursuant to the General Plan.[50] Since the levels of anticipated development associated with the Specific Plan are less than that analyzed in the General Plan EIR, existing fire services would be able to accommodate the increased demand for fire protection services associated with the Specific Plan. Future individual development projects would be reviewed by the Los Angeles County Fire Department to determine the specific fire requirements applicable to that development and to ensure compliance with these requirements, consistent with General Plan Policy Action

[49] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-5).
[50] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-5).

6.2.2.[51] The proposed project would not affect this current practice or General Plan Policy Action 6.2.2. Implementation of the proposed project would not result in significant impacts related to fire protection and no mitigation measures would be required.

b) **Less than Significant Impact.** Police protection services to the City of Artesia are provided under contract with the County of Los Angeles Sheriff's Department. The General Plan Program EIR concluded that the existing police protection staffing levels were sufficient to meet service demands associated with the projected population growth permitted pursuant to the General Plan, and buildout according to the proposed General Plan Update would not require new or physically altered police protection facilities.[52] Since the levels of anticipated development associated with the Specific Plan are less than that analyzed in the General Plan EIR, existing police services would be able to accommodate the increased demand for fire protection services associated with the Specific Plan. Future individual development projects would be reviewed by the Los Angeles County Sherriff's Department for potential impacts to the provision of emergency services and to ensure that police protection facilities, services, and resources are adequate to support the increased demands. Future development would furthermore be subject to General Plan polices and policy actions ensuring safety in the community; the proposed project would not affect any of those policies. Impact would be less than significant.

c) **Less than Significant Impact.** The ABC Unified School District (ABCUSD) provides public education services for the residents of Artesia. ABCUSD has experienced declining enrollment in all area schools over the past decade and shows no indication of reversal,[53] reducing the urgency for any new school construction projects and alleviating capacity constraints on all area schools. The General Plan Program EIR concluded that development allowed pursuant to the General Plan is not anticipated to require new or physically altered school facilities.[54]

Furthermore, the proposed project does not involve any construction activity. Whenever new development projects are proposed and approved pursuant to the Specific Plan, payment of fees to the applicable school district is considered full mitigation for project impacts according to Senate Bill (SB) 50, including impacts related to 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, or other performance objectives for schools. Therefore, individual project applicants would be required to pay the statutory fees so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

d) **Less than Significant Impact.** The City of Artesia is largely built out with little available vacant land for parkland dedication and conversion. The project limits do not contain any areas currently or previously dedicated for parkland purposes; therefore the proposed project would not propose to allow development on any parcel previously designated for open space or preservation. The proposed project does not substantially revise cumulative development capacities which could increase demand for parkland beyond that which was analyzed in the General Plan Program EIR; estimated development associated with the Specific Plan is less than that associated with the General Plan. Private open space will be

[51] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-5).
[52] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-10).
[53] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-13).
[54] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-15).

required as part of new residential construction, pursuant to Specific Plan policies, in the form of both common and private outdoor space.

The General Plan Program EIR includes a mitigation measure to for new development to dedicate parkland or pay in-lieu fees consistent with the Quimby Act prior to approval of any final parcel or tract map. This mitigation measure would ensure that recreational facilities are adequate to support increased demands.[55] The proposed project would not affect this mitigation measure; new development and redevelopment projects within the project limits would be required to dedicate parkland or pay in-lieu fees, resulting in an less than significant impact regarding parks and recreational facilities.

e) **Less than Significant Impact.** See responses a-d.

[55] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-26).

3.15 – Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑

a) **Less than Significant Impact.** The proposed project does not involve any development activity. The project implements General Plan policies and programs, and does not affect General Plan Program EIR Mitigation Measure PR-1, which requires dedication of parkland and/or payment of in-lieu fees prior to approval of final parcel or tract maps for residential projects. While the potential exists for population growth associated with the Specific Plan to increase the use of parks and recreational facilities, compliance with this mitigation would ensure that all future development is self-serving in terms of recreational uses.[56] Furthermore, provisions in the Specific Plan require private and common open space as part of new residential development projects in part to relieve impacts on public recreation facilities. Impacts would be less than significant.

b) **No Impact.** The proposed project does not involve the development of any recreational facilities. No impact would result.

[56] City of Artesia General Plan 2030 Final Program EIR (p. 5.11-27).

3.16 – Transportation and Traffic

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☑	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☑	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☑	☐
e) Result in inadequate emergency access?	☐	☐	☑	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☑

A Mobility and Circulation Report was completed by Kimley-Horn and Associates for the Artesia Boulevard Corridor Specific Plan, dated September 2011.[57] The report evaluated existing and future operating conditions, based on presumed future buildout of the proposed project.

a) **Less than Significant Impact with Mitigation Incorporation.** In 2007, a 24-hour roadway traffic count was completed by the City on Artesia Boulevard between Gridley Road and Pioneer Boulevard. At the time of the count, this segment of roadway carried 17,743 trips per day. Morning traffic peaked at 7:15 a.m. with 714 vehicles in the eastbound direction, and 854 vehicles in the westbound direction. In the afternoon, traffic peaked at 4:45 p.m. with 885 trips in the eastbound direction, and 817 trips in the westbound direction. Based on a daily roadway capacity of 30,000 ADT for Primary Highway (Major), Artesia Boulevard is operating at a Level of Service (LOS) A.

Peak hour turning movement counts at the three signalized study intersections in the vicinity of the Specific Plan (Gridley Road, Roseton Avenue, and Pioneer Boulevard) were collected in February 2011. In addition, peak hour truck classification turning movement counts were collected in September 2011 at the intersection of Artesia Boulevard and Pioneer Boulevard to evaluate the effects of truck traffic from the industrial uses on Artesia Boulevard, specifically from California Dairies and the Cement Plant. Existing peak hour operating conditions at the study intersections are summarized in Table 3.16-1: Existing Traffic Conditions in terms of intersection capacity utilization (ICU), which indicates how much reserve capacity is available at the intersection, and LOS.

Table 3.16-1: Existing Traffic Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
Artesia Boulevard at Gridley Road	0.595	A	0.589	A
Artesia Boulevard at Roseton Avenue	0.468	A	0.395	A
Artesia Boulevard at Pioneer Boulevard	0.665	B	0.799	C

Note: **Bold** values indicate intersections operating at LOS E or LOS F.
Source: Kimley-Horn & Associates, September 2011.

Future traffic conditions with and without the project were analyzed to assess the impacts of implementation of the Artesia Boulevard Corridor Specific Plan. A conservative traffic growth rate of one percent per year was applied to the existing peak hour traffic volumes at each of the study intersections to account for general background growth outside the Specific Plan area. Then, trip generation estimates were developed for each of the four quadrants of the Specific Plan. For the analysis of future traffic conditions, each parcel of interest in the project area was identified in terms of its existing land use and its potential future land use, including the land use type and the existing and future development potential of those lands. The total net new trips that would be generated by the Specific Plan development is estimated to be 10,292 daily trips, with 279 trips in the morning peak hour and 630 trips in the evening peak hour. The project-related traffic would cause an increase in the volume to capacity ratio of 0.035.

Table 3.16-2 provides a summary of intersection operation under future conditions, but without considering the proposed project. Table 3.16-3 summarizes future conditions and considers the impact of the proposed project as well. Under future conditions, the intersection of Artesia Boulevard at Pioneer Boulevard would operate at LOS E with or without the project. The project would contribute 0.03 to the ICU. As such, the traffic

[57] Kimley-Horn & Associates. Artesia Boulevard Corridor Specific Plan - Mobility and Circulation in the City of Artesia. September 2011.

study recommends feasible mitigation such as constructing a northbound right-turn lane to the intersection of Artesia Boulevard at Pioneer Boulevard, which would bring the LOS for P.M. peak hour to LOS D and ICU to 0.852. Sufficient width exists on the northbound exit leg of the intersection (the north leg) to receive a third lane of through traffic. This improvement can be accomplished with signing and striping modifications on Pioneer Boulevard. No acquisition of right-of-way or construction would be necessary. This recommended improvement could be implemented if the intersection of Artesia Boulevard at Pioneer Boulevard is operating at a level of service (LOS) E or worse. The intersection will be monitored for performance through implementation of Mitigation Measure T-1.

Table 3.16-2: Future Without Project Traffic Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
Artesia Boulevard at Gridley Road	0.672	B	0.665	B
Artesia Boulevard at Roseton Avenue	0.527	A	0.444	A
Artesia Boulevard at Pioneer Boulevard	0.753	C	0.905	**E**

Note: **Bold** values indicate intersections operating at LOS E or LOS F.
Source: Kimley-Horn & Associates, September 2011.

Table 3.16-3: Future With Project Traffic Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
Artesia Boulevard at Gridley Road	0.685	B	0.7436	C
Artesia Boulevard at Roseton Avenue	0.573	A	0.587	A
Artesia Boulevard at Pioneer Boulevard	0.792	C	0.935	**E**
Artesia Boulevard at Pioneer Boulevard – with mitigation: Convert northbound right-turn lane to a through/right lane	0.792	C	0.852	D

Note: **Bold** values indicate intersections operating at LOS E or LOS F.
Source: Kimley-Horn & Associates, September 2011.

Mitigation Measure

T-1 No building permits shall be issued within the Specific Plan area if the intersection of Artesia Boulevard at Pioneer Boulevard is operating at a level of service (LOS) E or worse, as verified through periodic intersection performance monitoring, until such time that intersection performance is improved to LOS D or better. Adequate intersection performance shall be reviewed and approved by the City Engineer.

b) **Less than Significant Impact.** Pursuant to the Los Angeles County Metropolitan Transportation Authority Congestion Management Plan (CMP), traffic impacts of individual development projects of potential regional significance must be analyzed. The CMP system is made up of a system of arterial roadways, freeways, and monitoring intersections in Los Angeles County. Any project that adds 150 or more vehicle trips to freeway segments or 50 or more vehicle trips to roadway segments/monitoring intersections during peak hours must be analyzed. The nearest CMP freeway segment is the San Gabriel River Freeway (I-605), and the Artesia Freeway (SR-91).[58] Based on the results of the traffic study, this project would generate less than 150 total trips per peak hour on the I-605 or SR-91.

[58] Metropolitan Transportation Authority. 2010 Congestion Management Program.

There are no CMP monitoring intersections in the City of Artesia. The closest CMP monitoring intersections in adjacent cities are:

- South Street and Lakewood Boulevard, in the City of Lakewood (3 miles west of the Specific Plan area
- Artesia Bouelvard and Lakewood Boulevard, in the City of Bellflower (3½ miles southwest of the Specific Plan area

The Specific Plan would not add 50 peak hour trips to these intersections;[59] impacts would be less than significant.

c) **No Impact.** The two closest air facilities to the City are the Los Alamitos Armed Air Forces Reserve Center located approximately nine miles to the south, and the Fullerton Municipal Airport located approximately nine miles to the east. The City is also served by regional airports such as the Los Angeles World Airport (LAX). Development levels permitted by the project are within the development capacity analyzed in the General Plan EIR, and no use is anticipated to draw appreciable amounts of regional air traffic or increase air travel demand. Furthermore, the proposed maximum building height (35-45 feet, depending on quadrant) would not affect airport approach or departure spaces or any air traffic patterns.

d) **Less than Significant Impact.** There are multiple driveways providing access to individual parcels on both sides of Artesia Boulevard within the Specific Plan area. Under existing conditions, there are 11 curb cuts on the north side of the street and 23 on the south side. Through the City's development review process, future developments would be evaluated to determine the appropriate land use permit for authorizing the use and conditions for establishment and operation. Site plan review includes the requirement to provide clear vision triangles at intersections to enhance pedestrian and vehicular safety.

The proposed project does not involve changes to the alignment of Artesia Boulevard or any other street in the project area. It does, however, require the conversion of an existing northbound right-turn lane on Pioneer Boulevard to a through/right-turn lane. Sufficient width exists on the northbound exit leg of the intersection (the north leg) to receive a third lane of through traffic. This improvement can be accomplished with signing and striping modifications on Pioneer Boulevard, and will therefore not result in a new traffic safety hazard due to any design feature.

e) **Less than Significant Impact.** The proposed project, a policy document, does not involve any building activity. New developments would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Individual projects would be reviewed by the Los Angeles County Fire Department to determine the specific fire requirements applicable to the specific development and to ensure compliance with these requirements. This would ensure that new developments provide adequate emergency access to and from the site. No impact would result.

f) **No Impact.** As noted in Checklist Response 3.7a, multiple transit routes are located within or adjacent to the Specific Plan area. The proposed project has no direct affect on any local or regional policies involving support of alternative transportation. The policy document implements General Plan policies that support mixed-use development and use of alternative transportation modes. The new allowance of mixed-use development in specific quadrants of the Specific Plan has the potential to positively influence alternative

[59] Kimley-Horn & Associates. Artesia Boulevard Corridor Specific Plan - Mobility and Circulation in the City of Artesia. September 2011.

transportation use by allowing a mix of uses near local and regional transportation facilities such as existing bus lines. No negative impacts on alternative transportation policies would occur.

3.17 – Utilities and Service Systems

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☑	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☑	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☑	☐

a, b, e) **Less than Significant Impact.** The proposed project does not involve any development activity. The project implements General Plan policies and programs. The project would

not facilitate any substantial new development activity beyond that analyzed in the General Plan FEIR. The General Plan Program EIR calculated the wastewater flow at buildout for the General Plan update and concluded that the additional housing units and non-residential development square footage would yield an increase of approximately 12 percent over 2010 existing conditions.[60] The General Plan Program EIR indicated that this growth could be accommodated within the existing wastewater treatment infrastructure, which was operating at a maximum 74 percent capacity.[61] Furthermore, the General Plan Program EIR stated that no deficiencies exist in the conveyance facilities that serve the City.[62] However, incremental increases in wastewater generation as a result of new development may require expansions of existing facilities on an as-needed basis. The General Plan Program EIR included a mitigation measure (USS-2), which requires all new development to undertake a site-specific sewer evaluation prior to issuance of grading permits or otherwise determined as necessary by the City. The sewer evaluation on a site-specific basis assesses the adequacy of the conveyance system capacities, including trunk and local sewers. The proposed project would not affect this mitigation measure, and future development projects within the project limits would be required to comply with this mitigation measure. Development estimates associated with the proposed project do not exceed development assumptions associated with the General Plan; as such it can be concluded that the City's wastewater conveyance system and treatment facilities have adequate capacity to accommodate development associated with implementation of the Artesia Boulevard Corridor Specific Plan. Furthermore, the project would not change or interfere with Regional Water Quality Control Board wastewater treatment requirements. New development under implementation of the Specific Plan would continue to comply with all provisions of the NPDES program, as enforced by the RWQCB, consistent with the conclusions of the General Plan Program EIR.[63] Impacts on any wastewater treatment capabilities and public services would be less than significant.

c) **Less than Significant Impact.** The proposed project does not involve any development activity. The project implements General Plan policies and programs. The project will not facilitate any substantial new development activity beyond that analyzed in the General Plan EIR. The project limits are located in an urbanized area with an existing storm drainage system in place. As such, stormwater drainage facilities are anticipated to be sufficient to accommodate General Plan buildout, including the proposed project. New development projects are required to ensure project-specific and citywide drainage systems have adequate capacity to accommodate new development. Impact would be less than significant.

d) **Less than Significant Impact.** The City of Artesia's potable water needs are served by the Golden State Water Company. The Urban Water Management Plan (UWMP) discussed the reliability of supply for the Artesia System, of which the majority of Artesia is a part (along with the City of Hawaiian Gardens. The UWMP indicated that the Golden State Water Company water supply is anticipated to be 100 percent reliable through 2035, based on adjudicated groundwater rights in the Central Basin; availability of leased groundwater; benefits of conjunctive use storage programs to be developed in accordance with court judgments that are anticipated at some time in the near future; water supplies available from the City of Cerritos and their supplemental suppliers, CBMWD and

[60] City of Artesia General Plan 2030 Final Program EIR (p. 5.12-23).
[61] City of Artesia General Plan 2030 Final Program EIR (p. 5.12-25).
[62] City of Artesia General Plan 2030 Final Program EIR (p. 5.12-23).
[63] City of Artesia General Plan 2030 Final Program EIR (p. 5.12-33).

Metropolitan, projected to be 100 percent reliable; conservation derived supply; and the availability of recycled water from CBMWD.[64]

As discussed in response to Checklist Item 3.9b, Golden State Water Company supply in the Artesia system is in excess of anticipated demand. Demand projections in the UWMP anticipate moderate increases in demand, tempered by increases in water conservation measures. Increases in water needs will be met with imported water, decreases in water losses, and water savings associated with SBX7-7 compliance. The UWMP anticipates reliable water supply under these assumptions.

The proposed project does not involve any development activity. The project implements General Plan policies and programs at a development level that does not exceed that which was analyzed in the General Plan EIR on infill sites. Although the Artesia Boulevard Corridor Specific Plan does increase allowable intensities in two quadrants and allow residential development in three quadrants, which was not considered in the General Plan Program EIR, the assumed Specific Plan development levels would not exceed growth assumptions put forth in the General Plan Final Program EIR, even including an increase in existing population, housing, and employment conditions over that which was previously analyzed. Review of future projects will continue to be carried out to ensure that the projects are consistent with all General Plan Policies and Policy Actions. Impacts on water supplies or water supply infrastructure would be less than significant.

f, g) **Less than Significant Impact.** As indicated in the General Plan EIR, The increased solid waste due to implementation of the General Plan could be accommodated within the existing landfill capacity.[65] The project will not facilitate any substantial new development activity beyond that analyzed in the General Plan EIR, and thus will not lead to any significant solid waste production beyond that previously indicated. Furthermore, compliance with the City's Source Reduction and Recycling Element (SRRE) program, whereby all future development projects must divert solid waste to meet state diversion goals associated with AB 939, as well as State and County waste reduction programs and policies, would reduce the volume of solid waste entering landfills. Review of future projects will continue be carried out to ensure that the projects are consistent with all General Plan Policies and Policy Actions and the SRRE program. Adherence to such requirements would reduce potential impacts associated with solid waste to a less than significant impact level.

[64] Golden State Water Company. Draft Report 2010 Urban Water Management Plan: Artesia. September 2011. p. 6-14.
[65] City of Artesia General Plan 2030 Final Program EIR (p. 5.12-33).

3.18 – Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☑	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable?	☐	☐	☑	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

a) **Less than Significant Impact.** The results of the preceding analyses and discussions of responses to the entire Initial Study Checklist have determined that the proposed project would have no effect upon sensitive biological resources, and would not result in significant impacts to historical, archaeological or paleontological resources. The City of Artesia and the project limits for the Artesia Boulevard Corridor Specific Plan area are fully urbanized and do not contain any forest, river, wildlife, or similar resources, which would preclude impacts to unique, rare, endangered, or threatened species. There are no historic resources identified within the project limits. The proposed project will not affect regulations protecting historical or cultural resources. The proposed Specific Plan does not authorize any plan for a development or redevelopment on any property within the City of Artesia. The Specific Plan is intended to provide a framework for future projects within the project limits to follow in order to achieve the goals and polices of the General Plan. The proposed project would not result in any effects that would degrade the quality of the environment.

b) **Less than Significant Impact.** Cumulative effects resulting from implementation of the City's goals and policies were evaluated in the General Plan Program EIR. The proposed project provides consistency between stated General Plan goals and policies aimed at minimizing negative environmental impacts over the long term, included in Appendix A of the Specific Plan. No General Plan policies would be changed or modified through adoption

of the proposed project. Adoption and implementation of the proposed project would not create any significant impacts beyond those previously identified in the General Plan Program EIR. No development projects are associated with the proposed project, and thus the project would not contribute to short-term or long-term cumulative impacts.

c) **Less than Significant Impact.** The proposed project does not involve any development activity. Rather, the project implements adopted General Plan policies and policy actions. The Specific Plan introduces mixed-use as a possible development approach in the project limits, which is designed to implement planning approaches that integrate complementary uses and work to reduce travel in personal vehicles and commuting to work. By achieving the associated reduction in vehicle travel, a corresponding reduction in air quality emissions, traffic impacts, urban sprawl, and outdoor water use can be realized. The new development and design standards will assist in promoting a good quality of life in Artesia. The project would not result in substantial adverse effects on human beings.

Section 4: References

4.1 – List of Preparers

City of Artesia (Lead Agency)
City of Artesia
18747 Clarkdale Avenue
Artesia, California 90701
(562) 865-6262 ext. 227

Okina Dor, Redevelopment/Planning Director

Hogle-Ireland, Inc. (Environmental Analysis)
2860 Michelle Drive, Suite 100
Irvine, California 92606
949-553-1427

Alexa Washburn, Managing Principal
Christopher Brown, Air Quality Analyst
Genevieve Sharrow, Analyst

Kimley Horn & Associates (Traffic Analysis)
765 The City Drive, Suite 400
Orange, California 92868

Serine Ciandella, Project Manager

4.2 – Document References

California Air Resources Board. Air Quality Attainment Status. 2010

California Department of Conservation. Farmland Mapping and Monitoring Program, 2008.

California Department of Conservation. Williamson Act Program, 2004.

California Department of Fish and Game. Natural Community Conservation Planning. http://www.dfg.ca.gov/habcon/nccp/status/

California Department of Forestry and Fire Protection. Land Cover Mapping and Monitoring Program: Los Angeles County. 2006.

California Department of Toxic Substances Control, EnviroStor. http://www.envirostor.dtsc.ca.gov/public/

California Department of Transportation. California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm

California Department of Transportation. Transportation Project-Level Carbon Monoxide Protocol. 1997.

California Department of Transportation. Users' Guide for CL4. June 1998.

California State Water Resources Control Board, GeoTracker. https://geotracker.waterboards.ca.gov/

City of Artesia, City of Artesia General Plan 2030. September 2010.

City of Artesia, City of Artesia General Plan 2030 Final Program EIR. September 2010.

City of Artesia, Municipal Code.

EnviroStor. http://www.envirostor.dtsc.ca.gov/public/

GeoTracker. https://geotracker.waterboards.ca.gov/

Golden State Water Company. Draft Report 2010 Urban Water Management Plan: Artesia. September 2011.

Hogle-Ireland, Inc. Artesia Boulevard Corridor Specific Plan Initial Study Air Quality and GHG Analysis. September 2011. (See Appendix A)

Kimley-Horn & Associates, Inc. Artesia Boulevard Corridor Specific Plan Mobility and Circulation in the City of Artesia. September 2011. (See Appendix B)

The Natelson Company, Inc., E*mployment Density Study Summary Report Table II-B, Derivation of Square Feet Per Employee Based on Average Employees Per Acre and Average FAR*, October 31, 2001, available at http://www.scag.ca.gov/forecast/downloads/employ_den.pdf. Accessed August 16, 2011.

South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993

United States Environmental Protection Agency. Frequently Asked Questions About Global Warming and Climate Change. Back to Basics. April 2009.

United States Environmental Protection Agency. The Greenbook Nonattainment Areas. 2010.

U.S. Fish and Wildlife Services. Habitat Conservation Plans: Regional Summary Report. http://ecos.fws.gov/conserv_plans/

Section 5: Summary of Mitigation Measures

C-1 In the event that archeological resources are unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-meter radius of the area of discovery and shall retain a qualified archaeologist to evaluate the significance of the finding and appropriate course of action. Salvage operation requirements pursuant to Section 15064.5 of the *CEQA Guidelines* shall be followed. After the find has been appropriately mitigated, work in the area may resume.

T-1 No building permits shall be issued within the Specific Plan area if the intersection of Artesia Boulevard at Pioneer Boulevard is operating at a level of service (LOS) E or worse, as verified through periodic intersection performance monitoring, until such time that intersection performance is improved to LOS D or better. Adequate intersection performance shall be reviewed and approved by the City Engineer.

Appendix Materials

Appendix A: Air Quality Analysis
Prepared by Hogle-Ireland, Inc. September 2011

Appendix B: Mobility and Circulation Report
Prepared by Kimley-Horn and Associates, Inc. September 2011

Appendix A
Air Quality Analysis

Prepared by:

Hogle-Ireland, Inc.
1500 S. Iowa Avenue, 1st Floor
Riverside, California 92501

Artesia Boulevard Corridor Specific Plan Initial Study

Air Quality and GHG Analysis: Existing Conditions Assumptions

Project Charecteristics							
Project Detail							
Project	2858						
Name	2858 Artesia Blvd SP (Existing)						
Location	SC						
Windspeed	2.2						
Precipitation Frequency	31						
Climate Zone	9						
Land Use Setting	Urban						
Operational Year	2011						
Total Population	23						
Total Acerage	6.29						
Utility Information							
Utility Company	Southern California Edison						
CO2 Intensity Factor	641.26						
CH4 intensity Factor	0.029						
N2O Intensity Factor	0.011						
Using Historical Data?	0						
Pollutants							
ROG	1						
NOX	1						
CO	1						
SO2	1						
PM10	1						
PM2_5	1						
PM10_FUG	1						
PM25_FUG	1						
TOG	0						
PB	1						
CO2_BIO	0						
CO2_NBIO	0						
CO2	1						
CH4	1						
N2O	1						
CO2E	1						
Land Use		***Amount***	***Metric***	***Acres***	***Square Feet***	***Population***	
Commercial	General Office Building	29.83	1000sqft	0.68	29830	0	
Educational	Day-Care Center	5.44	1000sqft	0.12	5438	0	
Industrial	General Heavy Industry	6.81	1000sqft	0.16	6814	0	
Industrial	General Light Industry	65.12	1000sqft	1.5	65124	0	
Industrial	Manufacturing	5.21	1000sqft	0.12	5210	0	
Recreational	Fast Food Restaurant w/o Drive Thru	3.31	1000sqft	0.08	3309	0	
Recreational	High Turnover (Sit Down Restaurant)	1	1000sqft	0.02	1000	0	
Recreational	Recreational Swimming Pool	44.41	1000sqft	1.02	44408	0	
Residential	Apartments Low Rise	6	Dwelling Unit	0.38	4320	17	
Residential	Single Family Housing	2	Dwelling Unit	0.65	2597	6	
Retail	Automobile Care Center	14.8	1000sqft	0.34	14796	0	
Retail	Hardware/Paint Store	7.54	1000sqft	0.17	7545	0	
Retail	Strip Mall	45.67	1000sqft	1.05	45666	0	
0	0	0	0	0	0	0	
Construction Emissions	***Name***	***Type***	***Start***	***End***	***Work Week***	***Total days***	***PhaseDescription***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

Equipment	Type	QTY	Hours	HP	Load				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
0	0	0	0	0	0				
	Trips			Trip Length			Vechicle Class		
Trips and VMT	**Worker**	**Vendor**	**Haul**	**Worker**	**Venddor**	**Haul**	**Worker**	**Vendor**	**Haul**
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
	Paved (%)								
On-Road Dust	**Worker**	**Vendor**	**Haul**	**Road Silt**	**Silt Content**	**Moisture Content**	**Vehicle Weight**	**Vehicle Speed**	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
Demolition	**Metric**	**QTY**							
0	0	0							
0	0	0							
0	0	0							
0	0	0							
							Moisture Content		
Grading	**Import**	**Export**	**Metric**	**Phased?**	**Speed**	**Acres**	**Bulldozing**	**Loading**	**Silt Content**
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

			Residential				Nonresidential							
Architectural Coating	**Start**	**End**	**Interior**	**Area**	**Exterior**	**Area**	**Interior**	**Area**	**Exterior**	**Area**				
0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0				
Paving Area														
0														
0														
0														
0														
Mobile Sources														
Vehicle Trips	**Metric**	**WD_TR**	**ST_TR**	**SU_TR**	**HW_TL**	**HS_TL**	**HO_TL**							
Apartments Low Rise	Dwelling Unit	6.59	7.16	6.07	10.8	7.3	7.5							
Automobile Care Center	1000sqft	62	62	62	0	0	0							
Day-Care Center	1000sqft	79.26	6.21	5.83	0	0	0							
Fast Food Restaurant w/o Drive Thru	1000sqft	716	696	500	0	0	0							
General Heavy Industry	1000sqft	1.5	1.5	1.5	0	0	0							
General Light Industry	1000sqft	6.97	1.32	0.68	0	0	0							
General Office Building	1000sqft	11.01	2.37	0.98	0	0	0							
Hardware/Paint Store	1000sqft	51.29	82.52	68.65	0	0	0							
High Turnover (Sit Down Restaurant)	1000sqft	127.15	158.37	131.84	0	0	0							
Manufacturing	1000sqft	3.82	1.49	0.62	0	0	0							
Recreational Swimming Pool	1000sqft	32.93	20.87	26.73	0	0	0							
Single Family Housing	Dwelling Unit	9.57	10.08	8.77	10.8	7.3	7.5							
Strip Mall	1000sqft	44.32	42.04	20.43	0	0	0							
Apartments Low Rise	Dwelling Unit	**CC_TL**	**CW_TL**	**CNW_TL**	**PR_TP**	**DV_TP**	**PB_TP**							
Automobile Care Center	1000sqft	0	0	0	86	11	3							
Day-Care Center	1000sqft	7.3	9.5	7.3	21	51	28							
Fast Food Restaurant w/o Drive Thru	1000sqft	7.3	9.5	7.3	28	58	14							
General Heavy Industry	1000sqft	7.3	9.5	7.3	51	37	12							
General Light Industry	1000sqft	7.3	9.5	7.3	92	5	3							
General Office Building	1000sqft	7.3	9.5	7.3	92	5	3							
Hardware/Paint Store	1000sqft	7.3	9.5	7.3	77	19	4							
High Turnover (Sit Down Restaurant)	1000sqft	7.3	9.5	7.3	45	29	26							
Manufacturing	1000sqft	7.3	9.5	7.3	37	20	43							
Recreational Swimming Pool	1000sqft	7.3	9.5	7.3	92	5	3							
Single Family Housing	Dwelling Unit	7.3	9.5	7.3	52	39	9							
Strip Mall	1000sqft	0	0	0	86	11	3							
Apartments Low Rise	Dwelling Unit	**HW_TTP**	**HS_TTP**	**HO_TTP**	**CC_TTP**	**CW_TTP**	**CNW_TTP**							
Automobile Care Center	1000sqft	40.2	19.2	40.6	0	0	0							
Day-Care Center	1000sqft	0	0	0	48	33	19							
Fast Food Restaurant w/o Drive Thru	1000sqft	0	0	0	82.3	12.7	5							
General Heavy Industry	1000sqft	0	0	0	79.5	1.5	19							
General Light Industry	1000sqft	0	0	0	28	59	13							
General Office Building	1000sqft	0	0	0	28	59	13							
Hardware/Paint Store	1000sqft	0	0	0	48	33	19							
High Turnover (Sit Down Restaurant)	1000sqft	0	0	0	67.4	13.6	19							
Manufacturing	1000sqft	0	0	0	72.5	8.5	19							
Recreational Swimming Pool	1000sqft	0	0	0	28	59	13							
Single Family Housing	Dwelling Unit	0	0	0	48	33	19							
Strip Mall	1000sqft	40.2	19.2	40.6	0	0	0							

Emissions Factors	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	FleetMix	0.512397	0.076403	0.229567	0.105683	0.020632	0.006014	0.01488	0.02194	0.00115	0.00173	0.00595	0.0009	0.002756
A	CH4_IDLEX	0	0	0	0	0.0015	0.0013	0.0009	0.1	0.0013	0	0	0.03	0
A	CH4_RUNEX	0.02	0.02	0.03	0.04	0.02	0.01	0.01	0.06	0.02	0.05	0.23	0.03	0.04
A	CH4_STREX	0.02	0.02	0.02	0.03	0.03	0.02	0.03	0.14	0.03	0.07	0.14	0.03	0.05
A	CO_IDLEX	0	0	0	0	0.21	0.19	0.14	8.95	0.18	0	0	5.5	0
A	CO_RUNEX	2.13	3.35	2.9	3.6	3.6	2.13	2.96	6.38	3.28	8.5	36.58	7.52	11.25
A	CO_STREX	4.53	5.44	5.82	7.39	7.28	5.11	6.99	34.67	10.12	16.89	9.61	7.45	15.16
A	CO2_IDLEX	0	0	0	0	8.0498	8.5685	12.5884	1244.7603	11.0922	0	0	553.712	0
A	CO2_RUNEX	387.2793	477.5331	484.2264	660.1155	642.2204	610.071	1361.7371	1803.8391	1171.3742	2186.47	147.919	1397.05	738.5889
A	CO2_STREX	71.7302	87.6603	89.0767	122.2137	38.0845	31.5309	15.1021	23.9599	23.3814	42.9124	49.7253	19.4013	37.7753
A	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	21.11	0.1	0	0	8.6	0
A	NOX_RUNEX	0.18	0.3	0.36	0.48	1.55	2.94	7.07	13.73	4.34	15.82	1.19	9.99	2.08
A	NOX_STREX	0.3	0.33	0.55	0.7	1.68	1.39	0.72	3.14	1.32	1.91	0.3	0.45	1.24
A	PM10_IDLEX	0	0	0	0	0.0002	0.0006	0.0022	0.3	0.0014	0	0	0.12	0
A	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0091	0.004	0.01	0.01
A	PM10_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.18	0.64	0.09	0.25	0.03	0.37	0.01
A	PM10_STREX	0.0061	0.0069	0.01	0.01	0.0023	0.0021	0.0012	0.0024	0.0019	0.0034	0.01	0.0011	0.001
A	PM25_IDLEX	0	0	0	0	0.0001	0.0005	0.0021	0.28	0.0013	0	0	0.11	0
A	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0088	0.003	0.0023	0.001	0.003	0.003
A	PM25_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.16	0.59	0.08	0.23	0.02	0.34	0.01
A	PM25_STREX	0.0056	0.0064	0.01	0.01	0.0021	0.002	0.0011	0.0021	0.0017	0.0032	0.01	0.001	0.0009
A	ROG_DIURN	0.11	0.11	0.1	0.1	0.0029	0.002	0.0009	0.0013	0.0008	0.0079	0.93	0.0085	1.78
A	ROG_HTSK	0.17	0.18	0.16	0.15	0.04	0.03	0.02	0.03	0.01	0.14	0.37	0.06	0.1
A	ROG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.23	0.02	0	0	0.76	0
A	ROG_RESTL	0.07	0.08	0.07	0.07	0.0009	0.0006	0.0003	0.0006	0.0003	0.0039	0.49	0.0032	0.63
A	ROG_RUNEX	0.06	0.13	0.08	0.13	0.25	0.17	0.22	1.23	0.19	1.11	3.19	0.58	0.35
A	ROG_RUNLS	0.090108	0.132574	0.125922	0.116798	0.392257	0.26618	0.120932	0.023134	0.168099	0.03261	0.45868	0.05738	0.019145
A	ROG_STREX	0.39	0.42	0.46	0.67	0.59	0.45	0.54	2.28	0.66	1.26	2.24	0.55	0.97
A	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0054	0
A	SO2_RUNEX	0.0038	0.0047	0.0048	0.0065	0.0062	0.0059	0.01	0.01	0.01	0.02	0.0021	0.01	0.0073
A	SO2_STREX	0.0008	0.0009	0.001	0.0013	0.0005	0.0004	0.0003	0.0008	0.0004	0.0007	0.0007	0.0003	0.0006
A	TOG_DIURN	0.11	0.11	0.1	0.1	0.0029	0.002	0.0009	0.0013	0.0008	0.0079	0.93	0.0085	1.78
A	TOG_HTSK	0.17	0.18	0.16	0.15	0.04	0.03	0.02	0.03	0.01	0.14	0.37	0.06	0.1
A	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.54	0.03	0	0	0.84	0
A	TOG_RESTL	0.07	0.08	0.07	0.07	0.0009	0.0006	0.0003	0.0006	0.0003	0.0039	0.49	0.0032	0.63
A	TOG_RUNEX	0.09	0.16	0.12	0.17	0.28	0.2	0.25	1.39	0.22	1.22	3.47	0.65	0.4
A	TOG_RUNLS	0.090108	0.132574	0.125922	0.116798	0.392257	0.26618	0.120932	0.023134	0.168099	0.03261	0.45868	0.05738	0.019145
A	TOG_STREX	0.41	0.45	0.49	0.71	0.63	0.49	0.58	2.45	0.7	1.35	2.42	0.59	1.04
S	FleetMix	0.512397	0.076403	0.229567	0.105683	0.020632	0.006014	0.01488	0.02194	0.00115	0.00173	0.00595	0.0009	0.002756
S	CH4_IDLEX	0	0	0	0	0.0015	0.0013	0.0009	0.09	0.0013	0	0	0.03	0
S	CH4_RUNEX	0.02	0.03	0.03	0.04	0.02	0.01	0.01	0.06	0.02	0.05	0.22	0.03	0.04
S	CH4_STREX	0.01	0.02	0.02	0.03	0.02	0.02	0.02	0.11	0.03	0.06	0.12	0.02	0.04
S	CO_IDLEX	0	0	0	0	0.21	0.19	0.14	6.5	0.18	0	0	5.5	0
S	CO_RUNEX	2.33	3.56	3.18	3.89	3.66	2.15	2.97	6.4	3.33	8.53	34.5	7.42	11.33
S	CO_STREX	3.47	4.21	4.45	5.67	5.67	4.03	5.82	30.38	8.19	14.12	8.64	6.34	11.8
S	CO2_IDLEX	0	0	0	0	8.0498	8.5685	12.5884	1315.6925	11.0922	0	0	553.712	0
S	CO2_RUNEX	412.2667	506.311	514.311	701.2624	642.2204	610.071	1361.7371	1803.8391	1171.3742	2186.47	147.919	1397.05	738.5889
S	CO2_STREX	71.7302	87.6603	89.0767	122.2137	38.0845	31.5309	15.1021	23.9599	23.3814	42.9124	49.7253	19.4013	37.7753
S	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	21.85	0.1	0	0	8.6	0
S	NOX_RUNEX	0.17	0.29	0.34	0.46	1.52	2.93	7.05	13.72	4.3	15.75	1.13	9.95	2.02
S	NOX_STREX	0.28	0.31	0.51	0.64	1.61	1.33	0.69	3.01	1.26	1.82	0.29	0.42	1.19
S	PM10_IDLEX	0	0	0	0	0.0002	0.0006	0.0022	0.25	0.0014	0	0	0.12	0
S	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01
S	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0091	0.004	0.01	0.01
S	PM10_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.18	0.64	0.09	0.25	0.03	0.37	0.01
S	PM10_STREX	0.0061	0.0069	0.01	0.01	0.0023	0.0021	0.0012	0.0024	0.0019	0.0034	0.01	0.0011	0.001
S	PM25_IDLEX	0	0	0	0	0.0001	0.0005	0.0021	0.23	0.0013	0	0	0.11	0
S	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054
S	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0088	0.003	0.0023	0.001	0.003	0.003
S	PM25_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.16	0.59	0.08	0.23	0.02	0.34	0.01
S	PM25_STREX	0.0056	0.0064	0.01	0.01	0.0021	0.002	0.0011	0.0021	0.0017	0.0032	0.01	0.001	0.0009
S	ROG_DIURN	0.18	0.19	0.17	0.17	0.0045	0.0032	0.0014	0.0021	0.0013	0.01	1.61	0.01	2.72
S	ROG_HTSK	0.19	0.2	0.18	0.17	0.05	0.04	0.02	0.03	0.02	0.15	0.44	0.06	0.11
S	ROG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.1	0.02	0	0	0.76	0
S	ROG_RESTL	0.13	0.14	0.12	0.13	0.0017	0.0012	0.0006	0.0011	0.0006	0.0069	1.03	0.0058	1.12
S	ROG_RUNEX	0.07	0.13	0.09	0.13	0.25	0.18	0.22	1.23	0.19	1.12	3.04	0.58	0.35
S	ROG_RUNLS	0.086171	0.125267	0.11828	0.109978	0.383426	0.259324	0.119464	0.023039	0.165016	0.03081	0.43355	0.05299	0.018773
S	ROG_STREX	0.32	0.35	0.38	0.55	0.5	0.39	0.46	1.94	0.57	1.12	1.92	0.47	0.79
S	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0054	0
S	SO2_RUNEX	0.0041	0.005	0.0051	0.0069	0.0062	0.0059	0.01	0.01	0.01	0.02	0.002	0.01	0.0073
S	SO2_STREX	0.0008	0.0009	0.0009	0.0013	0.0005	0.0004	0.0002	0.0007	0.0004	0.0007	0.0007	0.0003	0.0006
S	TOG_DIURN	0.18	0.19	0.17	0.17	0.0045	0.0032	0.0014	0.0021	0.0013	0.01	1.61	0.01	2.72
S	TOG_HTSK	0.19	0.2	0.18	0.17	0.05	0.04	0.02	0.03	0.02	0.15	0.44	0.06	0.11
S	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.39	0.03	0	0	0.84	0
S	TOG_RESTL	0.13	0.14	0.12	0.13	0.0017	0.0012	0.0006	0.0011	0.0006	0.0069	1.03	0.0058	1.12
S	TOG_RUNEX	0.09	0.16	0.12	0.18	0.29	0.2	0.25	1.4	0.23	1.24	3.32	0.65	0.4
S	TOG_RUNLS	0.086171	0.125267	0.11828	0.109978	0.383426	0.259324	0.119464	0.023039	0.165016	0.03081	0.43355	0.05299	0.018773
S	TOG_STREX	0.34	0.37	0.41	0.59	0.54	0.42	0.49	2.08	0.61	1.2	2.07	0.51	0.85

W	FleetMix	0.512397	0.076403	0.229567	0.105683	0.020632	0.006014	0.01488	0.02194	0.00115	0.00173	0.00595	0.0009	0.002756	
W	CH4_IDLEX	0	0	0	0	0.0015	0.0013	0.0009	0.11	0.0013	0	0	0.03	0	
W	CH4_RUNEX	0.02	0.02	0.03	0.04	0.02	0.01	0.01	0.06	0.02	0.05	0.23	0.03	0.04	
W	CH4_STREX	0.02	0.02	0.02	0.03	0.03	0.02	0.03	0.14	0.03	0.07	0.14	0.03	0.05	
W	CO_IDLEX	0	0	0	0	0.21	0.19	0.14	12.36	0.18	0	0	5.5	0	
W	CO_RUNEX	2.05	3.26	2.8	3.48	3.59	2.12	2.96	6.38	3.28	8.49	36.8	7.56	11.24	
W	CO_STREX	4.64	5.57	5.97	7.57	7.37	5.17	7.01	34.74	10.17	17	9.66	7.8	15.19	
W	CO2_IDLEX	0	0	0	0	8.0498	8.5685	12.5884	1145.4492	11.0922	0	0	553.712	0	
W	CO2_RUNEX	376.3667	465.0045	471.1292	642.2104	642.2204	610.071	1361.7371	1803.8391	1171.3742	2186.47	147.919	1397.05	738.5889	
W	CO2_STREX	71.7302	87.6603	89.0767	122.2137	38.0845	31.5309	15.1021	23.9599	23.3814	42.9124	49.7253	19.4013	37.7753	
W	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	20.06	0.1	0	0	8.6	0	
W	NOX_RUNEX	0.2	0.33	0.4	0.53	1.68	3.15	7.58	14.67	4.69	16.94	1.34	10.66	2.29	
W	NOX_STREX	0.31	0.34	0.56	0.7	1.68	1.4	0.72	3.15	1.32	1.92	0.31	0.45	1.25	
W	PM10_IDLEX	0	0	0	0	0.0002	0.0006	0.0022	0.37	0.0014	0	0	0.12	0	
W	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01	
W	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0091	0.004	0.01	0.01	
W	PM10_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.18	0.64	0.09	0.25	0.03	0.37	0.01	
W	PM10_STREX	0.0061	0.0069	0.01	0.01	0.0023	0.0021	0.0012	0.0024	0.0019	0.0034	0.01	0.0011	0.001	
W	PM25_IDLEX	0	0	0	0	0.0001	0.0005	0.0021	0.34	0.0013	0	0	0.11	0	
W	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054	
W	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0088	0.003	0.0023	0.001	0.003	0.003	
W	PM25_RUNEX	0.01	0.01	0.02	0.02	0.01	0.02	0.16	0.59	0.08	0.23	0.02	0.34	0.01	
W	PM25_STREX	0.0056	0.0064	0.01	0.01	0.0021	0.002	0.0011	0.0021	0.0017	0.0032	0.01	0.001	0.0009	
W	ROG_DIURN	0.13	0.13	0.12	0.12	0.004	0.0028	0.0012	0.0018	0.0011	0.01	1.21	0.01	2.48	
W	ROG_HTSK	0.21	0.22	0.19	0.18	0.05	0.04	0.02	0.04	0.02	0.19	0.52	0.07	0.14	
W	ROG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.42	0.02	0	0	0.76	0	
W	ROG_RESTL	0.06	0.07	0.06	0.06	0.0009	0.0006	0.0003	0.0006	0.0003	0.0041	0.42	0.0032	0.64	
W	ROG_RUNEX	0.06	0.13	0.08	0.13	0.25	0.17	0.22	1.23	0.19	1.1	3.21	0.58	0.35	
W	ROG_RUNLS	0.102102	0.155134	0.149301	0.137865	0.42758	0.291374	0.128008	0.024316	0.179281	0.03778	0.5321	0.06738	0.020204	
W	ROG_STREX	0.39	0.42	0.47	0.68	0.59	0.46	0.54	2.29	0.66	1.27	2.26	0.57	0.98	
W	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0054	0	
W	SO2_RUNEX	0.0037	0.0046	0.0046	0.0063	0.0062	0.0059	0.01	0.01	0.01	0.02	0.0021	0.01	0.0073	
W	SO2_STREX	0.0008	0.0009	0.001	0.0013	0.0005	0.0004	0.0003	0.0008	0.0004	0.0007	0.0007	0.0003	0.0006	
W	TOG_DIURN	0.13	0.13	0.12	0.12	0.004	0.0028	0.0012	0.0018	0.0011	0.01	1.21	0.01	2.48	
W	TOG_HTSK	0.21	0.22	0.19	0.18	0.05	0.04	0.02	0.04	0.02	0.19	0.52	0.07	0.14	
W	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.76	0.03	0	0	0.84	0	
W	TOG_RESTL	0.06	0.07	0.06	0.06	0.0009	0.0006	0.0003	0.0006	0.0003	0.0041	0.42	0.0032	0.64	
W	TOG_RUNEX	0.09	0.16	0.11	0.17	0.28	0.2	0.25	1.39	0.22	1.22	3.49	0.65	0.4	
W	TOG_RUNLS	0.102102	0.155134	0.149301	0.137865	0.42758	0.291374	0.128008	0.024316	0.179281	0.03778	0.5321	0.06738	0.020204	
W	TOG_STREX	0.42	0.45	0.5	0.72	0.64	0.49	0.58	2.46	0.71	1.36	2.43	0.61	1.05	
Paved (%)	**Silt Loading**	**Silt**	**Moisture**	**Weight**	**Speed**										
100	0.1	4.3	0.5	2.4	40										
Area Sources															
Woodstoves	**Conventional**	**Catalytic**	**Noncatalytic**	**Pellet**	**Days**	**Mass**									
Apartments Low Rise	0	0.3	0.3	0	25	999.6									
Single Family Housing	0	0.1	0.1	0	25	999.6									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
0	0	0	0	0	0	0									
Fireplaces	**Wood**	**Gas**	**Propane**	**None**	**Hours/Day**	**Days/syear**	**Mass**								
Apartments Low Rise	0.3	5.1	0	0.6	3	75	1019.2								
Single Family Housing	0.1	1.7	0	0.2	3	75	1019.2								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
Consumer Products															
0.0000198															
Architectural Coating															
Residential				*Nonresidential*											
Interior	*Area*	*Exterior*	*Area*	*Interior*	*Area*	*Exterior*	*Area*	*Reapply (%)*							
50	0	100	0	250	592260	250	197420	10							
Landscaping															
NumberSnowDays	*NumberSummerDays*														
0	365														
Energy Use															
Land Use	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**										
Apartments Low Rise	284.86	2399.07	876.36	16443.48	2756										
Automobile Care Center	2.75	5.75	3.55	14.36	4.45										
Day-Care Center	2.13	1.59	2.98	9.81	1.08										
Fast Food Restaurant w/o Drive Thru	9.91	28.16	8.84	45.23	187.78										
General Heavy Industry	2.75	5.75	3.55	14.36	4.45										
General Light Industry	2.75	5.75	3.55	14.36	4.45										
General Office Building	5.62	4.62	4.29	10.54	0.39										
Hardware/Paint Store	4.9	3.23	7.04	1.21	0.49										
High Turnover (Sit Down Restaurant)	9.91	28.16	8.84	45.23	187.78										
Manufacturing	2.75	5.75	3.55	14.36	4.45										
Recreational Swimming Pool	0	0	0	0	0										
Single Family Housing	832.04	4476.23	1478.48	35465.4	5936.6										
Strip Mall	4.9	3.23	7.04	1.21	0.49										

Water and Wastewater

Land Use	Metric	Indoor rate	Outdoor Rate	Supply	Supply Treat	Distribute	Waste Treat	Septic	Aerobic	Anaerobic	Digest	Cogen
				Intensity Factors								
Apartments Low Rise	Dwelling Unit	390924.15	246452.18	9727	111	1272	1911	10	84.69	2.14	3.17	0
Automobile Care Center	1000sqft	1392400.39	853406.69	9727	111	1272	1911	10	84.69	2.14	3.17	0
Day-Care Center	1000sqft	233319.25	599963.78	9727	111	1272	1911	10	84.69	2.14	3.17	0
Fast Food Restaurant w/o Drive Thru	1000sqft	1004696.59	64129.57	9727	111	1272	1911	10	84.69	2.14	3.17	0
General Heavy Industry	1000sqft	33484357.8	0	9727	111	1272	1911	10	84.69	2.14	3.17	0
General Light Industry	1000sqft	320191098.4	0	9727	111	1272	1911	10	84.69	2.14	3.17	0
General Office Building	1000sqft	5301797.7	3249488.91	9727	111	1272	1911	10	84.69	2.14	3.17	0
Hardware/Paint Store	1000sqft	558506.81	342310.63	9727	111	1272	1911	10	84.69	2.14	3.17	0
High Turnover (Sit Down Restaurant)	1000sqft	303533.71	19374.49	9727	111	1272	1911	10	84.69	2.14	3.17	0
Manufacturing	1000sqft	25617254.65	0	9727	111	1272	1911	10	84.69	2.14	3.17	0
Recreational Swimming Pool	1000sqft	2626547.03	1609819.15	9727	111	1272	1911	10	84.69	2.14	3.17	0
Single Family Housing	Dwelling Unit	130308.05	82150.73	9727	111	1272	1911	10	84.69	2.14	3.17	0
Strip Mall	1000sqft	3382892.06	2073385.45	9727	111	1272	1911	10	84.69	2.14	3.17	0

Solid Waste

Land Use	Metric	Rate	No Capture	Flare	Energy Recoup
Apartments Low Rise	Dwelling Unit	2.76	6	94	0
Automobile Care Center	1000sqft	56.54	6	94	0
Day-Care Center	1000sqft	7.07	6	94	0
Fast Food Restaurant w/o Drive Thru	1000sqft	38.13	6	94	0
General Heavy Industry	1000sqft	41.92	6	94	0
General Light Industry	1000sqft	3788.6	6	94	0
General Office Building	1000sqft	27.74	6	94	0
Hardware/Paint Store	1000sqft	83.61	6	94	0
High Turnover (Sit Down Restaurant)	1000sqft	11.9	6	94	0
Manufacturing	1000sqft	56.27	6	94	0
Recreational Swimming Pool	1000sqft	253.14	6	94	0
Single Family Housing	Dwelling Unit	2.46	6	94	0
Strip Mall	1000sqft	47.95	6	94	0

Land Use Change

Land Use	Vegetation Type	Acres Begin	Acres End	CO2
0	0	0	0	0

Sequestration

BroadSpeciesClass	NumberOfNewTrees	CO2perTree
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Mitigation

Construction

ConstMitigationEquipmentType	*FuelType*	*Tier*	*No.*	*Total*	*DPF*	*OxidationCatalyst*
Air Compressors	Diesel	0	0	1	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Soil Stabilizers	*PM10 Reduction*	*PM2.5 Reduction*	
0	0	0	
Ground Cover	*PM10 Reduction*	*PM2.5 Reduction*	
0	0	0	
Watering	*Frequency*	*PM10 Reduction*	*PM2.5 Reduction*
0	0	0	0
Unpaved Roads	*Vehicle Speed*	*Moisture Content*	*Speed*
0	0	0	0
Road Cleaning	*PM Reduction*		
0	0		

Land Use and Traffic														
ProjectSetting														
0														
Increase Density	*DU/Acre*	*Job/Acre*	*Increase Diversity*											
0	0	0	0											
Improve Walkability	*Intersections*	*Improve Accessibility*	*Distance*	*Improve Transit*	*Distance*	*Low Income Homes*	*DU*							
0	0	0	0	0	0	0	0							
Improve Ped Network	*Selection*													
0	0													
Traffic Calming	*Streets*	*Intersections*	*NEV network*											
0	0	0	0											
Limit parking	*Reduction*	*Unbundle Costs*	*Cost*	*On-Street pricing*	*Increase*									
0	0	0	0	0	0									
BRT System	*Lines*	*Expand Transit*	*Increase*	*Increase Frequency*	*Level*	*Reducction*								
0	0	0	0	0	0	0								
Trip Reduction	*Employee %*	*Type*												
0	0	0												
Transit Subsidy	*Employee %*	*Amount*												
0	0	0												
Parking Cash Out	*Employee %*	*Parking Charge*	*Employee %*	*WorkplaceParkingChargeCost*										
0	0	0	0	0										
Encourage Telecommuting	*9-80*	*4-40*	*1/5*											
0	0	0	0											
Market Trip Reduction	*Employee %*	*Vanpool*	*Percent %*	*Mode Share*										
0	0	0	0	2										
Ride Sharing	*Employee %*	*School Bus*	*Family %*											
0	0	0	0											
Area														
Lawnmower	*Electric %*	*Leafblower*	*Electric %*	*Chainsaw*	*Electric %*									
0	0	0	0	0	0									
Residential				*Nonresidential*										
Interior	*EF*	*Exterior*	*EF*	*Interior*	*EF*	*Exterior*	*EF*							
0	50	0	100	0	250	0	250							
Natural Gas Hearth	*No Hearth*	*Low VOC Cleaning*												
0	0	0												
Energy					**ApplianceType**	**Land Use**	**Improvement %**							
Exceed Title 24	*Improvement %*	*Efficient Lighting*	*Reduction %*		ClothWasher	0	30							
0	0	0	0		DishWasher	0	15							
Renewable Energy	*KwhGeneratedCheck*	*KwhGenerated*	*Generated %*	*Generated %*	Fan	0	50							
0	0	0	0	0	Refrigerator	0	15							
Water														
Conservation Strategy	*Indoor Reduction*	*Outdoor reduction*												
0	0	0												
Reclaimed Water	*Outdoor*	*Indoor*	*Grey Water*	*Outdoor*	*Indoor*									
0	0	0	0	0	0									
Low Flow WC Faucet	*Reduction %*	*Low Flow Kitchen Faucet*	*Reduction %*											
0	32	0	18											
Low Flow Toileet	*Reduction %*	*Low Flow Shower*	*Reduction %*											
0	20	0	20											
Turf Reduction	*Area*	*Reduction %*	*Efficient Irrigation*	*Reduction %*										
0	0	0	0	6.1										
Efficient landscape	*MAWA*	*ETWU*												
0	0	0												
Solid Waste														
Recycling	Reduction %													
0	0													

Artesia Boulevard Corridor Specific Plan Initial Study

Air Quality and GHG Analysis: CalEEMod Existing Conditions - Winter

2858 Artesia Blvd SP (Existing)

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	29.83	1000sqft
Fast Food Restaurant w/o Drive Thru	3.31	1000sqft
Manufacturing	5.21	1000sqft
Hardware/Paint Store	7.54	1000sqft
General Light Industry	65.12	1000sqft
Single Family Housing	2	Dwelling Unit
Strip Mall	45.67	1000sqft
Recreational Swimming Pool	44.41	1000sqft
Automobile Care Center	14.8	1000sqft
Day-Care Center	5.44	1000sqft
Apartments Low Rise	6	Dwelling Unit
General Heavy Industry	6.81	1000sqft
High Turnover (Sit Down Restaurant)	1	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	9	**Precipitation Freq (Days)**	31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Existing Conditions (Adjust to Match Existing Inventory)

Construction Phase - Placeholder (No Construction Emissions to Be Modeled)

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

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					

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	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Energy	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Mobile	41.33	90.98	376.04	0.42	47.89	2.99	50.88	0.67	2.84	3.51				2.85		45,056.13
Total	**48.45**	**91.94**	**380.14**	**0.44**	**47.89**	**2.99**	**51.38**	**0.67**	**2.84**	**4.01**				**3.09**	**0.02**	**46,368.48**

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	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Energy	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Mobile	41.33	90.98	376.04	0.42	47.89	2.99	50.88	0.67	2.84	3.51				2.85		45,056.13
Total	**48.45**	**91.94**	**380.14**	**0.44**	**47.89**	**2.99**	**51.38**	**0.67**	**2.84**	**4.01**				**3.09**	**0.02**	**46,368.48**

3.0 Construction Detail

3.1 Mitigation Measures Construction

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					

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					

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					

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					

4.0 Mobile Detail

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	41.33	90.98	376.04	0.42	47.89	2.99	50.88	0.67	2.84	3.51				2.85		45,056.13
Unmitigated	41.33	90.98	376.04	0.42	47.89	2.99	50.88	0.67	2.84	3.51				2.85		45,056.13
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	39.54	42.96	36.42	112,420	112,420
Automobile Care Center	917.60	917.60	917.60	914,100	914,100
Day-Care Center	431.17	33.78	31.72	373,707	373,707
Fast Food Restaurant w/o Drive Thru	2,369.96	2,303.76	1655.00	3,641,769	3,641,769
General Heavy Industry	10.22	10.22	10.22	29,823	29,823
General Light Industry	453.89	85.96	44.28	1,000,838	1,000,838
General Office Building	328.43	70.70	29.23	594,732	594,732
Hardware/Paint Store	386.73	622.20	517.62	638,732	638,732
High Turnover (Sit Down Restaurant)	127.15	158.37	131.84	153,480	153,480
Manufacturing	19.90	7.76	3.23	46,088	46,088
Recreational Swimming Pool	1,462.42	926.84	1187.08	2,433,637	2,433,637
Single Family Housing	19.14	20.16	17.54	54,125	54,125
Strip Mall	2,024.09	1,919.97	933.04	2,854,226	2,854,226
Total	8,590.24	7,120.27	5,514.81	12,847,678	12,847,678

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00
General Heavy Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

5.0 Energy Detail

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	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
NaturalGas Unmitigated	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Apartments Low Rise	315.608	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	37.36
Automobile Care Center	762.501	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01				0.00	0.00	90.25
Day-Care Center	162.246	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	19.20
Fast Food Restaurant w/o Drive Thru	2112.41	0.02	0.21	0.17	0.00		0.00	0.02		0.00	0.02				0.00	0.00	250.03
General Heavy Industry	351.154	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00				0.00	0.00	41.56
General Light Industry	3356.12	0.04	0.33	0.28	0.00		0.00	0.03		0.00	0.03				0.01	0.01	397.24
General Office Building	893.265	0.01	0.09	0.07	0.00		0.00	0.01		0.00	0.01				0.00	0.00	105.73
Hardware/Paint Store	35.1411	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	4.16
High Turnover (Sit Down Restaurant)	638.384	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00				0.00	0.00	75.56
Manufacturing	268.493	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	31.78
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Single Family Housing	226.86	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	26.85
Strip Mall	212.691	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	25.17
Total		**0.09**	**0.91**	**0.73**	**0.00**		**0.00**	**0.07**		**0.00**	**0.07**				**0.01**	**0.01**	**1,104.89**

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	lb/day										lb/day					
Apartments Low Rise	0.315608	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	37.36
Automobile Care Center	0.762501	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01				0.00	0.00	90.25
Day-Care Center	0.162246	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	19.20
Fast Food Restaurant w/o Drive Thru	2.11241	0.02	0.21	0.17	0.00		0.00	0.02		0.00	0.02				0.00	0.00	250.03
General Heavy Industry	0.351154	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00				0.00	0.00	41.56
General Light Industry	3.35612	0.04	0.33	0.28	0.00		0.00	0.03		0.00	0.03				0.01	0.01	397.24
General Office Building	0.893265	0.01	0.09	0.07	0.00		0.00	0.01		0.00	0.01				0.00	0.00	105.73
Hardware/Paint Store	0.0351411	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	4.16
High Turnover (Sit Down Restaurant)	0.638384	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00				0.00	0.00	75.56
Manufacturing	0.268493	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	31.78
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Single Family Housing	0.22686	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	26.85
Strip Mall	0.212691	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	25.17
Total		**0.09**	**0.91**	**0.73**	**0.00**		**0.00**	**0.07**		**0.00**	**0.07**				**0.01**	**0.01**	**1,104.89**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Unmitigated	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	1.47					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42				0.22	0.00	206.22

Landscaping	0.02	0.01	0.70	0.00		0.00	0.00		0.00	0.00				0.00		1.23
Total	**7.01**	**0.05**	**3.35**	**0.01**		**0.00**	**0.42**		**0.00**	**0.42**				**0.22**	**0.00**	**207.45**

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	1.47					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42				0.22	0.00	206.22
Landscaping	0.02	0.01	0.70	0.00		0.00	0.00		0.00	0.00				0.00		1.23
Total	**7.01**	**0.05**	**3.35**	**0.01**		**0.00**	**0.42**		**0.00**	**0.42**				**0.22**	**0.00**	**207.45**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Artesia Boulevard Corridor Specific Plan
Initial Study

Air Quality and GHG Analysis:
CalEEMod Existing Conditions - Summer

2858 Artesia Blvd SP (Existing)

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	29.83	1000sqft
Fast Food Restaurant w/o Drive Thru	3.31	1000sqft
Manufacturing	5.21	1000sqft
Hardware/Paint Store	7.54	1000sqft
General Light Industry	65.12	1000sqft
Single Family Housing	2	Dwelling Unit
Strip Mall	45.67	1000sqft
Recreational Swimming Pool	44.41	1000sqft
Automobile Care Center	14.8	1000sqft
Day-Care Center	5.44	1000sqft
Apartments Low Rise	6	Dwelling Unit
General Heavy Industry	6.81	1000sqft
High Turnover (Sit Down Restaurant)	1	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Existing Conditions (Adjust to Match Existing Inventory)

Construction Phase - Placeholder (No Construction Emissions to Be Modeled)

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

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					

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	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Energy	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Mobile	40.03	84.10	370.59	0.46	47.89	2.94	50.83	0.67	2.79	3.46				2.78		48,428.95
Total	**47.15**	**85.06**	**374.69**	**0.48**	**47.89**	**2.94**	**51.33**	**0.67**	**2.79**	**3.96**				**3.02**	**0.02**	**49,741.30**

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	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Energy	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Mobile	40.03	84.10	370.59	0.46	47.89	2.94	50.83	0.67	2.79	3.46				2.78		48,428.95
Total	**47.15**	**85.06**	**374.69**	**0.48**	**47.89**	**2.94**	**51.33**	**0.67**	**2.79**	**3.96**				**3.02**	**0.02**	**49,741.30**

3.0 Construction Detail

3.1 Mitigation Measures Construction

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					

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					

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					

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					

4.0 Mobile Detail

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	40.03	84.10	370.59	0.46	47.89	2.94	50.83	0.67	2.79	3.46				2.78		48,428.95
Unmitigated	40.03	84.10	370.59	0.46	47.89	2.94	50.83	0.67	2.79	3.46				2.78		48,428.95
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	39.54	42.96	36.42	112,420	112,420
Automobile Care Center	917.60	917.60	917.60	914,100	914,100
Day-Care Center	431.17	33.78	31.72	373,707	373,707
Fast Food Restaurant w/o Drive Thru	2,369.96	2,303.76	1655.00	3,641,769	3,641,769
General Heavy Industry	10.22	10.22	10.22	29,823	29,823
General Light Industry	453.89	85.96	44.28	1,000,838	1,000,838
General Office Building	328.43	70.70	29.23	594,732	594,732
Hardware/Paint Store	386.73	622.20	517.62	638,732	638,732
High Turnover (Sit Down Restaurant)	127.15	158.37	131.84	153,480	153,480
Manufacturing	19.90	7.76	3.23	46,088	46,088
Recreational Swimming Pool	1,462.42	926.84	1187.08	2,433,637	2,433,637
Single Family Housing	19.14	20.16	17.54	54,125	54,125
Strip Mall	2,024.09	1,919.97	933.04	2,854,226	2,854,226
Total	8,590.24	7,120.27	5,514.81	12,847,678	12,847,678

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00
General Heavy Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

5.0 Energy Detail

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	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
NaturalGas Unmitigated	0.10	0.91	0.75	0.01		0.00	0.07		0.00	0.07				0.02	0.02	1,104.90
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Apartments Low Rise	315.608	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	37.36
Automobile Care Center	762.501	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01				0.00	0.00	90.25
Day-Care Center	162.246	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	19.20
Fast Food Restaurant w/o Drive Thru	2112.41	0.02	0.21	0.17	0.00		0.00	0.02		0.00	0.02				0.00	0.00	250.03
General Heavy Industry	351.154	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00				0.00	0.00	41.56
General Light Industry	3356.12	0.04	0.33	0.28	0.00		0.00	0.03		0.00	0.03				0.01	0.01	397.24
General Office Building	893.265	0.01	0.09	0.07	0.00		0.00	0.01		0.00	0.01				0.00	0.00	105.73
Hardware/Paint Store	35.1411	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	4.16
High Turnover (Sit Down Restaurant)	638.384	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00				0.00	0.00	75.56
Manufacturing	268.493	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	31.78
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Single Family Housing	226.86	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	26.85
Strip Mall	212.691	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	25.17
Total		**0.09**	**0.91**	**0.73**	**0.00**		**0.00**	**0.07**		**0.00**	**0.07**				**0.01**	**0.01**	**1,104.89**

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	lb/day										lb/day					
Apartments Low Rise	0.315608	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	37.36
Automobile Care Center	0.762501	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01				0.00	0.00	90.25
Day-Care Center	0.162246	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	19.20
Fast Food Restaurant w/o Drive Thru	2.11241	0.02	0.21	0.17	0.00		0.00	0.02		0.00	0.02				0.00	0.00	250.03
General Heavy Industry	0.351154	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00				0.00	0.00	41.56
General Light Industry	3.35612	0.04	0.33	0.28	0.00		0.00	0.03		0.00	0.03				0.01	0.01	397.24
General Office Building	0.893265	0.01	0.09	0.07	0.00		0.00	0.01		0.00	0.01				0.00	0.00	105.73
Hardware/Paint Store	0.0351411	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	4.16
High Turnover (Sit Down Restaurant)	0.638384	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00				0.00	0.00	75.56
Manufacturing	0.268493	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	31.78
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Single Family Housing	0.22686	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	26.85
Strip Mall	0.212691	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00				0.00	0.00	25.17
Total		**0.09**	**0.91**	**0.73**	**0.00**		**0.00**	**0.07**		**0.00**	**0.07**				**0.01**	**0.01**	**1,104.89**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Unmitigated	7.02	0.05	3.35	0.01		0.00	0.43		0.00	0.43				0.22	0.00	207.45
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	1.47					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42				0.22	0.00	206.22

Landscaping	0.02	0.01	0.70	0.00		0.00	0.00		0.00	0.00				0.00		1.23
Total	**7.01**	**0.05**	**3.35**	**0.01**		**0.00**	**0.42**		**0.00**	**0.42**				**0.22**	**0.00**	**207.45**

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	1.47					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42				0.22	0.00	206.22
Landscaping	0.02	0.01	0.70	0.00		0.00	0.00		0.00	0.00				0.00		1.23
Total	**7.01**	**0.05**	**3.35**	**0.01**		**0.00**	**0.42**		**0.00**	**0.42**				**0.22**	**0.00**	**207.45**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Artesia Boulevard Corridor Specific Plan
Initial Study

Air Quality and GHG Analysis:
CalEEMod Existing Conditions - Annual

2858 Artesia Blvd SP (Existing)

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	29.83	1000sqft
Fast Food Restaurant w/o Drive Thru	3.31	1000sqft
Manufacturing	5.21	1000sqft
Hardware/Paint Store	7.54	1000sqft
General Light Industry	65.12	1000sqft
Single Family Housing	2	Dwelling Unit
Strip Mall	45.67	1000sqft
Recreational Swimming Pool	44.41	1000sqft
Automobile Care Center	14.8	1000sqft
Day-Care Center	5.44	1000sqft
Apartments Low Rise	6	Dwelling Unit
General Heavy Industry	6.81	1000sqft
High Turnover (Sit Down Restaurant)	1	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Existing Conditions (Adjust to Match Existing Inventory)

Construction Phase - Placeholder (No Construction Emissions to Be Modeled)

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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

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					

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.15	0.00	0.18	0.00		0.00	0.01		0.00	0.01			5.95	0.00	0.00	6.04
Energy	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01			944.51	0.04	0.02	950.39
Mobile	6.29	13.87	61.47	0.07	6.98	0.48	7.46	0.11	0.45	0.56			6,750.54	0.42	0.00	6,759.32
Waste						0.00	0.00		0.00	0.00			896.83	53.00	0.00	2,009.86
Water						0.00	0.00		0.00	0.00			1,528.55	12.11	0.32	1,883.66
Total	**7.46**	**14.04**	**61.79**	**0.07**	**6.98**	**0.48**	**7.48**	**0.11**	**0.45**	**0.58**			**10,126.38**	**65.57**	**0.34**	**11,609.27**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.15	0.00	0.18	0.00		0.00	0.01		0.00	0.01			5.95	0.00	0.00	6.04
Energy	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01			944.51	0.04	0.02	950.39
Mobile	6.29	13.87	61.47	0.07	6.98	0.48	7.46	0.11	0.45	0.56			6,750.54	0.42	0.00	6,759.32
Waste						0.00	0.00		0.00	0.00			896.83	53.00	0.00	2,009.86
Water						0.00	0.00		0.00	0.00			1,528.55	12.11	0.32	1,883.66
Total	**7.46**	**14.04**	**61.79**	**0.07**	**6.98**	**0.48**	**7.48**	**0.11**	**0.45**	**0.58**			**10,126.38**	**65.57**	**0.34**	**11,609.27**

3.0 Construction Detail

3.1 Mitigation Measures Construction

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					

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					

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					

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					

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.29	13.87	61.47	0.07	6.98	0.48	7.46	0.11	0.45	0.56			6,750.54	0.42	0.00	6,759.32
Unmitigated	6.29	13.87	61.47	0.07	6.98	0.48	7.46	0.11	0.45	0.56			6,750.54	0.42	0.00	6,759.32
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	39.54	42.96	36.42	112,420	112,420
Automobile Care Center	917.60	917.60	917.60	914,100	914,100
Day-Care Center	431.17	33.78	31.72	373,707	373,707
Fast Food Restaurant w/o Drive Thru	2,369.96	2,303.76	1655.00	3,641,769	3,641,769
General Heavy Industry	10.22	10.22	10.22	29,823	29,823
General Light Industry	453.89	85.96	44.28	1,000,838	1,000,838
General Office Building	328.43	70.70	29.23	594,732	594,732
Hardware/Paint Store	386.73	622.20	517.62	638,732	638,732
High Turnover (Sit Down Restaurant)	127.15	158.37	131.84	153,480	153,480
Manufacturing	19.90	7.76	3.23	46,088	46,088
Recreational Swimming Pool	1,462.42	926.84	1187.08	2,433,637	2,433,637
Single Family Housing	19.14	20.16	17.54	54,125	54,125
Strip Mall	2,024.09	1,919.97	933.04	2,854,226	2,854,226
Total	8,590.24	7,120.27	5,514.81	12,847,678	12,847,678

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00
General Heavy Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

5.0 Energy Detail

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						0.00	0.00		0.00	0.00			762.68	0.03	0.01	767.46
Electricity Unmitigated						0.00	0.00		0.00	0.00			762.68	0.03	0.01	767.46
NaturalGas Mitigated	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01			181.82	0.00	0.00	182.93
NaturalGas Unmitigated	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01			181.82	0.00	0.00	182.93
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
Apartments Low Rise	115197	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00			6.15	0.00	0.00	6.18
Automobile Care Center	278313	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			14.85	0.00	0.00	14.94
Day-Care Center	59219.8	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			3.16	0.00	0.00	3.18
Fast Food Restaurant w/o Drive	771030	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00			41.15	0.00	0.00	41.40
General Heavy Industry	128171	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			6.84	0.00	0.00	6.88
General Light Industry	1.22498e+006	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00			65.37	0.00	0.00	65.77
General Office Building	326042	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00			17.40	0.00	0.00	17.50
Hardware/Paint Store	12826.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.68	0.00	0.00	0.69
High Turnover (Sit Down Restaurant)	233010	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			12.43	0.00	0.00	12.51
Manufacturing	98000.1	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			5.23	0.00	0.00	5.26
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Single Family Housing	82804	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			4.42	0.00	0.00	4.45
Strip Mall	77632.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			4.14	0.00	0.00	4.17
Total		**0.01**	**0.16**	**0.12**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**			**181.82**	**0.00**	**0.00**	**182.93**

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	tons/yr										MT/yr					
Apartments Low Rise	115197	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00			6.15	0.00	0.00	6.18
Automobile Care Center	278313	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			14.85	0.00	0.00	14.94
Day-Care Center	59219.8	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			3.16	0.00	0.00	3.18
Fast Food Restaurant w/o Drive	771030	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00			41.15	0.00	0.00	41.40
General Heavy Industry	128171	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			6.84	0.00	0.00	6.88
General Light Industry	1.22498e+006	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00			65.37	0.00	0.00	65.77
General Office Building	326042	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00			17.40	0.00	0.00	17.50
Hardware/Paint Store	12826.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.68	0.00	0.00	0.69
High Turnover (Sit Down Restaurant)	233010	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			12.43	0.00	0.00	12.51
Manufacturing	98000.1	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			5.23	0.00	0.00	5.26
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Single Family Housing	82804	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			4.42	0.00	0.00	4.45
Strip Mall	77632.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			4.14	0.00	0.00	4.17
Total		**0.01**	**0.16**	**0.12**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**			**181.82**	**0.00**	**0.00**	**182.93**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	21361.7					6.21	0.00	0.00	6.25
Automobile Care Center	178292					51.86	0.00	0.00	52.18
Day-Care Center	36434.6					10.60	0.00	0.00	10.66
Fast Food Restaurant w/o Drive	155225					45.15	0.00	0.00	45.43
General Heavy Industry	82108.7					23.88	0.00	0.00	24.03
General Light Industry	784744					228.26	0.01	0.00	229.69
General Office Building	433430					126.07	0.01	0.00	126.86
Hardware/Paint Store	114458					33.29	0.00	0.00	33.50
High Turnover (Sit Down Restaurant)	46910					13.64	0.00	0.00	13.73
Manufacturing	62780.5					18.26	0.00	0.00	18.38
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	13573.5					3.95	0.00	0.00	3.97
Strip Mall	692753					201.50	0.01	0.00	202.76
Total						**762.67**	**0.03**	**0.00**	**767.44**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	21361.7					6.21	0.00	0.00	6.25
Automobile Care Center	178292					51.86	0.00	0.00	52.18
Day-Care Center	36434.6					10.60	0.00	0.00	10.66
Fast Food Restaurant w/o Drive	155225					45.15	0.00	0.00	45.43
General Heavy Industry	82108.7					23.88	0.00	0.00	24.03
General Light Industry	784744					228.26	0.01	0.00	229.69
General Office Building	433430					126.07	0.01	0.00	126.86
Hardware/Paint Store	114458					33.29	0.00	0.00	33.50
High Turnover (Sit Down Restaurant)	46910					13.64	0.00	0.00	13.73
Manufacturing	62780.5					18.26	0.00	0.00	18.38
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	13573.5					3.95	0.00	0.00	3.97
Strip Mall	692753					201.50	0.01	0.00	202.76
Total						**762.67**	**0.03**	**0.00**	**767.44**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.15	0.00	0.18	0.00		0.00	0.01		0.00	0.01			5.95	0.00	0.00	6.04
Unmitigated	1.15	0.00	0.18	0.00		0.00	0.01		0.00	0.01			5.95	0.00	0.00	6.04
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.27					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Consumer Products	0.85					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Hearth	0.03	0.00	0.05	0.00		0.00	0.01		0.00	0.01			5.75	0.00	0.00	5.84
Landscaping	0.00	0.00	0.13	0.00		0.00	0.00		0.00	0.00			0.20	0.00	0.00	0.20
Total	**1.15**	**0.00**	**0.18**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**			**5.95**	**0.00**	**0.00**	**6.04**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.27					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Consumer Products	0.85					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Hearth	0.03	0.00	0.05	0.00		0.00	0.01		0.00	0.01			5.75	0.00	0.00	5.84
Landscaping	0.00	0.00	0.13	0.00		0.00	0.00		0.00	0.00			0.20	0.00	0.00	0.20
Total	**1.15**	**0.00**	**0.18**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**			**5.95**	**0.00**	**0.00**	**6.04**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					1,528.55	12.11	0.32	1,883.66
Unmitigated					1,528.55	12.11	0.32	1,883.66
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.390924 / 0.246452					2.28	0.01	0.00	2.64
Automobile Care Center	1.3924 / 0.853407					8.05	0.04	0.00	9.32
Day-Care Center	0.233319 / 0.599264					2.83	0.01	0.00	3.05
Fast Food Restaurant w/o Drive	1.0047 / 0.6541296					4.02	0.03	0.00	4.93
General Heavy Industry	33.4844 / 0					127.20	1.03	0.03	157.31
General Light Industry	320.191 / 0					1,216.29	9.83	0.26	1,504.28
General Office Building	5.3018 / 3.24949					30.64	0.16	0.00	35.47
Hardware/Paint Store	0.558507 / 0.343211					3.23	0.02	0.00	3.74
High Turnover (Sit Down Restaurant)	0.303534 / 0.0193745					1.22	0.01	0.00	1.49
Manufacturing	25.6173 / 0					97.31	0.79	0.02	120.35
Recreational Swimming Pool	2.62655 / 1.60882					15.18	0.08	0.00	17.57
Single Family Housing	0.130308 / 0.0821507					0.76	0.00	0.00	0.88
Strip Mall	3.38289 / 2.07339					19.55	0.10	0.00	22.64
Total						**1,528.56**	**12.11**	**0.31**	**1,883.67**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.390924 / 0.246452					2.28	0.01	0.00	2.64
Automobile Care Center	1.3924 / 0.853407					8.05	0.04	0.00	9.32
Day-Care Center	0.233319 / 0.599264					2.83	0.01	0.00	3.05
Fast Food Restaurant w/o Drive	1.0047 / 0.6541296					4.02	0.03	0.00	4.93
General Heavy Industry	33.4844 / 0					127.20	1.03	0.03	157.31
General Light Industry	320.191 / 0					1,216.29	9.83	0.26	1,504.28
General Office Building	5.3018 / 3.24949					30.64	0.16	0.00	35.47
Hardware/Paint Store	0.558507 / 0.343211					3.23	0.02	0.00	3.74
High Turnover (Sit Down Restaurant)	0.303534 / 0.0193745					1.22	0.01	0.00	1.49
Manufacturing	25.6173 / 0					97.31	0.79	0.02	120.35
Recreational Swimming Pool	2.62655 / 1.60882					15.18	0.08	0.00	17.57
Single Family Housing	0.130308 / 0.0821507					0.76	0.00	0.00	0.88
Strip Mall	3.38289 / 2.07339					19.55	0.10	0.00	22.64
Total						**1,528.56**	**12.11**	**0.31**	**1,883.67**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					896.83	53.00	0.00	2,009.86
Unmitigated					896.83	53.00	0.00	2,009.86
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	2.76					0.56	0.03	0.00	1.26
Automobile Care Center	56.54					11.48	0.68	0.00	25.72
Day-Care Center	7.07					1.44	0.08	0.00	3.22
Fast Food Restaurant w/o Drive	38.13					7.74	0.46	0.00	17.35
General Heavy Industry	41.92					8.51	0.50	0.00	19.07
General Light Industry	3788.8					769.05	45.45	0.00	1,723.49
General Office Building	27.74					5.63	0.33	0.00	12.62
Hardware/Paint Store	83.61					16.97	1.00	0.00	38.04
High Turnover (Sit Down Restaurant)	11.9					2.42	0.14	0.00	5.41
Manufacturing	56.27					11.42	0.68	0.00	25.60
Recreational Swimming Pool	253.14					51.39	3.04	0.00	115.16
Single Family Housing	2.46					0.50	0.03	0.00	1.12
Strip Mall	47.95					9.73	0.58	0.00	21.81
Total						**896.84**	**53.00**	**0.00**	**2,009.87**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	2.76					0.56	0.03	0.00	1.26
Automobile Care Center	56.54					11.48	0.68	0.00	25.72
Day-Care Center	7.07					1.44	0.08	0.00	3.22
Fast Food Restaurant w/o Drive	38.13					7.74	0.46	0.00	17.35
General Heavy Industry	41.92					8.51	0.50	0.00	19.07
General Light Industry	3788.6					769.05	45.45	0.00	1,723.49
General Office Building	27.74					5.63	0.33	0.00	12.62
Hardware/Paint Store	83.61					16.97	1.00	0.00	38.04
High Turnover (Sit Down Restaurant)	11.9					2.42	0.14	0.00	5.41
Manufacturing	56.27					11.42	0.68	0.00	25.60
Recreational Swimming Pool	253.14					51.39	3.04	0.00	115.16
Single Family Housing	2.46					0.50	0.03	0.00	1.12
Strip Mall	47.95					9.73	0.58	0.00	21.81
Total						**896.84**	**53.00**	**0.00**	**2,009.87**

9.0 Vegetation

Artesia Boulevard Corridor Specific Plan Initial Study

Air Quality and GHG Analysis: Future Conditions Assumptions

Project Charecteristics							
Project Detail							
Project	2858						
Name	2858 Artesia Blvd SP (Future Conditions)						
Location	SC						
Windspeed	2.2						
Precipitation Frequency	31						
Climate Zone	9						
Land Use Setting	Urban						
Operational Year	2030						
Total Population	275						
Total Acerage	11.48						
Utility Information							
Utility Company	Southern California Edison						
CO2 Intensity Factor	641.26						
CH4 intensity Factor	0.029						
N2O Intensity Factor	0.011						
Using Historical Data?	0						
Pollutants							
ROG	1						
NOX	1						
CO	1						
SO2	1						
PM10	1						
PM2_5	1						
PM10_FUG	1						
PM25_FUG	1						
TOG	0						
PB	1						
CO2_BIO	0						
CO2_NBIO	0						
CO2	1						
CH4	1						
N2O	1						
CO2E	1						
Land Use		***Amount***	***Metric***	***Acres***	***Square Feet***	***Population***	
Residential	Apartments Low Rise	91.27	Dwelling Unit	5.7	91270	261	
Residential	Condo/Townhouse	4.94	Dwelling Unit	0.31	4940	14	
Retail	Regional Shopping Center	238.28	1000sqft	5.47	238283	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
Construction Emissions	***Name***	***Type***	***Start***	***End***	***Work Week***	***Total days***	***PhaseDescription***
1	Architectural Coating	Architectural Coating	2010/01/02	2010/01/04	5	1	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
Equipment	**Type**	**QTY**	**Hours**	**HP**	**Load**		
Architectural Coating	Air Compressors	1	6	78	0.48		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		

	Trips			Trip Length			Vechicle Class			
Trips and VMT	**Worker**	**Vendor**	**Haul**	**Worker**	**Venddor**	**Haul**	**Worker**	**Vendor**	**Haul**	
Architectural Coating	29	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	Paved (%)									
On-Road Dust	**Worker**	**Vendor**	**Haul**	**Road Silt**	**Silt Content**	**Moisture Content**	**Vehicle Weight**	**Vehicle Speed**		
Architectural Coating	100	100	100	0.1	8.5	0.5	2.4	40		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0		
Demolition	**Metric**	**QTY**								
0	0	0								
0	0	0								
0	0	0								
0	0	0								
							Moisture Content			
Grading	**Import**	**Export**	**Metric**	**Phased?**	**Speed**	**Acres**	**Bulldozing**	**Loading**	**Silt Content**	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
				Residential				**Nonresidential**		
Architectural Coating	**Start**	**End**	**Interior**	**Area**	**Exterior**	**Area**	**Interior**	**Area**	**Exterior**	**Area**
Architectural Coating	2008/07/01	3000/12/31	50	194825	100	64942	250	357425	250	119142
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
Paving Area										
0										
0										
0										
0										
Mobile Sources										
Vehicle Trips	**Metric**	**WD_TR**	**ST_TR**	**SU_TR**	**HW_TL**	**HS_TL**	**HO_TL**			
Apartments Low Rise	Dwelling Unit	6.59	7.16	6.07	10.8	7.3	7.5			
Condo/Townhouse	Dwelling Unit	6.59	7.16	6.07	10.8	7.3	7.5			
Regional Shopping Center	1000sqft	42.94	49.97	25.24	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
Apartments Low Rise	Dwelling Unit	**CC_TL**	**CW_TL**	**CNW_TL**	**PR_TP**	**DV_TP**	**PB_TP**			
Condo/Townhouse	Dwelling Unit	0	0	0	86	11	3			
Regional Shopping Center	1000sqft	0	0	0	86	11	3			
0	0	7.3	9.5	7.3	54	35	11			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
Apartments Low Rise	Dwelling Unit	**HW_TTP**	**HS_TTP**	**HO_TTP**	**CC_TTP**	**CW_TTP**	**CNW_TTP**			
Condo/Townhouse	Dwelling Unit	40.2	19.2	40.6	0	0	0			
Regional Shopping Center	1000sqft	40.2	19.2	40.6	0	0	0			
0	0	0	0	0	64.7	16.3	19			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			

Emissions Factors	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	FleetMix	0.485441	0.077396	0.236411	0.110728	0.023114	0.006831	0.016179	0.030501	0.001015	0.001834	0.00578	0.001	0.003773
A	CH4_IDLEX	0	0	0	0	0.0014	0.0012	0.0009	0.09	0.0009	0	0	0.02	0
A	CH4_RUNEX	0.0077	0.0093	0.01	0.01	0.0065	0.0047	0.0053	0.01	0.0057	0.03	0.21	0.02	0.0077
A	CH4_STREX	0.0034	0.0042	0.0072	0.01	0.01	0.0077	0.0067	0.02	0.01	0.07	0.12	0.01	0.01
A	CO_IDLEX	0	0	0	0	0.19	0.18	0.13	11.28	0.14	0	0	4.79	0
A	CO_RUNEX	0.59	0.77	1.14	1.42	0.51	0.41	1.15	1.67	1.1	4.54	23.34	3.79	0.29
A	CO_STREX	0.99	1.3	1.98	2.71	2.44	1.75	1.9	7.85	3.14	16.16	10.32	2.74	4.3
A	CO2_IDLEX	0	0	0	0	7.281	7.704	11.403	1615.221	11.097	0	0	496.494	0
A	CO2_RUNEX	243.252	313.497	356.202	484.074	598.095	561.375	1223.388	1650.591	1214.604	1588.005	156.978	1286.49	677.421
A	CO2_STREX	44.604	57.501	64.872	88.632	36.693	31.365	9.747	6.102	11.808	54.729	36.495	11.394	29.637
A	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	33.41	0.16	0	0	8.97	0
A	NOX_RUNEX	0.04	0.05	0.09	0.11	0.44	0.7	1.31	2.64	1.15	7.65	1.1	7.02	0.36
A	NOX_STREX	0.05	0.06	0.13	0.17	1.23	0.97	0.27	0.97	0.47	2.5	0.3	0.27	0.56
A	PM10_IDLEX	0	0	0	0	0.0002	0.0005	0.002	0.04	0.0018	0	0	0.1	0
A	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0096	0.004	0.01	0.01
A	PM10_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.09	0.12	0.07	0.14	0.02	0.37	0.0074
A	PM10_STREX	0.0066	0.0075	0.01	0.01	0.0021	0.0017	0.001	0.0009	0.0013	0.0051	0.0086	0.0008	0.0006
A	PM25_IDLEX	0	0	0	0	0.0002	0.0004	0.0018	0.04	0.0016	0	0	0.09	0
A	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0089	0.003	0.0024	0.001	0.003	0.003
A	PM25_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.08	0.11	0.07	0.12	0.01	0.34	0.0068
A	PM25_STREX	0.0061	0.0069	0.01	0.01	0.002	0.0016	0.001	0.0008	0.0012	0.0047	0.0067	0.0007	0.0006
A	ROG_DIURN	0.03	0.04	0.07	0.08	0.0013	0.0008	0.0002	0.0003	0.0004	0.0063	0.93	0.0031	0.38
A	ROG_HTSK	0.08	0.1	0.14	0.14	0.03	0.02	0.0057	0.0075	0.01	0.1	0.32	0.02	0.02
A	ROG_IDLEX	0	0	0	0	0.03	0.02	0.01	2.1	0.02	0	0	0.64	0
A	ROG_RESTL	0.03	0.04	0.08	0.08	0.0006	0.0004	0.0001	0.0001	0.0002	0.0037	0.5	0.0013	0.21
A	ROG_RUNEX	0.01	0.01	0.02	0.02	0.03	0.03	0.08	0.25	0.07	0.48	2.71	0.38	0.01
A	ROG_RUNLS	0.038977	0.06764	0.089288	0.091563	0.252303	0.124408	0.04455	0.002999	0.113252	0.036449	0.29161	0.03669	0.003455
A	ROG_STREX	0.06	0.07	0.12	0.18	0.19	0.13	0.11	0.38	0.18	1.32	2.03	0.18	0.23
A	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0053	0
A	SO2_RUNEX	0.0037	0.0047	0.0048	0.0065	0.0064	0.006	0.01	0.01	0.01	0.01	0.0021	0.01	0.0072
A	SO2_STREX	0.0007	0.0009	0.0009	0.0012	0.0004	0.0004	0.0001	0.0002	0.0002	0.0009	0.0006	0.0002	0.0004
A	TOG_DIURN	0.03	0.04	0.07	0.08	0.0013	0.0008	0.0002	0.0003	0.0004	0.0063	0.93	0.0031	0.38
A	TOG_HTSK	0.08	0.1	0.14	0.14	0.03	0.02	0.0057	0.0075	0.01	0.1	0.32	0.02	0.02
A	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.39	0.02	0	0	0.7	0
A	TOG_RESTL	0.03	0.04	0.08	0.08	0.0006	0.0004	0.0001	0.0001	0.0002	0.0037	0.5	0.0013	0.21
A	TOG_RUNEX	0.01	0.02	0.03	0.04	0.03	0.04	0.09	0.29	0.08	0.54	2.96	0.43	0.02
A	TOG_RUNLS	0.038977	0.06764	0.089288	0.091563	0.252303	0.124408	0.04455	0.002999	0.113252	0.036449	0.29161	0.03669	0.003455
A	TOG_STREX	0.06	0.07	0.13	0.19	0.2	0.14	0.12	0.41	0.2	1.41	2.18	0.19	0.25
S	FleetMix	0.485441	0.077396	0.236411	0.110728	0.023114	0.006831	0.016179	0.030501	0.001015	0.001834	0.00578	0.001	0.003773
S	CH4_IDLEX	0	0	0	0	0.0014	0.0012	0.0009	0.09	0.0009	0	0	0.02	0
S	CH4_RUNEX	0.0083	0.01	0.01	0.02	0.0066	0.0047	0.0054	0.01	0.0057	0.03	0.21	0.02	0.0079
S	CH4_STREX	0.0028	0.0035	0.006	0.0085	0.0095	0.0067	0.0059	0.01	0.0094	0.06	0.1	0.0092	0.01
S	CO_IDLEX	0	0	0	0	0.19	0.18	0.13	8.2	0.14	0	0	4.79	0
S	CO_RUNEX	0.66	0.86	1.28	1.59	0.51	0.42	1.15	1.68	1.1	4.61	22.29	3.81	0.3
S	CO_STREX	0.75	0.98	1.5	2.06	1.91	1.37	1.51	6.28	2.51	13.61	8.89	2.34	3.43
S	CO2_IDLEX	0	0	0	0	7.281	7.704	11.403	1707.273	11.097	0	0	496.494	0
S	CO2_RUNEX	259.632	333.837	379.368	515.601	598.095	561.375	1223.388	1650.591	1214.604	1588.005	156.978	1286.49	677.421
S	CO2_STREX	44.604	57.501	64.872	88.632	36.693	31.365	9.747	6.102	11.808	54.729	36.495	11.394	29.637
S	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	34.59	0.16	0	0	8.97	0
S	NOX_RUNEX	0.04	0.05	0.09	0.11	0.43	0.7	1.31	2.63	1.14	7.6	1.05	7	0.36
S	NOX_STREX	0.04	0.06	0.12	0.16	1.18	0.93	0.26	0.93	0.45	2.38	0.29	0.26	0.54
S	PM10_IDLEX	0	0	0	0	0.0002	0.0005	0.002	0.03	0.0018	0	0	0.1	0
S	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01
S	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0096	0.004	0.01	0.01
S	PM10_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.09	0.12	0.07	0.14	0.02	0.37	0.0074
S	PM10_STREX	0.0066	0.0075	0.01	0.01	0.0021	0.0017	0.001	0.0009	0.0013	0.0051	0.0086	0.0008	0.0006
S	PM25_IDLEX	0	0	0	0	0.0002	0.0004	0.0018	0.03	0.0016	0	0	0.09	0
S	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054
S	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0089	0.003	0.0024	0.001	0.003	0.003
S	PM25_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.08	0.11	0.07	0.12	0.01	0.34	0.0068
S	PM25_STREX	0.0061	0.0069	0.01	0.01	0.002	0.0016	0.001	0.0008	0.0012	0.0047	0.0067	0.0007	0.0006
S	ROG_DIURN	0.05	0.07	0.12	0.13	0.0019	0.0013	0.0004	0.0004	0.0006	0.0095	1.63	0.0047	0.59
S	ROG_HTSK	0.09	0.11	0.14	0.15	0.03	0.02	0.0059	0.0077	0.01	0.11	0.4	0.02	0.02
S	ROG_IDLEX	0	0	0	0	0.03	0.02	0.01	1.97	0.02	0	0	0.64	0
S	ROG_RESTL	0.05	0.07	0.12	0.13	0.001	0.0007	0.0002	0.0003	0.0004	0.006	1.02	0.0021	0.34
S	ROG_RUNEX	0.01	0.01	0.02	0.03	0.03	0.03	0.08	0.25	0.07	0.49	2.65	0.38	0.01
S	ROG_RUNLS	0.037124	0.063955	0.084463	0.086675	0.245196	0.120712	0.043655	0.002993	0.111103	0.033917	0.27163	0.03376	0.003372
S	ROG_STREX	0.05	0.06	0.1	0.15	0.16	0.11	0.1	0.34	0.16	1.19	1.78	0.16	0.2
S	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0053	0
S	SO2_RUNEX	0.004	0.005	0.0051	0.007	0.0064	0.006	0.01	0.01	0.01	0.01	0.0021	0.01	0.0072
S	SO2_STREX	0.0007	0.0009	0.0009	0.0012	0.0004	0.0004	0.0001	0.0002	0.0002	0.0008	0.0006	0.0002	0.0004
S	TOG_DIURN	0.05	0.07	0.12	0.13	0.0019	0.0013	0.0004	0.0004	0.0006	0.0095	1.63	0.0047	0.59
S	TOG_HTSK	0.09	0.11	0.14	0.15	0.03	0.02	0.0059	0.0077	0.01	0.11	0.4	0.02	0.02
S	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.25	0.02	0	0	0.7	0
S	TOG_RESTL	0.05	0.07	0.12	0.13	0.001	0.0007	0.0002	0.0003	0.0004	0.006	1.02	0.0021	0.34
S	TOG_RUNEX	0.01	0.02	0.04	0.05	0.03	0.04	0.09	0.29	0.08	0.55	2.9	0.43	0.02
S	TOG_RUNLS	0.037124	0.063955	0.084463	0.086675	0.245196	0.120712	0.043655	0.002993	0.111103	0.033917	0.27163	0.03376	0.003372
S	TOG_STREX	0.05	0.06	0.11	0.16	0.17	0.12	0.11	0.36	0.17	1.27	1.91	0.17	0.22

W	FleetMix	0.485441	0.077396	0.236411	0.110728	0.023114	0.006831	0.016179	0.030501	0.001015	0.001834	0.00578	0.001	0.003773
W	CH4_IDLEX	0	0	0	0	0.0014	0.0012	0.0009	0.1	0.0009	0	0	0.02	0
W	CH4_RUNEX	0.0075	0.0091	0.01	0.01	0.0065	0.0047	0.0053	0.01	0.0056	0.03	0.21	0.02	0.0077
W	CH4_STREX	0.0035	0.0042	0.0073	0.01	0.01	0.0078	0.0068	0.02	0.01	0.07	0.12	0.01	0.01
W	CO_IDLEX	0	0	0	0	0.19	0.18	0.13	15.59	0.14	0	0	4.79	0
W	CO_RUNEX	0.56	0.73	1.09	1.36	0.5	0.41	1.15	1.67	1.1	4.53	23.44	3.78	0.29
W	CO_STREX	1.02	1.33	2.03	2.79	2.47	1.78	1.9	7.89	3.15	16.26	10.38	2.87	4.32
W	CO2_IDLEX	0	0	0	0	7.281	7.704	11.403	1486.359	11.097	0	0	496.494	0
W	CO2_RUNEX	236.124	304.686	346.158	470.412	598.095	561.375	1223.388	1650.591	1214.604	1588.005	156.978	1286.49	677.421
W	CO2_STREX	44.604	57.501	64.872	88.632	36.693	31.365	9.747	6.102	11.808	54.729	36.495	11.394	29.637
W	NOX_IDLEX	0	0	0	0	0.01	0.04	0.18	31.76	0.16	0	0	8.97	0
W	NOX_RUNEX	0.04	0.06	0.11	0.13	0.47	0.75	1.41	2.82	1.23	8.21	1.24	7.48	0.4
W	NOX_STREX	0.05	0.07	0.13	0.18	1.23	0.97	0.27	0.97	0.48	2.51	0.3	0.28	0.56
W	PM10_IDLEX	0	0	0	0	0.0002	0.0005	0.002	0.05	0.0018	0	0	0.1	0
W	PM10_PMBW	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.0063	0.01	0.01
W	PM10_PMTW	0.008	0.008	0.008	0.008	0.01	0.01	0.01	0.03	0.01	0.0096	0.004	0.01	0.01
W	PM10_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.09	0.12	0.07	0.14	0.02	0.37	0.0074
W	PM10_STREX	0.0066	0.0075	0.01	0.01	0.0021	0.0017	0.001	0.0009	0.0013	0.0051	0.0086	0.0008	0.0006
W	PM25_IDLEX	0	0	0	0	0.0002	0.0004	0.0018	0.05	0.0016	0	0	0.09	0
W	PM25_PMBW	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.01	0.0054	0.0054	0.0027	0.0054	0.0054
W	PM25_PMTW	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.0089	0.003	0.0024	0.001	0.003	0.003
W	PM25_RUNEX	0.01	0.01	0.03	0.03	0.01	0.01	0.08	0.11	0.07	0.12	0.01	0.34	0.0068
W	PM25_STREX	0.0061	0.0069	0.01	0.01	0.002	0.0016	0.001	0.0008	0.0012	0.0047	0.0067	0.0007	0.0006
W	ROG_DIURN	0.03	0.04	0.07	0.07	0.0014	0.0009	0.0003	0.0003	0.0004	0.008	1.2	0.0039	0.42
W	ROG_HTSK	0.09	0.11	0.15	0.15	0.03	0.02	0.006	0.0079	0.01	0.12	0.43	0.03	0.02
W	ROG_IDLEX	0	0	0	0	0.03	0.02	0.01	2.28	0.02	0	0	0.64	0
W	ROG_RESTL	0.03	0.04	0.07	0.07	0.0005	0.0004	0.0001	0.0001	0.0002	0.0035	0.42	0.0012	0.18
W	ROG_RUNEX	0.01	0.01	0.02	0.02	0.03	0.03	0.08	0.25	0.07	0.48	2.71	0.38	0.01
W	ROG_RUNLS	0.044553	0.079049	0.104178	0.106643	0.277309	0.136932	0.047848	0.003179	0.12106	0.043812	0.35283	0.04327	0.003707
W	ROG_STREX	0.06	0.07	0.12	0.18	0.19	0.13	0.12	0.39	0.19	1.33	2.05	0.18	0.23
W	SO2_IDLEX	0	0	0	0	0.0001	0.0001	0.0001	0.01	0.0001	0	0	0.0053	0
W	SO2_RUNEX	0.0036	0.0046	0.0047	0.0063	0.0064	0.006	0.001	0.01	0.0021	0.01	0.0072		
W	SO2_STREX	0.0007	0.0009	0.0009	0.0012	0.0004	0.0004	0.0001	0.0002	0.0002	0.0009	0.0006	0.0002	0.0004
W	TOG_DIURN	0.03	0.04	0.07	0.07	0.0014	0.0009	0.0003	0.0003	0.0004	0.008	1.2	0.0039	0.42
W	TOG_HTSK	0.09	0.11	0.15	0.15	0.03	0.02	0.006	0.0079	0.01	0.12	0.43	0.03	0.02
W	TOG_IDLEX	0	0	0	0	0.03	0.03	0.02	2.59	0.02	0	0	0.7	0
W	TOG_RESTL	0.03	0.04	0.07	0.07	0.0005	0.0004	0.0001	0.0001	0.0002	0.0035	0.42	0.0012	0.18
W	TOG_RUNEX	0.01	0.02	0.03	0.04	0.03	0.04	0.09	0.29	0.08	0.54	2.97	0.43	0.02
W	TOG_RUNLS	0.044553	0.079049	0.104178	0.106643	0.277309	0.136932	0.047848	0.003179	0.12106	0.043812	0.35283	0.04327	0.003707
W	TOG_STREX	0.06	0.08	0.13	0.19	0.2	0.14	0.12	0.41	0.2	1.42	2.2	0.19	0.25

Paved (%)	**Silt Loading**	**Silt**	**Moisture**	**Weight**	**Speed**
100	0.1	4.3	0.5	2.4	40

Area Sources

Woodstoves	**Conventional**	**Catalytic**	**Noncatalytic**	**Pellet**	**Days**	**Mass**
Apartments Low Rise	0	4.56	4.56	0	25	999.6
Condo/Townhouse	0	0.25	0.25	0	25	999.6
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Fireplaces	**Wood**	**Gas**	**Propane**	**None**	**Hours/Day**	**Days/syear**	**Mass**
Apartments Low Rise	4.56	77.58	0	9.13	3	75	1019.2
Condo/Townhouse	0.25	4.2	0	0.49	3	75	1019.2
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

Consumer Products

0.0000198

Architectural Coating

Residential				*Nonresidential*				
Interior	*Area*	*Exterior*	*Area*	*Interior*	*Area*	*Exterior*	*Area*	*Reapply (%)*
50	0	100	0	250	592260	250	197420	10

Landscaping

NumberSnowDays	*NumberSummerDays*
0	365

Energy Use

Land Use	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**
Apartments Low Rise	284.86	2399.07	876.36	16443.48	2756
Condo/Townhouse	385.39	2943.11	1016.08	21245.81	3393.8
Regional Shopping Center	4.9	3.23	7.04	1.21	0.49
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Water and Wastewater

				Intensity Factors									
Land Use	**Metric**	**Indoor rate**	**Outdoor Rate**	**Supply**	**Supply Treat**	**Distribute**	**Waste Treat**	**Septic**	**Aerobic**	**Anaerobic**	**Digest**	**Cogen**	
Apartments Low Rise	Dwelling Unit	5946607.92	3748948.47	9727	111	1272	1911	10	84.69	2.14	3.17	0	
Condo/Townhouse	Dwelling Unit	321860.89	202912.3	9727	111	1272	1911	10	84.69	2.14	3.17	0	
Regional Shopping Center	1000sqft	17650000.42	10817742.19	9727	111	1272	1911	10	84.69	2.14	3.17	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	

Solid Waste							
Land Use	**Metric**	**Rate**	**No Capture**	**Flare**	**Energy Recoup**		
Apartments Low Rise	Dwelling Unit	41.98	6	94	0		
Condo/Townhouse	Dwelling Unit	2.27	6	94	0		
Regional Shopping Center	1000sqft	250.19	6	94	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
Land Use Change							
Land Use	**Vegetation Type**	**Acres Begin**	**Acres End**	**CO2**			
0	0	0	0	0			
Sequestration							
BroadSpeciesClass	**NumberOfNewTrees**	**CO2perTree**					
0	0	0					
0	0	0					
0	0	0					
0	0	0					
0	0	0					
0	0	0					
Mitigation							
Construction							
ConstMitigationEquipmentType	*FuelType*	*Tier*	*No.*	*Total*	*DPF*	*OxidationCatalyst*	
Air Compressors	Diesel	0	0	1	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
Soil Stabilizers	*PM10 Reduction*	*PM2.5 Reduction*					
0	0	0					
Ground Cover	*PM10 Reduction*	*PM2.5 Reduction*					
0	0	0					
Watering	*Frequency*	*PM10 Reduction*	*PM2.5 Reduction*				
0	0	0	0				
Unpaved Roads	*Vehicle Speed*	*Moisture Content*	*Speed*				
0	0	0	0				
Road Cleaning	*PM Reduction*						
0	0						
Land Use and Traffic							
ProjectSetting							
Urban							
Increase Density	*DU/Acre*	*Job/Acre*	*Increase Diversity*				
1	0	26.76	1				
Improve Walkability	*Intersections*	*Improve Accessibility*	*Distance*	*Improve Transit*	*Distance*	*Low Income Homes*	*DU*
0	0	0	0	1	0.1	0	0
Improve Ped Network	*Selection*						
1	Project Site and Connecting Off-Site						
Traffic Calming	*Streets*	*Intersections*	*NEV network*				
0	100	100	0				
Limit parking	*Reduction*	*Unbundle Costs*	*Cost*	*On-Street pricing*	*Increase*		
0	0	0	0	0	0		
BRT System	*Lines*	*Expand Transit*	*Increase*	*Increase Frequency*	*Level*	*Reducction*	
0	0	0	0	0	0	0	
Trip Reduction	*Employee %*	*Type*					
0	0	0					
Transit Subsidy	*Employee %*	*Amount*					
0	0	0					
Parking Cash Out	*Employee %*	*Parking Charge*	*Employee %*	*WorkplaceParkingChargeCost*			
0	0	0	0	0			
Encourage Telecommuting	*9-80*	*4-40*	*1/5*				
0	0	0	0				
Market Trip Reduction	*Employee %*	*Vanpool*	*Percent %*	*Mode Share*			
0	0	0	0	2			
Ride Sharing	*Employee %*	*School Bus*	*Family %*				
0	0	0	0				

Area														
Lawnmower	*Electric %*	*Leafblower*	*Electric %*	*Chainsaw*	*Electric %*									
0	0	0	0	0	0									
	Residential				*Nonresidential*									
Interior	*EF*	*Exterior*	*EF*	*Interior*	*EF*	*Exterior*	*EF*							
0	50	0	100	0	250	0	250							
Natural Gas Hearth	*No Hearth*	*Low VOC Cleaning*												
0	0	0												
Energy					**ApplianceType**	**Land Use**	**Improvement %**							
Exceed Title 24	*Improvement %*	*Efficient Lighting*	*Reduction %*		ClothWasher	0	30							
0	10	0	0		DishWasher	0	15							
Renewable Energy	*KwhGeneratedCheck*	*KwhGenerated*	*Generated %*	*Generated %*	Fan	0	50							
0	0	0	0	0	Refrigerator	0	15							
Water														
Conservation Strategy	*Indoor Reduction*	*Outdoor reduction*												
0	0	0												
Reclaimed Water	*Outdoor*	*Indoor*	*Grey Water*	*Outdoor*	*Indoor*									
0	0	0	0	0	0									
Low Flow WC Faucet	*Reduction %*	*Low Flow Kitchen Faucet*	*Reduction %*											
1	32	1	18											
Low Flow Toilleet	*Reduction %*	*Low Flow Shower*	*Reduction %*											
1	20	1	20											
Turf Reduction	*Area*	*Reduction %*	*Efficient Irrigation*	*Reduction %*										
0	0	0	1	6.1										
Efficient landscape	*MAWA*	*ETWU*												
0	0	0												
Solid Waste														
Recycling	Reduction %													
1	50													

Artesia Boulevard Corridor Specific Plan
Initial Study

Air Quality and GHG Analysis:
CalEEMod Future Conditions - Winter

2858 Artesia Blvd SP (Future Conditions)

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	91.27	Dwelling Unit
Condo/Townhouse	4.94	Dwelling Unit
Regional Shopping Center	238.28	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No Construction Emissions Analysis

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

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					

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	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Energy	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Mobile	26.66	62.26	198.63	0.67	75.61	3.33	78.94	1.08	3.24	4.32				1.62		53,747.90
Total	**45.55**	**63.40**	**238.77**	**0.75**	**75.61**	**3.33**	**84.12**	**1.08**	**3.24**	**9.50**				**4.33**	**0.05**	**56,981.72**

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	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Energy	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Mobile	20.96	51.18	150.17	0.44	48.27	2.22	50.49	0.69	2.16	2.84				1.13		35,315.37

Total	**39.85**	**52.32**	**190.31**	**0.52**	**48.27**	**2.22**	**55.67**	**0.69**	**2.16**	**8.02**				**3.84**	**0.05**	**38,549.19**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2010

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	6,269.32					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	3.55	2.00	0.00		0.32	0.32		0.32	0.32				0.05		282.32
Total	**6,269.92**	**3.55**	**2.00**	**0.00**		**0.32**	**0.32**		**0.32**	**0.32**				**0.05**		**282.32**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.22	0.24	2.27	0.00	0.38	0.01	0.39	0.01	0.01	0.02				0.02		299.40
Total	**0.22**	**0.24**	**2.27**	**0.00**	**0.38**	**0.01**	**0.39**	**0.01**	**0.01**	**0.02**				**0.02**		**299.40**

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	6,269.32					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	3.55	2.00	0.00		0.32	0.32		0.32	0.32				0.05		282.32
Total	**6,269.92**	**3.55**	**2.00**	**0.00**		**0.32**	**0.32**		**0.32**	**0.32**				**0.05**		**282.32**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.22	0.24	2.27	0.00	0.01	0.01	0.03	0.01	0.01	0.02				0.02		299.40
Total	**0.22**	**0.24**	**2.27**	**0.00**	**0.01**	**0.01**	**0.03**	**0.01**	**0.01**	**0.02**				**0.02**		**299.40**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density
Increase Diversity
Increase Transit Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.96	51.18	150.17	0.44	48.27	2.22	50.49	0.69	2.16	2.84				1.13		35,315.37

Unmitigated	26.66	62.26	198.63	0.67	75.61	3.33	78.94	1.08	3.24	4.32				1.62		53,747.90
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	601.47	653.49	554.01	1,710,097	1,091,857
Condo/Townhouse	32.55	35.37	29.99	92,559	59,097
Regional Shopping Center	10,231.74	11,906.85	6014.19	17,302,552	11,047,275
Total	10,865.77	12,595.72	6,598.18	19,105,208	12,198,229

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00

5.0 Energy Detail

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	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
NaturalGas Unmitigated	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Apartments Low Rise	4800.92	0.05	0.44	0.19	0.00		0.00	0.04		0.00	0.04				0.01	0.01	568.25
Condo/Townhouse	333.479	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	39.47
Regional Shopping Center	1109.81	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01				0.00	0.00	131.36
Total		**0.06**	**0.58**	**0.29**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**				**0.01**	**0.01**	**739.08**

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	lb/day										lb/day					
Apartments Low Rise	4.80092	0.05	0.44	0.19	0.00		0.00	0.04		0.00	0.04				0.01	0.01	568.25
Condo/Townhouse	0.333479	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	39.47
Regional Shopping Center	1.10981	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01				0.00	0.00	131.36
Total		**0.06**	**0.58**	**0.29**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**				**0.01**	**0.01**	**739.08**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Unmitigated	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	1.72					0.00	0.00		0.00	0.00						0.00
Consumer Products	6.62					0.00	0.00		0.00	0.00						0.00
Hearth	10.24	0.47	31.84	0.08		0.00	5.09		0.00	5.09				2.69	0.04	2,479.98
Landscaping	0.24	0.09	8.01	0.00		0.00	0.04		0.00	0.04				0.01		14.76
Total	**18.82**	**0.56**	**39.85**	**0.08**		**0.00**	**5.13**		**0.00**	**5.13**				**2.70**	**0.04**	**2,494.74**

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	1.72					0.00	0.00		0.00	0.00						0.00
Consumer Products	6.62					0.00	0.00		0.00	0.00						0.00
Hearth	10.24	0.47	31.84	0.08		0.00	5.09		0.00	5.09				2.69	0.04	2,479.98
Landscaping	0.24	0.09	8.01	0.00		0.00	0.04		0.00	0.04				0.01		14.76
Total	**18.82**	**0.56**	**39.85**	**0.08**		**0.00**	**5.13**		**0.00**	**5.13**				**2.70**	**0.04**	**2,494.74**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

Artesia Boulevard Corridor Specific Plan
Initial Study

Air Quality and GHG Analysis:
CalEEMod Future Conditions - Summer

2858 Artesia Blvd SP (Future Conditions)

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	91.27	Dwelling Unit
Condo/Townhouse	4.94	Dwelling Unit
Regional Shopping Center	238.28	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No Construction Emissions Analysis

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

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					

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	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Energy	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Mobile	26.01	61.61	196.82	0.73	75.61	3.32	78.92	1.08	3.23	4.30				1.79		57,602.92
Total	**44.90**	**62.75**	**236.96**	**0.81**	**75.61**	**3.32**	**84.10**	**1.08**	**3.23**	**9.48**				**4.50**	**0.05**	**60,836.74**

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	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Energy	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Mobile	20.92	51.50	142.20	0.48	48.27	2.20	50.47	0.69	2.14	2.83				1.22		37,843.94

Total	**39.81**	**52.64**	**182.34**	**0.56**	**48.27**	**2.20**	**55.65**	**0.69**	**2.14**	**8.01**				**3.93**	**0.05**	**41,077.76**

3.0 Construction Detail

3.1 Mitigation Measures Construction

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					

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					

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					

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					

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density
Increase Diversity
Increase Transit Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.92	51.50	142.20	0.48	48.27	2.20	50.47	0.69	2.14	2.83				1.22		37,843.94

Unmitigated	26.01	61.61	196.82	0.73	75.61	3.32	78.92	1.08	3.23	4.30				1.79		57,602.92
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	601.47	653.49	554.01	1,710,097	1,091,857
Condo/Townhouse	32.55	35.37	29.99	92,559	59,097
Regional Shopping Center	10,231.74	11,906.85	6014.19	17,302,552	11,047,275
Total	10,865.77	12,595.72	6,598.18	19,105,208	12,198,229

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00

5.0 Energy Detail

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	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
NaturalGas Unmitigated	0.07	0.58	0.29	0.00		0.00	0.05		0.00	0.05				0.01	0.01	739.08
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Apartments Low Rise	4800.92	0.05	0.44	0.19	0.00		0.00	0.04		0.00	0.04				0.01	0.01	568.25
Condo/Townhouse	333.479	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	39.47
Regional Shopping Center	1109.81	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01				0.00	0.00	131.36
Total		**0.06**	**0.58**	**0.29**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**				**0.01**	**0.01**	**739.08**

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	lb/day										lb/day					
Apartments Low Rise	4.80092	0.05	0.44	0.19	0.00		0.00	0.04		0.00	0.04				0.01	0.01	568.25
Condo/Townhouse	0.333479	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00				0.00	0.00	39.47
Regional Shopping Center	1.10981	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01				0.00	0.00	131.36
Total		**0.06**	**0.58**	**0.29**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**				**0.01**	**0.01**	**739.08**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Unmitigated	18.82	0.56	39.85	0.08		0.00	5.13		0.00	5.13				2.70	0.04	2,494.74
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	1.72					0.00	0.00		0.00	0.00						0.00
Consumer Products	6.62					0.00	0.00		0.00	0.00						0.00
Hearth	10.24	0.47	31.84	0.08		0.00	5.09		0.00	5.09				2.69	0.04	2,479.98
Landscaping	0.24	0.09	8.01	0.00		0.00	0.04		0.00	0.04				0.01		14.76
Total	**18.82**	**0.56**	**39.85**	**0.08**		**0.00**	**5.13**		**0.00**	**5.13**				**2.70**	**0.04**	**2,494.74**

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	1.72					0.00	0.00		0.00	0.00						0.00
Consumer Products	6.62					0.00	0.00		0.00	0.00						0.00
Hearth	10.24	0.47	31.84	0.08		0.00	5.09		0.00	5.09				2.69	0.04	2,479.98
Landscaping	0.24	0.09	8.01	0.00		0.00	0.04		0.00	0.04				0.01		14.76
Total	**18.82**	**0.56**	**39.85**	**0.08**		**0.00**	**5.13**		**0.00**	**5.13**				**2.70**	**0.04**	**2,494.74**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

Artesia Boulevard Corridor Specific Plan
Initial Study

Air Quality and GHG Analysis:
CalEEMod Future Conditions - Annual

2858 Artesia Blvd SP (Future Conditions)

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	91.27	Dwelling Unit
Condo/Townhouse	4.94	Dwelling Unit
Regional Shopping Center	238.28	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No Construction Emissions Analysis

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.88	0.02	2.06	0.00		0.00	0.10		0.00	0.10			71.53	0.03	0.00	72.67
Energy	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01			1,273.81	0.05	0.02	1,281.77
Mobile	3.79	9.28	30.24	0.10	10.38	0.51	10.89	0.16	0.49	0.66			7,585.64	0.22	0.00	7,590.34
Waste						0.00	0.00		0.00	0.00			59.77	3.53	0.00	133.95
Water						0.00	0.00		0.00	0.00			138.59	0.74	0.02	160.40
Total	**5.68**	**9.41**	**32.35**	**0.10**	**10.38**	**0.51**	**11.00**	**0.16**	**0.49**	**0.77**			**9,129.34**	**4.57**	**0.04**	**9,239.13**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.88	0.02	2.06	0.00		0.00	0.10		0.00	0.10			71.53	0.03	0.00	72.67
Energy	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01			1,273.81	0.05	0.02	1,281.77
Mobile	3.00	7.73	22.59	0.07	6.63	0.34	6.96	0.10	0.33	0.43			4,985.84	0.16	0.00	4,989.12
Waste						0.00	0.00		0.00	0.00			29.88	1.77	0.00	66.97
Water						0.00	0.00		0.00	0.00			117.50	0.59	0.02	134.99
Total	**4.89**	**7.86**	**24.70**	**0.07**	**6.63**	**0.34**	**7.07**	**0.10**	**0.33**	**0.54**			**6,478.56**	**2.60**	**0.04**	**6,545.52**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.00	7.73	22.59	0.07	6.63	0.34	6.96	0.10	0.33	0.43			4,985.84	0.16	0.00	4,989.12
Unmitigated	3.79	9.28	30.24	0.10	10.38	0.51	10.89	0.16	0.49	0.66			7,585.64	0.22	0.00	7,590.34
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	601.47	653.49	554.01	1,710,097	1,091,857
Condo/Townhouse	32.55	35.37	29.99	92,559	59,097
Regional Shopping Center	10,231.74	11,906.85	6014.19	17,302,552	11,047,275
Total	10,865.77	12,595.72	6,598.18	19,105,208	12,198,229

4.3 Trip Type Information

	Miles			Trip %		
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
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00

5.0 Energy Detail

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						0.00	0.00		0.00	0.00			1,152.19	0.05	0.02	1,159.41
Electricity Unmitigated						0.00	0.00		0.00	0.00			1,152.19	0.05	0.02	1,159.41
NaturalGas Mitigated	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01			121.62	0.00	0.00	122.36
NaturalGas Unmitigated	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01			121.62	0.00	0.00	122.36
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
Apartments Low Rise	1.75234e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01			93.51	0.00	0.00	94.08
Condo/Townhouse	121720	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00			6.50	0.00	0.00	6.53
Regional Shopping Center	405081	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00			21.62	0.00	0.00	21.75
Total		**0.01**	**0.11**	**0.05**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**			**121.63**	**0.00**	**0.00**	**122.36**

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	tons/yr										MT/yr					
Apartments Low Rise	1.75234e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01			93.51	0.00	0.00	94.08
Condo/Townhouse	121720	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00			6.50	0.00	0.00	6.53
Regional Shopping Center	405081	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00			21.62	0.00	0.00	21.75
Total		**0.01**	**0.11**	**0.05**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**			**121.63**	**0.00**	**0.00**	**122.36**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	324948					94.52	0.00	0.00	95.11
Condo/Townhouse	21462.2					6.24	0.00	0.00	6.28
Regional Shopping Center	3.61475e+006					1,051.43	0.05	0.02	1,058.02
Total						**1,152.19**	**0.05**	**0.02**	**1,159.41**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	324948					94.52	0.00	0.00	95.11
Condo/Townhouse	21462.2					6.24	0.00	0.00	6.28
Regional Shopping Center	3.61475e+006					1,051.43	0.05	0.02	1,058.02
Total						**1,152.19**	**0.05**	**0.02**	**1,159.41**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.88	0.02	2.06	0.00		0.00	0.10		0.00	0.10			71.53	0.03	0.00	72.67
Unmitigated	1.88	0.02	2.06	0.00		0.00	0.10		0.00	0.10			71.53	0.03	0.00	72.67
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.31					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Consumer Products	1.21					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Hearth	0.32	0.01	0.60	0.00		0.00	0.09		0.00	0.09			69.13	0.03	0.00	70.23
Landscaping	0.04	0.02	1.46	0.00		0.00	0.01		0.00	0.01			2.39	0.00	0.00	2.44
Total	**1.88**	**0.03**	**2.06**	**0.00**		**0.00**	**0.10**		**0.00**	**0.10**			**71.52**	**0.03**	**0.00**	**72.67**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.31					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Consumer Products	1.21					0.00	0.00		0.00	0.00			0.00	0.00	0.00	0.00
Hearth	0.32	0.01	0.60	0.00		0.00	0.09		0.00	0.09			69.13	0.03	0.00	70.23
Landscaping	0.04	0.02	1.46	0.00		0.00	0.01		0.00	0.01			2.39	0.00	0.00	2.44
Total	**1.88**	**0.03**	**2.06**	**0.00**		**0.00**	**0.10**		**0.00**	**0.10**			**71.52**	**0.03**	**0.00**	**72.67**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					117.50	0.59	0.02	134.99
Unmitigated					138.59	0.74	0.02	160.40
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	5.94661 / 3.74895					34.70	0.18	0.01	40.13
Condo/Townhouse	0.321861 / 0.202912					1.88	0.01	0.00	2.17
Regional Shopping Center	17.65 / 10.8177					102.00	0.54	0.02	118.10
Total						**138.58**	**0.73**	**0.03**	**160.40**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	4.75729 / 3.52026					29.45	0.15	0.00	33.80
Condo/Townhouse	0.257489 / 0.190535					1.59	0.01	0.00	1.83
Regional Shopping Center	14.12 / 10.1579					86.46	0.43	0.01	99.37

Total						117.50	0.59	0.01	135.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					29.88	1.77	0.00	66.97
Unmitigated					59.77	3.53	0.00	133.95
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	41.98					8.52	0.50	0.00	19.10
Condo/Townhouse	2.27					0.46	0.03	0.00	1.03
Regional Shopping Center	250.19					50.79	3.00	0.00	113.82
Total						**59.77**	**3.53**	**0.00**	**133.95**

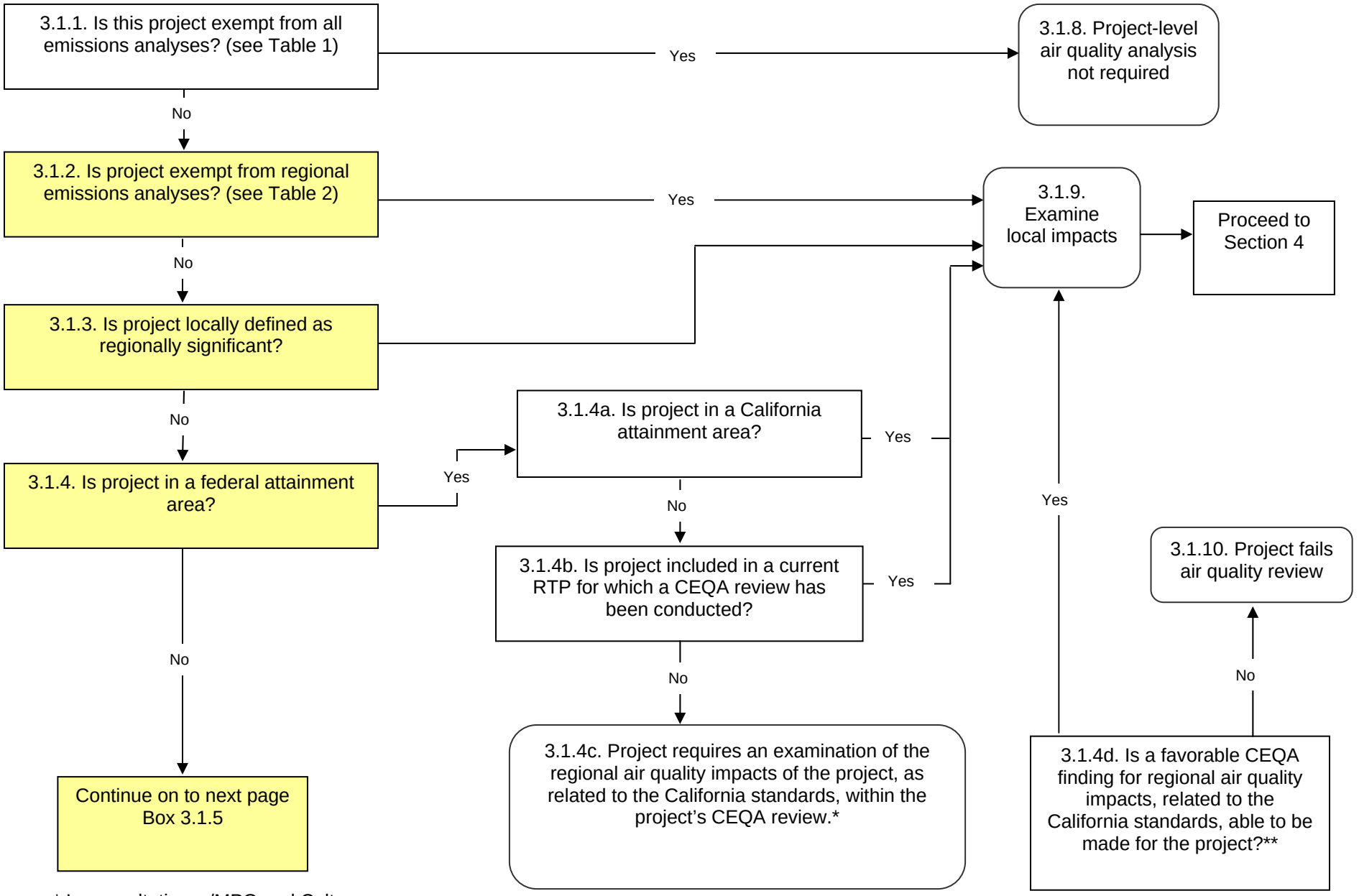
Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	20.99					4.26	0.25	0.00	9.55
Condo/Townhouse	1.135					0.23	0.01	0.00	0.52
Regional Shopping Center	125.095					25.39	1.50	0.00	56.91
Total						**29.88**	**1.76**	**0.00**	**66.98**

9.0 Vegetation

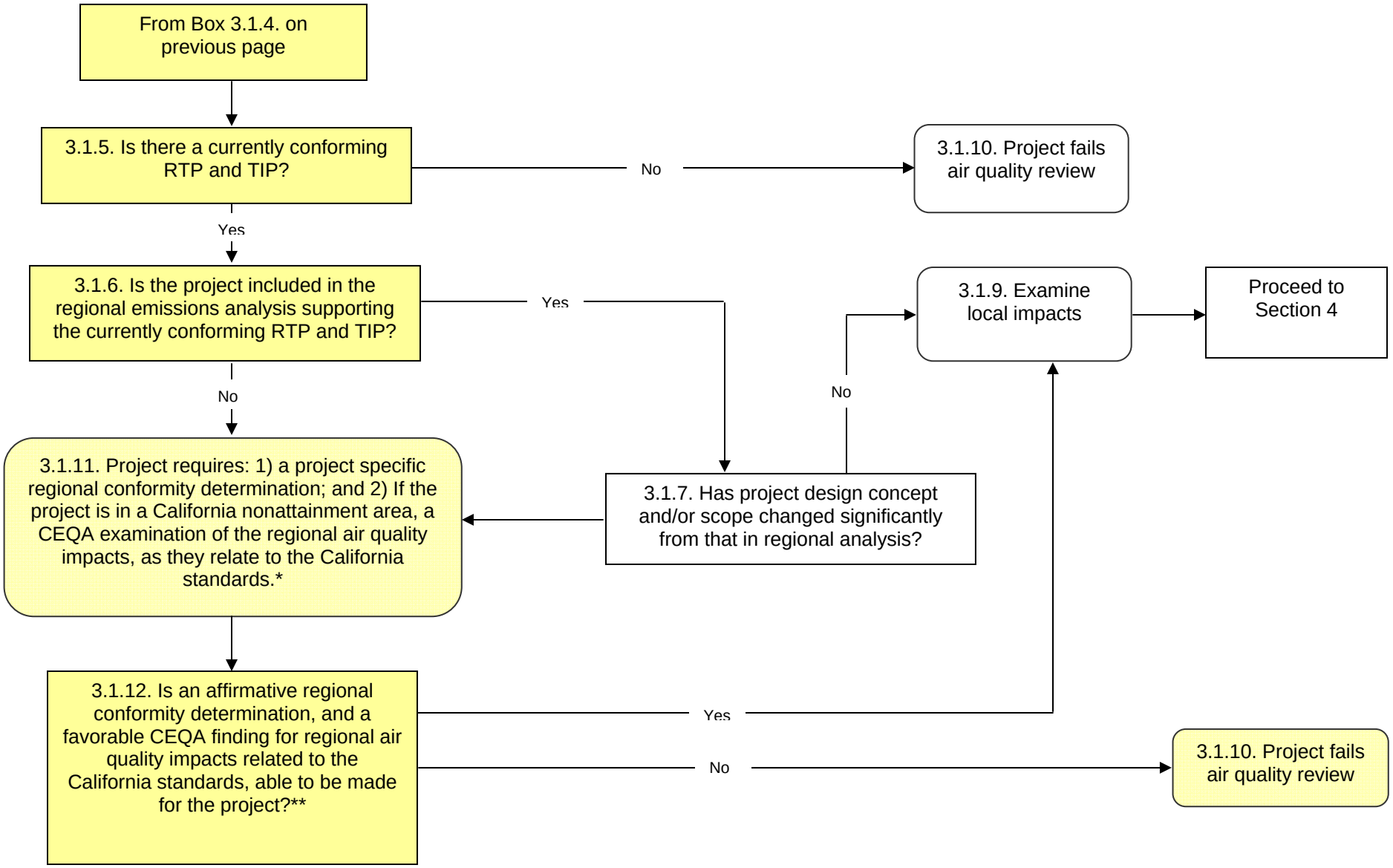
Artesia Boulevard Corridor Specific Plan Initial Study

Air Quality and GHG Analysis: Carbon Monoxide Hotspot Appendix



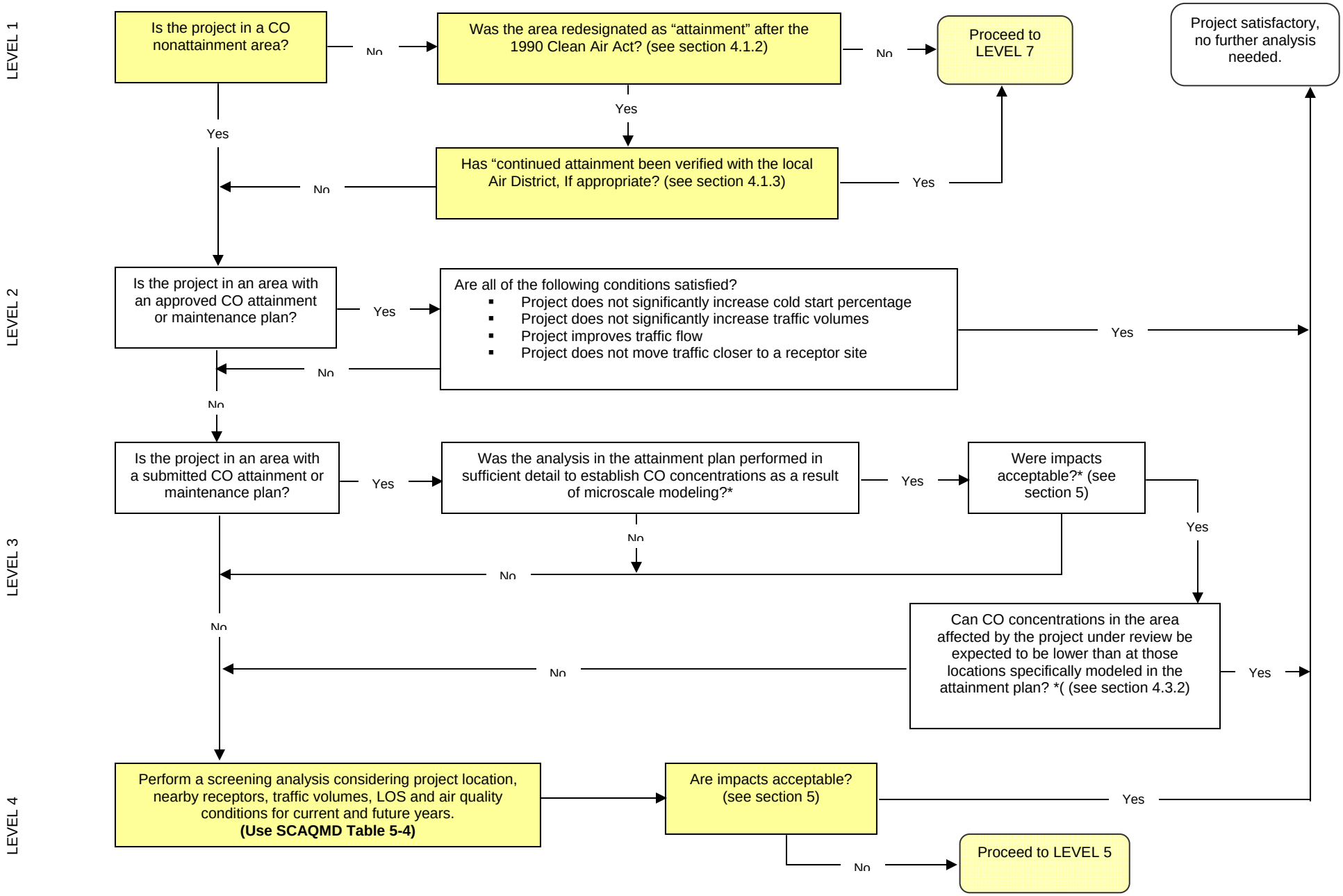
* In consultation w/MPO and Caltrans

** In consultation w/MPO, local air district, CARB and Caltrans



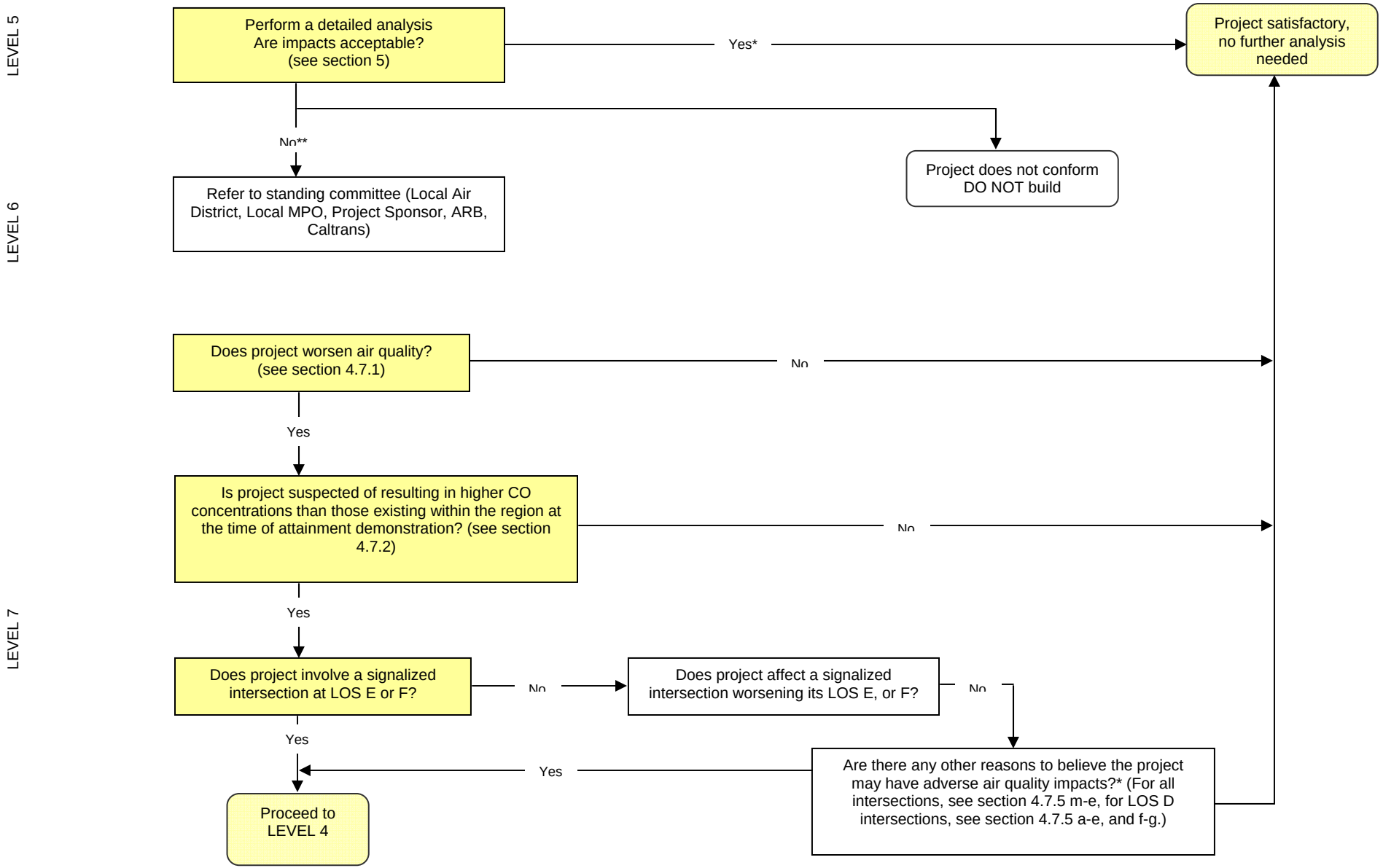
* In consultation w/MPO and Caltrans
** In consultation w/MPO, local air district, CARB and Caltrans

2858 Artesia Boulevard Specific Plan



* Consultation with MPO and Local Air District required in addition to normal NEPA/CEQA requirements
** Consultation with MPO, Local Air District, CARB and Caltrans (District & Headquarters) required in addition to normal NEPA/CEQA requirements

2858 Artesia Boulevard Specific Plan



* Consultation with MPO and Local Air District required in addition to normal NEPA/CEQA requirements
** Consultation with MPO, Local Air District, CARB and Caltrans (District & Headquarters) required in addition to normal NEPA/CEQA requirements

Planning in Motion
Hogle-Ireland, Inc.

JOB TITLE ARTESIA SP - CO HOTSPOTS

JOB NO. 2858 CALCULATION NO. 1 ORIGINATOR CB DATE 9/30/11

SHEET 1 OF 1 REVIEWER — DATE —

SCAQMD CO IMPACTS EVALUATION (PAGE 5-3)

(1) BACKGROUND CONCENTRATIONS

1 LONG BEACH SRA

1-HR = 5.1 PPM (TABLE 2)

8-HR = 3.9 PPM (TABLE 3)

(2) SCREENING (TABLE 5-4)

ARTESIA @ GRIDLEY, PM PEAK = LOS C

PERSISTANCE FACTOR 0.73 (2.2 → 3.0) (SRA 4, 2009)

	1-HR	8-HR
ISM	10.8	7.9
30M	7.1	5.2
60M	4.4	3.2

ARTESIA @ PIONEER, PM PEAK = LOS D

	2-HR	8-HR
ISM	12.5	9.2
30M	8.3	6.1
60M	5.3	3.9

(3) BACKGROUND + SCREENING

15.9	11.8
12.2	9.1
9.5	7.1
17.6	13.1
13.4	10.0
10.4	7.8

(4) COMPARE TO AMBIENT STD

1-HR = 20 PPM

8-HR = 9 PPM

(5) FAILS SCREENING

Project 2858
CALINE Roadway Data (2030 + Project)

					Start		End									
Roadway	Direction	Extent	Length (M)	ID	X	Y	X	Y	Road Width	Mix Width	Volume	EMFAC	Type	Delay	Cruise Speed	AVG Speed
Artesia	E	Extent	600	ART1EE	0	-6.25	600	-6.25	25	31	1024	0.977	II	35.0%	28	28
Artesia	W	Extent	600	ART1WE	0	6.25	600	6.25	25	31	772	0.977	II	35.0%	28	28
Artesia	E	Approach	150	ART2EA	600	-6.25	750	-6.25	25	31	913	1.779	II	35.0%	28	4.6
Artesia	E	Left	150	ART2EL	600	-6.25	750	0	25	31	111	1.306	II	35.0%	28	12.5
Artesia	W	Departure	150	ART2WD	600	6.25	750	6.25	25	31	772	1.164	II	35.0%	28	21
Artesia	E	Departure	150	ART3ED	750	-6.25	900	-6.25	25	31	1100	1.306	II	35.0%	28	13.2
Artesia	W	Approach	150	ART3WA	750	6.25	900	6.25	25	31	721	1.506	II	35.0%	28	8.6
Artesia	W	Left	150	ART3WL	750	0	900	6.25	25	31	238	1.306	II	35.0%	28	12.5
Artesia	E	Extent	600	ART4EE	900	-6.25	1500	-6.25	25	31	1100	0.977	II	35.0%	28	28
Artesia	W	Extent	600	ART4WE	900	6.25	1500	6.25	25	31	959	0.977	II	35.0%	28	28
Gridley	N	Extent	600	GRIANE	755	-750	755	-150	20	26	704	1.061	III	35.0%	24	24
Gridley	S	Extent	600	GRIASE	745	-750	745	-150	20	26	628	1.061	III	35.0%	24	24
Gridley	N	Approach	150	GRIBNA	755	-150	755	0	20	26	566	1.506	III	35.0%	24	9.9
Gridley	N	Left	150	GRIBNL	755	-150	750	0	20	26	138	1.306	III	35.0%	24	12.5
Gridley	S	Departure	150	GRIBSD	745	-150	745	-150	20	26	628	1.164	III	35.0%	24	20.8
Gridley	N	Departure	150	GRICND	755	0	755	150	20	26	638	1.164	III	35.0%	24	20.8
Gridley	S	Left	150	GRICSL	745	0	750	150	20	26	131	1.306	III	35.0%	24	12.5
Gridley	S	Approach	150	GRICSA	745	0	745	150	20	26	320	1.506	III	35.0%	24	12
Gridley	N	Extent	200	GRIDNE	755	150	709	345	12	18	638	1.061	III	35.0%	24	24
Gridley	S	Extent	200	GDIDSE	745	150	699	345	12	18	451	1.061	III	35.0%	24	24
Artesia	E	Extent	600	ART1EE	0	-6.25	600	-6.25	25	31	1361	0.977	II	55.0%	28	28
Artesia	W	Extent	600	ART1WE	0	6.25	600	6.25	25	31	1146	0.977	II	55.0%	28	28
Artesia	E	Approach	150	ART2EA	600	-6.25	750	-6.25	25	31	887	1.779	II	55.0%	28	3
Artesia	E	Left	150	ART2EL	600	-6.25	750	0	25	31	474	1.779	II	55.0%	28	6.1
Artesia	W	Departure	150	ART2WD	600	6.25	750	6.25	25	31	1146	1.779	II	55.0%	28	3
Artesia	E	Departure	150	ART3ED	750	-6.25	900	-6.25	25	31	1072	1.779	II	55.0%	28	3
Artesia	W	Approach	150	ART3WA	750	6.25	900	6.25	25	31	858	1.779	II	55.0%	28	3
Artesia	W	Left	150	ART3WL	750	0	900	6.25	25	31	240	1.506	II	55.0%	28	9.1
Artesia	E	Extent	600	ART4EE	900	-6.25	1500	-6.25	25	31	1072	0.977	II	55.0%	28	28
Artesia	W	Extent	600	ART4WE	900	6.25	1500	6.25	25	31	1098	0.977	II	55.0%	28	28
Pioneer	N	Extent	600	PIOANE	756	-750	756	-150	24	30	1384	0.977	II	55.0%	28	28
Pioneer	S	Extent	600	PIOASE	744	-750	744	-150	24	30	1181	0.977	II	55.0%	28	28
Pioneer	N	Approach	150	PIOBNA	756	-150	756	0	24	30	1221	1.779	II	55.0%	28	3
Pioneer	N	Left	150	PIOBNL	756	-150	750	0	24	30	163	1.506	II	55.0%	28	9.1
Pioneer	S	Departure	150	PIOBSD	744	-150	744	0	24	30	1181	1.779	II	55.0%	28	3
Pioneer	N	Departure	150	PIOCND	756	0	756	150	24	30	1707	1.779	II	55.0%	28	3
Pioneer	S	Approach	150	PIOCSA	744	0	744	150	24	30	1070	1.779	II	55.0%	28	3
Pioneer	S	Left	150	PIOCSL	744	0	750	150	24	30	193	1.506	II	55.0%	28	9.1
Pioneer	N	Extent	600	PIODNE	756	150	756	750	24	30	1707	0.977	II	55.0%	28	28
Pioneer	S	Extent	600	PIODSE	744	150	744	750	24	30	1263	0.977	II	55.0%	28	28

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: 2858 Artesia @ Gridley Future + Project
RUN: Hour 1
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	18. (M)
BRG=	270.0 DEGREES	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	5.1 PPM		
SIGTH=	10. DEGREES	TEMP=	26.2 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. ART1EE	*	0	-6	600	-6	* FL	1024	1.0	.0	31.0
B. ART1WE	*	0	6	600	6	* FL	772	1.0	.0	31.0
C. ART2EA	*	600	-6	750	-6	* FL	913	1.8	.0	31.0
D. ART2EL	*	600	-6	750	0	* FL	111	1.3	.0	31.0
E. ART2WD	*	600	6	750	6	* FL	772	1.2	.0	31.0
F. ART3ED	*	750	-6	900	-6	* FL	1100	1.3	.0	31.0
G. ART3WA	*	750	6	900	6	* FL	721	1.5	.0	31.0
H. ART3WL	*	750	0	900	6	* FL	238	1.3	.0	31.0
I. ART4EE	*	900	-6	1500	-6	* FL	1100	1.0	.0	31.0
J. ART4WE	*	900	6	1500	6	* FL	959	1.0	.0	31.0
K. GRIANE	*	755	-750	755	-150	* FL	704	1.1	.0	26.0
L. GRIASE	*	745	-750	745	-150	* FL	628	1.1	.0	26.0
M. GRIBNA	*	755	-150	755	0	* FL	566	1.5	.0	26.0
N. GRIBNL	*	755	-150	750	0	* FL	138	1.3	.0	26.0
O. GRIBSD	*	745	-150	745	0	* FL	628	1.2	.0	26.0
P. GRICND	*	755	0	755	150	* FL	638	1.2	.0	26.0
Q. GRICSL	*	750	0	745	150	* FL	131	1.3	.0	26.0
R. GRICSA	*	745	0	745	150	* FL	320	1.5	.0	26.0
S. GRIDNE	*	755	150	709	345	* FL	638	1.1	.0	18.0
T. GRIDSE	*	745	150	699	345	* FL	451	1.1	.0	18.0

JOB: 2858 Artesia @ Gridley Future + Project
RUN: Hour 1
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R1	737	16	1.8
2. R2	763	16	1.8
3. R3	763	-16	1.8
4. R4	737	-16	1.8

IV. MODEL RESULTS (PRED. CONC. INCLUDES AMB.)

RECEPTOR	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H	I	J
1. R1	5.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. R2	5.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. R3	5.4	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
4. R4	5.4	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) K	L	M	N	O	P	Q	R	S	T
1. R1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. R2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. R3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. R4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: 2858 Artesia @ Pioneer Future + Project
RUN: Hour 1
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	18. (M)
BRG=	270.0 DEGREES	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	5.1 PPM		
SIGTH=	10. DEGREES	TEMP=	26.2 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. ART1EE	0	-6	600	-6	FL	1361	1.0	.0	31.0
B. ART1WE	0	6	600	6	FL	1146	1.0	.0	31.0
C. ART2EA	600	-6	750	-6	FL	887	1.8	.0	31.0
D. ART2EL	600	-6	750	0	FL	474	1.8	.0	31.0
E. ART2WD	600	6	750	6	FL	1146	1.8	.0	31.0
F. ART3ED	750	-6	900	-6	FL	1072	1.8	.0	31.0
G. ART3WA	750	6	900	6	FL	858	1.8	.0	31.0
H. ART3WL	750	0	900	6	FL	240	1.5	.0	31.0
I. ART4EE	900	-6	1500	-6	FL	1072	1.0	.0	31.0
J. ART4WE	900	6	1500	6	FL	1098	1.0	.0	31.0
K. PIOANE	756	-750	756	-150	FL	1384	1.0	.0	30.0
L. PIOASE	744	-750	744	-150	FL	1181	1.0	.0	30.0
M. PIOBNA	756	-150	756	0	FL	1221	1.8	.0	30.0
N. PIOBNL	756	-150	750	0	FL	163	1.5	.0	30.0
O. PIOBSD	744	-150	744	0	FL	1181	1.8	.0	30.0
P. PIOCND	756	0	756	150	FL	1707	1.8	.0	30.0
Q. PIOCSA	744	0	744	150	FL	1070	1.8	.0	30.0
R. PIOCSL	750	0	744	150	FL	193	1.5	.0	30.0
S. PIODNE	756	150	756	750	FL	1707	1.0	.0	30.0
T. PIODSE	744	150	744	750	FL	1263	1.0	.0	30.0

JOB: 2858 Artesia @ Pioneer Future + Project
RUN: Hour 1
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R1	737	16	1.8
2. R2	763	16	1.8
3. R3	763	-16	1.8
4. R4	737	-16	1.8

IV. MODEL RESULTS (PRED. CONC. INCLUDES AMB.)

RECEPTOR	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H	I	J
1. R1	5.5	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. R2	5.6	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
3. R3	5.6	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
4. R4	5.5	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) K	L	M	N	O	P	Q	R	S	T
1. R1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. R2	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
3. R3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. R4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Title : 2858
Version : CT-EMFAC 2.6
Run Date : 30 September 2011 07:38 PM
Scen Year : 2030
Season : Annual
Temperature : 68F
Relative Humidity: 55%
Area : South Coast Air Basin

==========

Running Exhaust Emissions (grams/mile)

Pollutant Name : CO

speed(mph)	Emission Factor
5	1.779000
10	1.506000
15	1.306000
20	1.164000
25	1.061000
30	0.977000
35	0.910000
40	0.857000
45	0.818000
50	0.794000
55	0.789000
60	0.809000
65	0.868000
70	1.017000
75	1.275000

Idling Emissions (grams/idle-hour) (Currently NOT Available)

Evaporative Running Loss Emissions (grams/minute)

---------- END----------

ARTESIA BOULEVARD CORRIDOR SPECIFIC PLAN
MOBILITY AND CIRCULATION

IN THE CITY OF
ARTESIA

Prepared for:

Hogle-Ireland, Inc.
2860 Michelle Drive, Suite 100
Irvine, CA 92606

Prepared by:

Kimley-Horn and Associates, Inc.
765 The City Drive, Suite 400
Orange, California 92868

September, 2011

ARTESIA BOULEVARD CORRIDOR SPECIFIC PLAN

MOBILITY AND CIRCULATION

Table of Contents

INTRODUCTION 1
Existing Roadway Conditions 1
Artesia Boulevard 1
Roseton Avenue 3
Gridley Road 3
CORRIDOR MOBILITY AND CIRCULATION FEATURES AND ISSUES 3
Access to Specific Plan Properties 3
Parking 5
Pedestrian Facilities 6
Transit Service 6
Bicycle Routes 8
Truck Routes 8
EXISTING Traffic OPERATING CONDITIONS 8
Existing Traffic Volumes 8
FUTURE TRAFFIC CONDITIONS 10
Future Without Project Traffic Conditions 10
PROJECT TRAFFIC 10
Project Trip Generation 10
Trip Distribution 16
PROJECT-RELATED TRAFFIC IMPACTS 16
PROJECT MITIGATION 16
LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM COMPLIANCE 21
SPECIFIC PLAN MOBILITY RECOMMENDATIONS 21
Roadways 21
Access to Specific Plan Properties 21
Parking 22
Pedestrian Facilities 22
SUMMARY OF FINDINGS AND CONCLUSIONS 23

List of Figures

Figure 1 – Artesia Boulevard Corridor Specific Plan Study Area 2
Figure 2 – Existing Parcel Access Points 4
Figure 3 – Existing Transit Routes and Facilities 7
Figure 4 – Existing Truck Routes 9
Figure 5 – Existing Lane Geometry 11
Figure 6 – Existing Peak Hour Traffic Volumes 12
Figure 7 – Future Without Project Peak Hour Traffic Volumes 14
Figure 8 – Project-Related Peak Hour Traffic Volumes 18
Figure 9 – Future With Project Peak Hour Traffic Volumes 19

List of Tables

Table 1 – Summary of Intersection Operation – Existing Conditions 13
Table 2 – Summary of Intersection Operation – Future Without Project Conditions 15
Table 3 – Summary of Specific Plan Project Trip Generation by Quadrant 17
Table 4 – Summary of Intersection Operation – Future With Project 20

ARTESIA BOULEVARD CORRIDOR SPECIFIC PLAN
MOBILITY AND CIRCULATION

INTRODUCTION

This report has been prepared to provide a description of the existing and recommended Mobility and Circulation features of the Artesia Boulevard Corridor, and to provide an evaluation of existing and future operating conditions with the implementation of the Artesia Boulevard Corridor Specific Plan. The study corridor consists of Artesia Boulevard from Gridley Road to just west of Pioneer Boulevard. The study area is shown on **Figure 1**.

EXISTING ROADWAY CONDITIONS

Artesia Boulevard

Artesia Boulevard is a four-lane divided east-west arterial roadway providing regional access to and through the project area. Artesia Boulevard is classified as a Primary Highway (Major) on the City's General Plan Circulation Element. Artesia Boulevard passes under the San Gabriel River Freeway (I-605) approximately one-half mile west of Gridley Road, and has a full interchange with the Artesia Freeway (SR-91) approximately one mile east of Pioneer Boulevard. The posted speed limit along Artesia Boulevard through the Specific Plan area is 40 miles per hour.

Through the project area, Artesia Boulevard provides two travel lanes in each direction with a raised landscaped median. Between Gridley Road and Roseton Avenue, the median is continuous except for a break to provide left-turn ingress and egress for the East West Ice Palace. Between Roseton Avenue and Pioneer Boulevard, the median has breaks with left-turn pockets at each of the minor cross streets on the north side of Artesia Boulevard, except for Corby Avenue.

The streetscape in front of some newer development includes a landscaped planter strip with a meandering sidewalk. These can be found in front of East West Ice Palace, the new commercial center between Jersey Avenue and Fallon Avenue, and the cement factory, just to the east of the Specific Plan area.

Within the study corridor vicinity, Artesia Boulevard has three signalized intersections: at Gridley Road, Roseton Avenue, and Pioneer Boulevard. Dedicated left-turn lanes are provided at all three intersections. Protected left-turn phasing is provided on all approaches at the intersection of Artesia Boulevard and Pioneer Boulevard, while left-turn movements are permissive at the other two signalized intersections.

Artesia Boulevard has four unsignalized street intersections within the study corridor: Jersey Avenue, Fallon Avenue, Alburtis Avenue, and Corby Avenue. At these intersections, traffic movements on the minor streets are stop-controlled, while traffic on Artesia Boulevard is uncontrolled. Median breaks and left-turn pockets on Artesia Boulevard are provided at each of these side streets, except Corby Avenue.

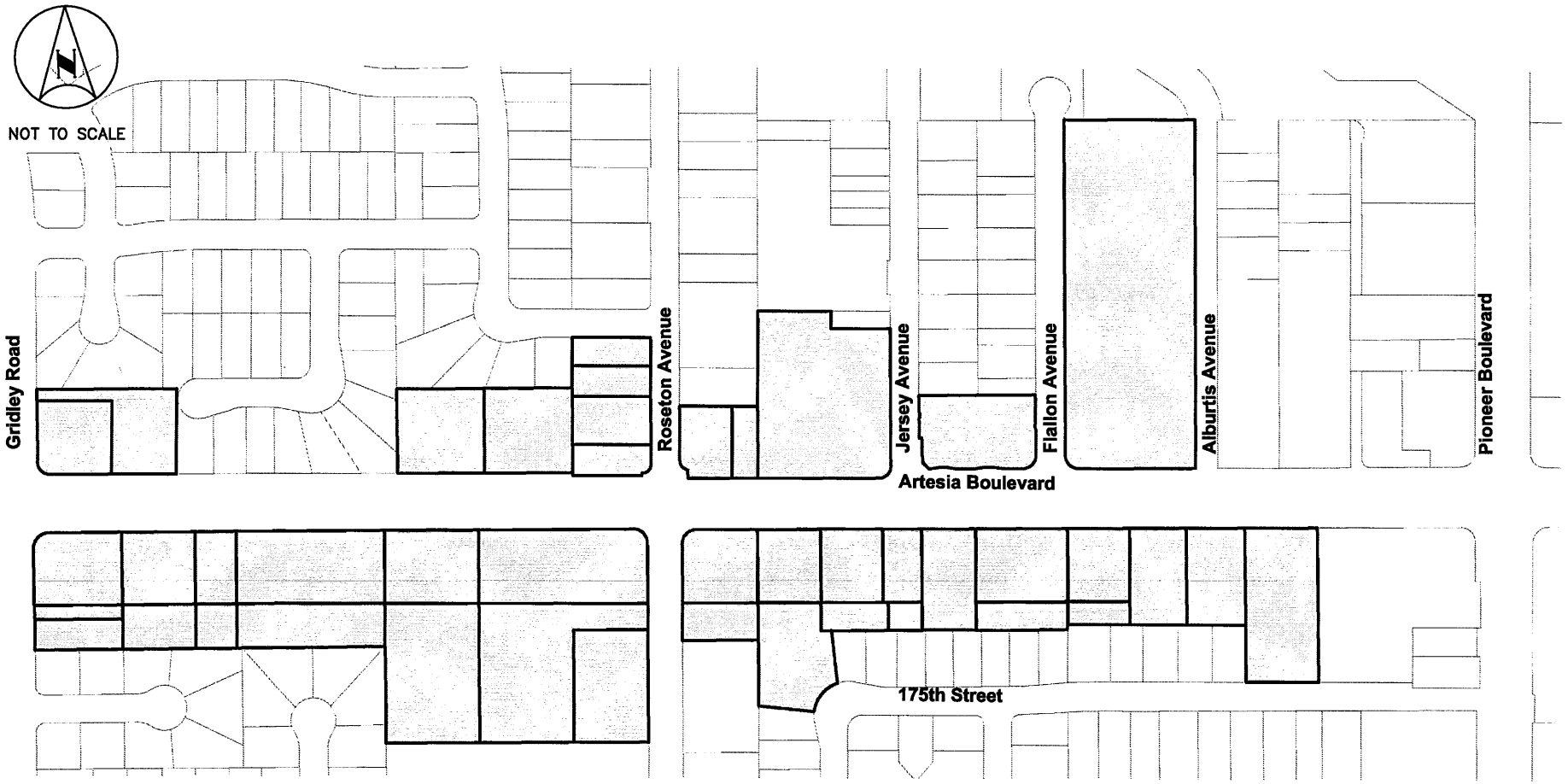


FIGURE 1
ARTESIA BOULEVARD CORRIDOR SPECIFIC PLAN STUDY AREA

FILENAME: Sep 30, 2011 – 11:43am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

Roseton Avenue

Roseton Avenue is a north-south local street cutting through the center of the project area. Within the project area, Roseton Avenue is approximately 36 feet wide without any lane markings. Roseton Avenue provides direct access for residential and commercial uses on both sides of Artesia Boulevard. The posted speed limit is 25 miles per hour.

On-street parking is allowed on both sides of the street, although parking is prohibited on Thursdays for street sweeping. All parcels that have frontage on Roseton Avenue also have at least one driveway on Roseton Avenue. The Burbank Elementary School is located on Roseton Avenue approximately 500 feet south of Artesia Boulevard. Roseton Avenue extends approximately ¼ mile on either side of Artesia Boulevard before ending in cul-de-sacs.

Gridley Road

Gridley Road is a north-south arterial which forms the western boundary of the project area. It is classified as a Secondary Highway in the City's General Plan Circulation Element. From Artesia Boulevard to 183rd Street, Gridley Road provides two lanes in each direction, separated by a painted median. South of 183rd Street, a raised landscaped median separates directional movements. North of the project area, Gridley Road narrows to one lane in each direction as it passes over the Artesia Freeway. Gridley Road extends a few miles north and south of Artesia Boulevard, providing access to residential and commercial uses. The posted speed limit on Gridley Road is 40 miles per hour. On-street parking is generally prohibited on Gridley Road immediately north and south of Artesia Boulevard.

CORRIDOR MOBILITY AND CIRCULATION FEATURES AND ISSUES

Access to Specific Plan Properties

There are multiple driveways providing access to individual parcels on both sides of Artesia Boulevard within the study corridor – 11 curb cuts on the north side of the street, and 23 on the south side. As shown on **Figure 2**, most parcels with frontage on Artesia Boulevard have at least one driveway directly onto Artesia Boulevard; some have two or more. Currently there is no cross access between adjacent parcels along Artesia Boulevard, therefore; each parcel of land has its own exclusive access to Artesia Boulevard.

Most of the driveways on Artesia Boulevard for the individual parcels are restricted to right-in/right-out only movements because of the raised median. The exceptions to this are the Ice Palace, for which a median break and westbound left-turn pocket are provided; and the parcels located on the south side of Artesia Boulevard across from the side street median breaks at Jersey Avenue and Fallon Avenue. Most, but not all parcels that are located on a street corner also have one or more driveways on the side street.

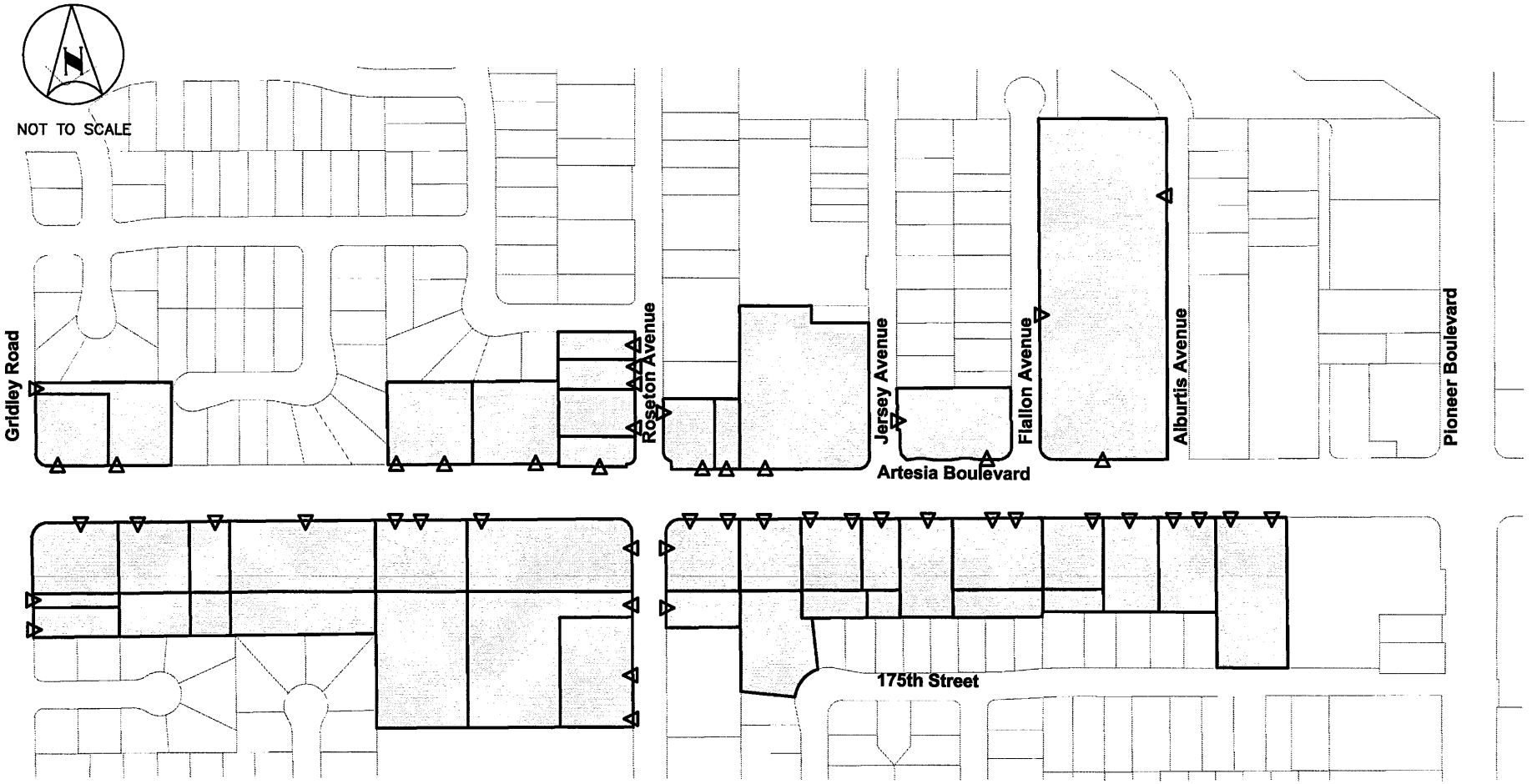


FIGURE 2
EXISTING PARCEL ACCESS POINTS

FILENAME: Sep 30, 2011 - 11:44am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley-Horn and Associates, Inc.

Parking

On-street parking is generally allowed on both sides of Artesia Boulevard throughout the study area, except for red-curb areas near some driveways and intersections where a parked vehicle would restrict sight distance. The on-street parking is not marked with parallel parking stalls, and the parking is not metered. Wide curb lanes on both sides of the street allow enough room for vehicles to park outside of the travel-way. Where on-street parking is allowed, there are generally no restrictions, with the exception of the following:

- Parking is prohibited for street sweeping from 5 to 8 AM on Thursdays on the north side of the street, and from 5 to 7:30 AM on Mondays on the south side.
- One-hour on-street parking is designated by green curb markings at a few locations in front of some retail businesses on the south side of the street between Roseton Avenue and Pioneer Boulevard.
- Two-hour on-street parking restrictions are posted on the north side of Artesia Boulevard between Jersey Avenue and Fallon Avenue.
- Between Fallon Avenue and Corby Avenue, Artesia Boulevard is posted with "Commercial Vehicles 90 Minute Parking Route" signage.

Most of the parcels along Artesia Boulevard provide adequate on-site parking for their businesses, and so street parking is generally not heavily used throughout the corridor. One exception to this is the street parking near the East West Ice Palace. On event days, the Ice Palace parking lot, which provides 55 to 60 parking spaces, does not always accommodate the facility's parking demand, and on-street parking on both sides of Artesia Boulevard is used by participants and spectators for the overflow parking. Parking demand has been observed to extend to Roseton Avenue and beyond on both sides of the street on some event days. When this is the case, people who park on the north side of the street either make their way to the signalized intersection to either side of the Ice Palace (Gridley Road or Roseton Avenue) or cross Artesia Avenue mid-block. No mid-block crosswalk is provided for pedestrians who park on the north side of the street, and no crossing guard or any form of crossing assistance is provided.

Some parcels within the Specific Plan area appear to have more on-site parking than would be required for the amount of development on the parcel at some times of the day. Examples of this include the parcel with the data processing business on the north side of Artesia Boulevard between Gridley Road and Roseton Avenue; and the Alberto's Mexican Restaurant parcel, on the south side of Artesia Boulevard at the eastern end of the Specific Plan area. In addition, some parcels within the Specific Plan area are currently not occupied and the site is unused. In each case, there may be an opportunity for shared parking through a reciprocal agreement to accommodate some of the Ice Palace overflow parking.

Pedestrian Facilities

Sidewalks are provided along both sides of Artesia Boulevard within the Specific Plan area. For most of its length, Artesia Boulevard provides an 8-foot wide sidewalk with utility poles and some street furniture. Sidewalks throughout the corridor are generally in good physical condition, with few raised or broken sections, or unmaintained tree planter areas. Most areas provide only a sidewalk to the curb, with little or no landscaping in the public right-of-way. In some cases, the frontage along some more recently developed parcels, such as the East West Ice Palace, the commercial center between Jersey Avenue and Fallon Avenue, and the cement factory (just outside the Specific Plan area), have been improved with a landscaped planter strip and a new meandering sidewalk.

In the project vicinity, Artesia Boulevard provides striped pedestrian crosswalks with pedestrian push buttons and phasing at all three signalized intersections, on all four approaches. Pedestrian access to properties along Artesia Boulevard from the public street is generally unencumbered. A clear path of travel to the public entrance for each building is maintained for each property (with the exception of those currently vacant properties which have security fencing across the property frontage).

Transit Service

Existing transit service and transit facilities in the project vicinity is shown on **Figure 3**. Transit service within the Specific Plan area itself is limited to Norwalk Transit, Route 8. Route 8 begins at the Whittier Historic Depot and travels south to the Norwalk/Santa Fe Metrolink Station, then proceeds south on Valley View Avenue and west on Artesia Boulevard through the study corridor, and finally ends at the Cerritos Mall. Headways (time between bus arrivals) at each stop is approximately one hour throughout the day. Route 8 does not provide weekend service.

As shown on Figure 3, bus stop facilities within the Specific Plan area consist of the following:

- On the south side of Artesia Boulevard (for eastbound travelling buses):
    - A bench and trash can are located just east of Gridley Road, in front of the Jerry's Liquor Market center.
    - A bus stop sign only is located just west of Pioneer Boulevard, in front of the Hamni Bank building (outside the Specific Plan area).

- On the north side of Artesia Boulevard (for westbound travelling buses):
    - A bus stop sign only is located west of Roseton Avenue, in front of the Avis Rent-a-car parking lot.

In addition, Norwalk Transit Route 2 travels in a north-south direction along Pioneer Boulevard, with bus stops on either side of Artesia Boulevard. Other transit services in the project vicinity but not through the Specific Plan area itself include several lines of the Cerritos Transit (Cerritos on Wheels – COW), and Line 62 of the Los Angeles Metro Local Service, which travels along Pioneer Boulevard and has bus stops on either side of Artesia Boulevard.

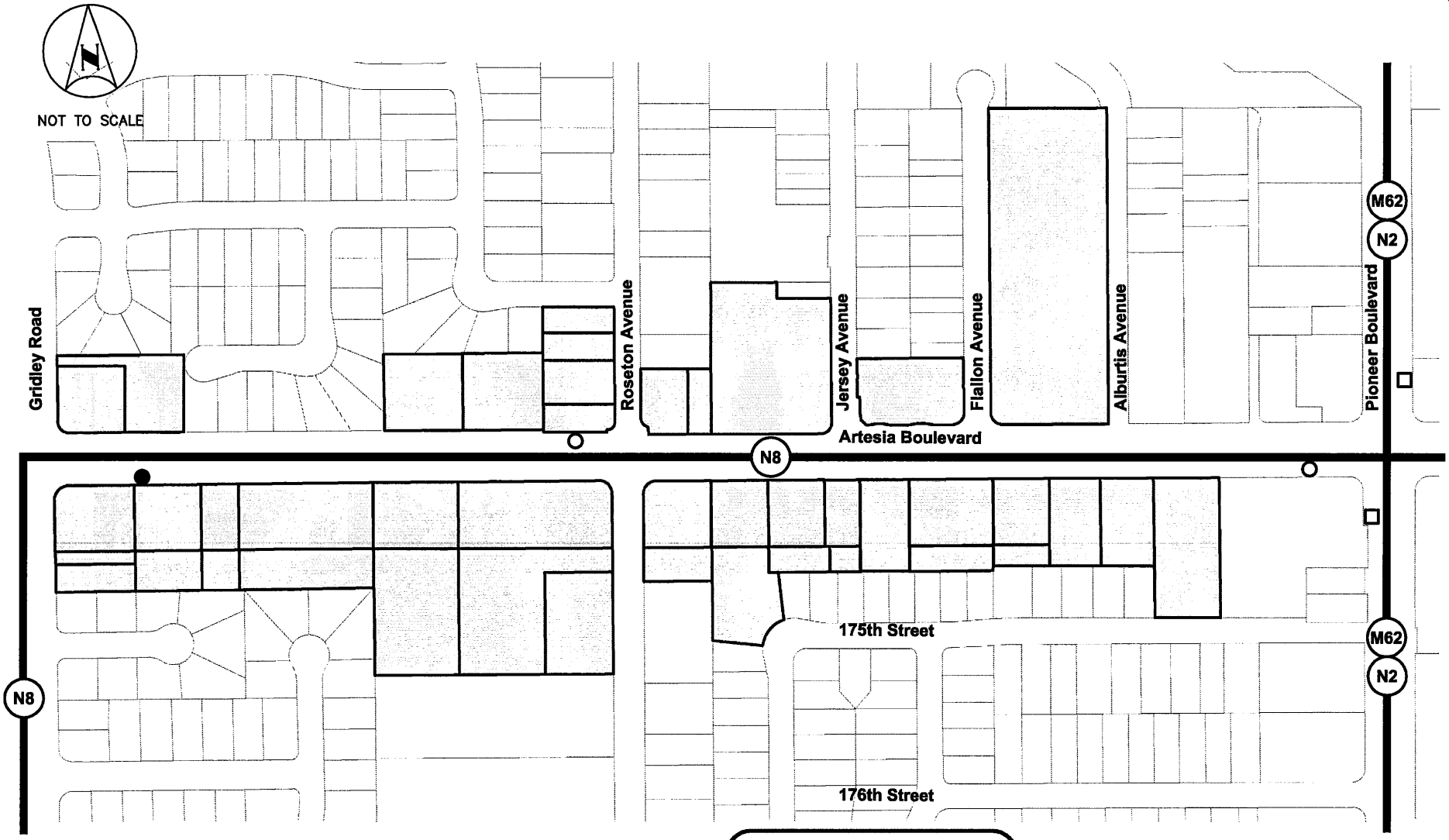


FIGURE 3
EXISTING TRANSIT ROUTES AND FACILITIES

FILENAME: Sep 30, 2011 – 11:44am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

Bicycle Routes

The City of Artesia currently does not have designated bikeways. Bicyclists on Artesia Boulevard must share the curb lane with any parked cars, and either ride up onto the sidewalk or into the travel lane to maneuver around a parked vehicle. There are currently no plans to provide bike lanes on Artesia Boulevard.

Truck Routes

The City of Artesia has designated three roadways as truck routes: Artesia Boulevard, Pioneer Boulevard, and South Street. Existing truck routes are shown on **Figure 4**. The entire length of the study corridor is designated as a truck route. The designation of a truck route is intended to direct truck movements to these designated routes, and to minimize the amount of noise and other impacts caused by trucks to sensitive land uses such as residential neighborhoods by confining truck traffic to major arterials.

The California Dairies, Inc. (at the east end of the Specific Plan area) and the cement factory (just outside the Specific Plan area) generate a substantial amount of heavy truck traffic. Truck trips for these businesses are generally concentrated on Artesia Boulevard between Fallon Avenue and Pioneer Boulevard, and on the Fallon Avenue, Alburtis Avenue, and Corby Avenue side streets. The trucks primarily arrive from and depart to the east. Because of the raised median in Artesia Boulevard across the property frontage, left turns are made to and from the side streets. Because trucks cause more wear and tear on the public street than passenger vehicles, and because of the concentration of heavy trucks associated with these two businesses, the City of Artesia has resurfaced Artesia Boulevard from Fallon Avenue to Pioneer Boulevard with concrete, rather than asphalt, for more durability.

EXISTING TRAFFIC OPERATING CONDITIONS

Existing Traffic Volumes

A 24-hour roadway traffic count collected in 2007 on Artesia Boulevard between Gridley Road and Pioneer Boulevard was provided by the City. At the time of the count, this segment of roadway carried 17,743 trips per day. Morning traffic peaked at 7:15 AM with 714 vehicles in the eastbound direction, and 854 vehicles in the westbound direction. In the afternoon, traffic peaked at 4:45 PM, with 885 trips in the eastbound direction, and 817 trips in the westbound direction. Based on a daily roadway capacity of 30,000 ADT for Primary Highway (Major), Artesia Boulevard is currently operating at Level of Service (LOS) A.

Peak hour turning movement counts at the three signalized study intersections in the vicinity of the Specific Plan were collected in February, 2011. In addition, peak hour truck classification turning movement counts were collected in September, 2011 at the intersection of Artesia Boulevard and Pioneer Boulevard to evaluate the effects of truck traffic from the industrial uses on Artesia Boulevard (California Dairies and the Cement plant).

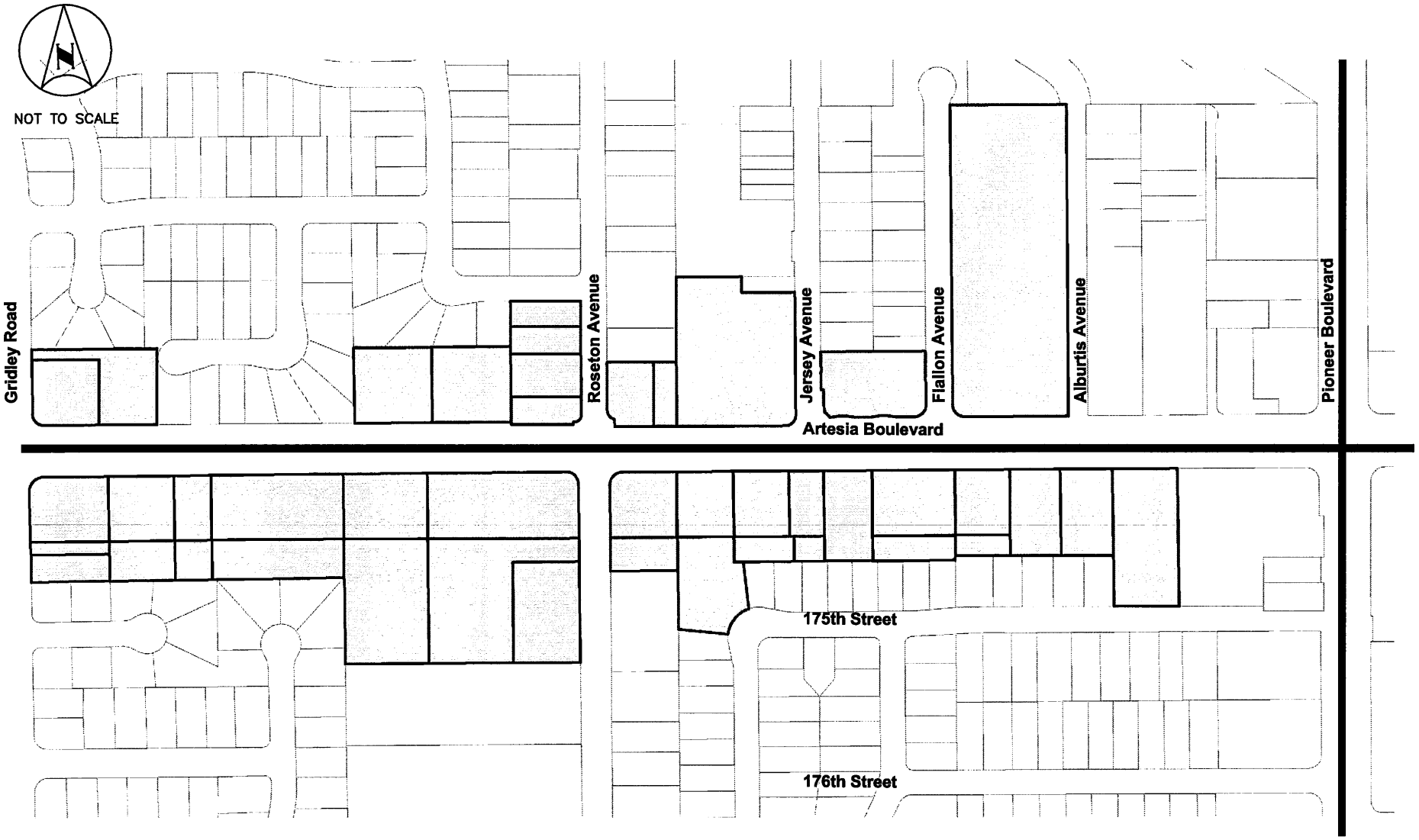


FIGURE 4
EXISTING TRUCK ROUTES

FILENAME: Sep 30, 2011 – 11:45am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

Existing lane configurations at the study intersections are shown on **Figure 5**. Peak hour turning movement volumes are shown on **Figure 6**. Existing peak hour operating conditions at the study intersections are summarized on **Table 1**. The study intersections are each operating at an acceptable Level of Service under existing conditions. The intersection of Artesia Boulevard and Pioneer Boulevard is operating at Level of Service C in the evening peak hour, with an ICU of 0.799, which is at the threshold between LOS C and D.

FUTURE TRAFFIC CONDITIONS

Future traffic conditions with and without the project were analyzed to address the impacts of the Artesia Boulevard Specific Plan development. Background traffic growth was added to existing traffic volumes to represent short-term future conditions. Project traffic was then added to evaluate the Specific Plan project impact on future traffic conditions.

Future Without Project Traffic Conditions

A conservative traffic growth rate of one percent per year was applied to the existing peak hour traffic volumes at each of the study intersections to account for general background growth outside the Specific Plan area. Future Without Project peak hour traffic volumes are shown on **Figure 7**.

The study intersections were reanalyzed with the ambient traffic growth assumed, and the results are summarized on **Table 2.** With the addition of background traffic, the intersection of Artesia Boulevard and Pioneer Boulevard would worsen to LOS E during the evening peak hour.

PROJECT TRAFFIC

In order to determine the potential traffic impacts that would be associated with the Specific Plan vision, trip generation estimates for the Specific Plan land use components were developed. The following paragraphs describe trip generation, trip distribution, and trip assignment for the project.

Project Trip Generation

Trip generation estimates were developed for each of the four quadrants of the Specific Plan. For the analysis of future traffic conditions, each parcel of interest in the project area was identified in terms of its existing land use and its potential future land use, including the land use type (i.e., commercial, residential, industrial etc.) and the existing and future development potential of those land uses.

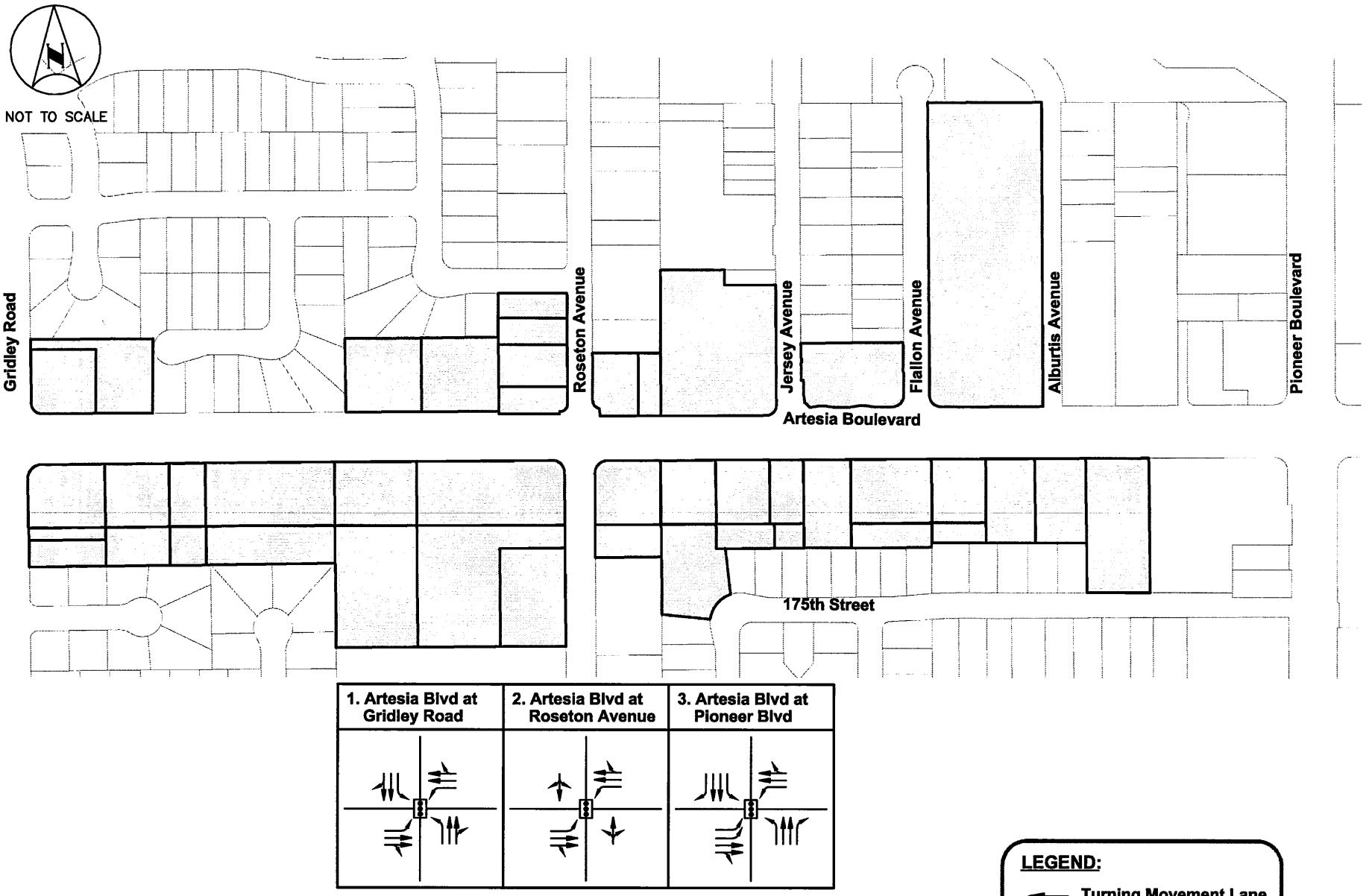
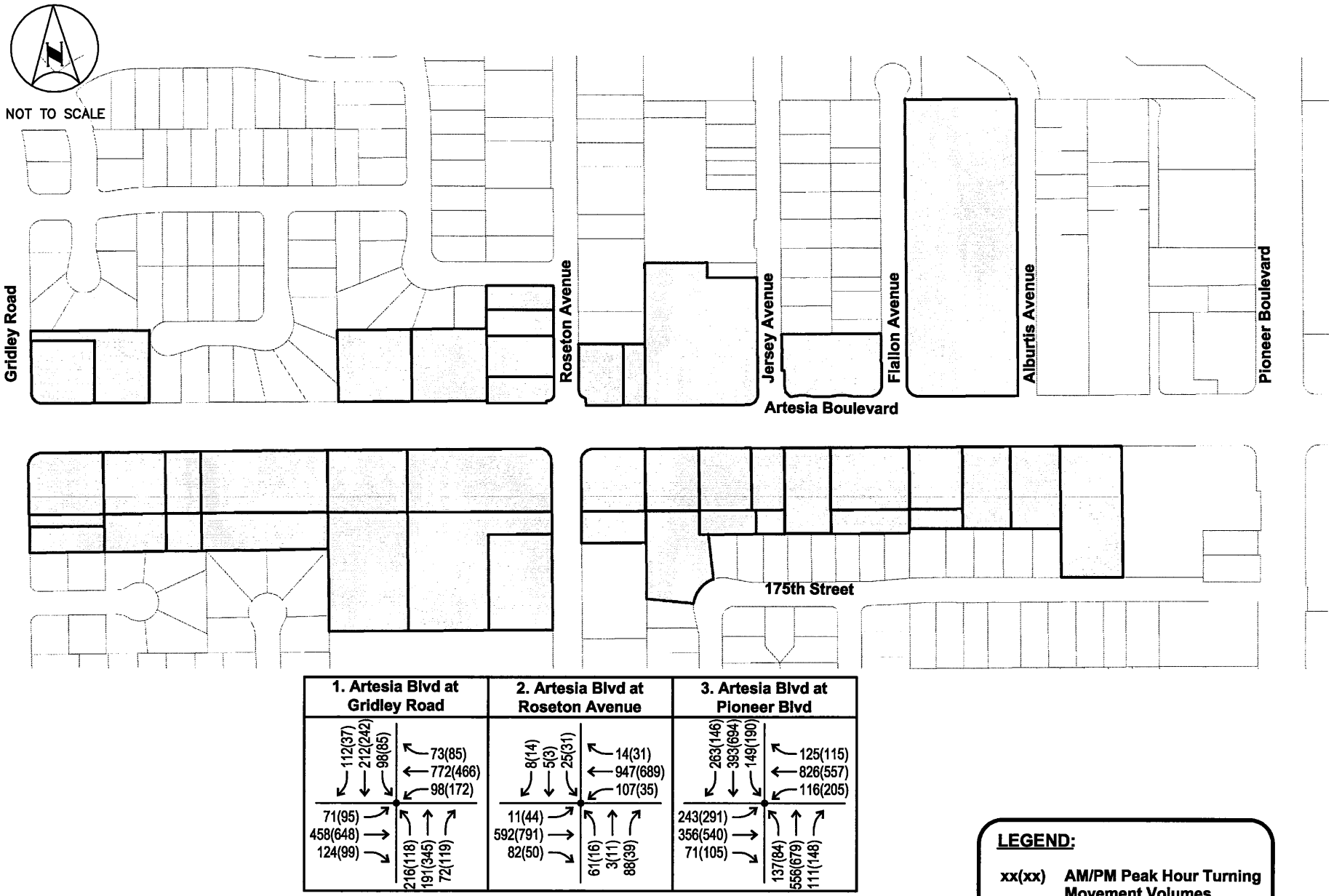


FIGURE 5
EXISTING LANE GEOMETRY

FILENAME: Sep 30, 2011 – 11:45am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.



LEGEND:

xx(xx) AM/PM Peak Hour Turning Movement Volumes

FIGURE 6
EXISTING PEAK HOUR TRAFFIC VOLUMES

FILENAME: Sep 30, 2011 – 11:46am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS

Int. #	Intersection	Control	AM Peak Hour		PM Peak Hour	
			ICU	LOS	ICU	LOS
1	Artesia Boulevard at Gridley Road	S	0.595	A	0.589	A
2	Artesia Boulevard at Roseton Avenue	S	0.468	A	0.395	A
3	Artesia Boulevard at Pioneer Boulevard	S	0.665	B	0.799	C

S = Signalized intersection

Bold and shaded values indicate intersections operating at LOS E or LOS F.

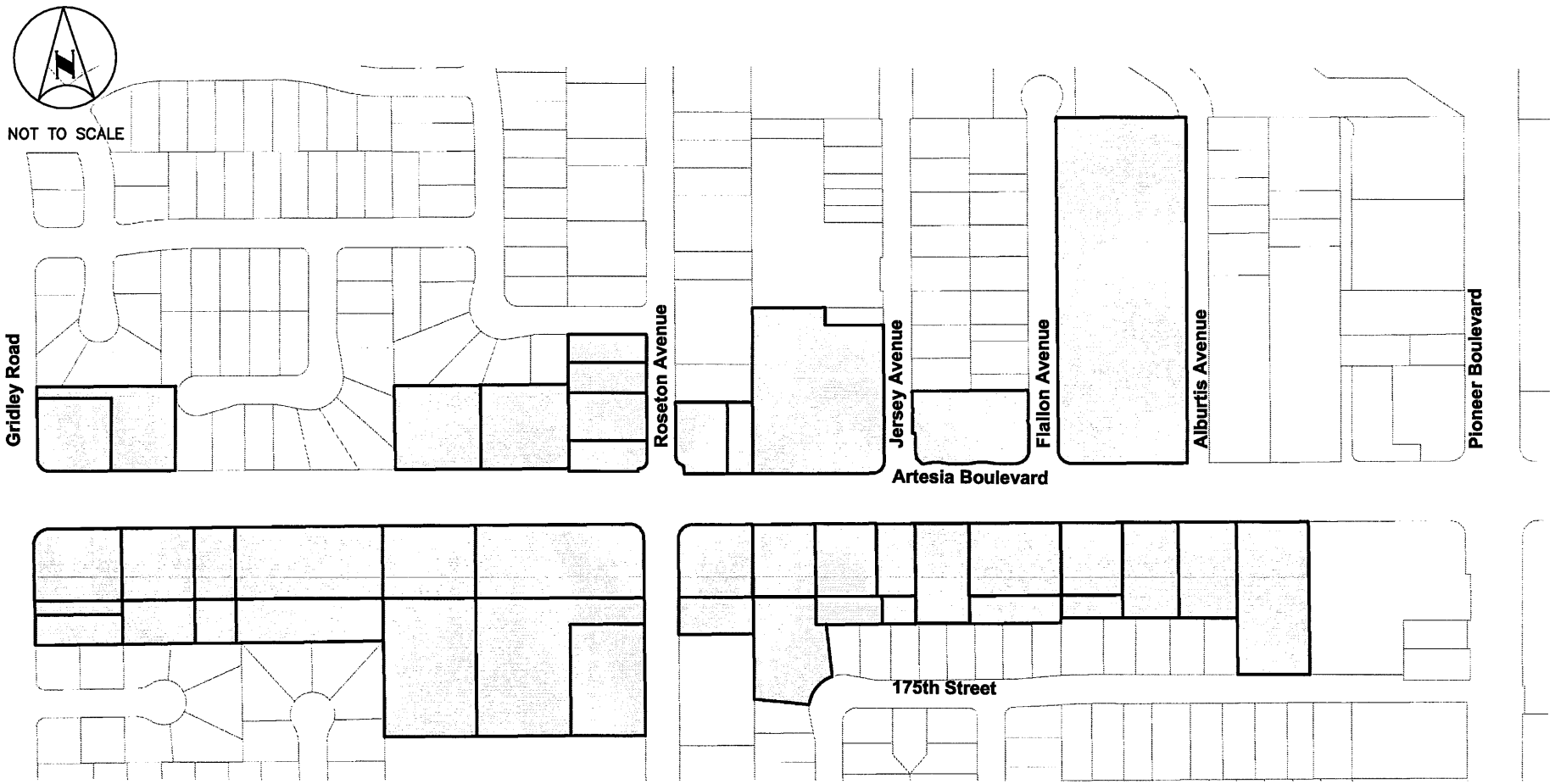


FIGURE 7
FUTURE WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES

FILENAME: Sep 30, 2011 – 11:46am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

TABLE 2
SUMMARY OF INTERSECTION OPERATION
FUTURE WITHOUT PROJECT CONDITIONS

Int. #	Intersection	Control	AM Peak Hour		PM Peak Hour	
			ICU	LOS	ICU	LOS
1	Artesia Boulevard at Gridley Road	S	0.672	B	0.665	B
2	Artesia Boulevard at Roseton Avenue	S	0.527	A	0.444	A
3	Artesia Boulevard at Pioneer Boulevard	S	0.753	C	0.905	**E**

S = Signalized intersection

Bold and shaded values indicate intersections operating at LOS E or LOS F.

The number of trips that would be generated by the net new development was calculated as the difference between the future potential development trips and existing development trips. A summary of the trip generation by quadrant is provided on **Table 3**. Some of the proposed development areas are relatively small with low trip generation and some would generate a more significant number of trips, based on the development potential in that quadrant. The total net new trips that would be generated by the Specific Plan land uses is estimated to be 10,292 daily trips, with 279 trips in the morning peak hour, and 630 trips in the evening peak hour.

Trip Distribution

Trip distribution assumptions for the proposed development were developed based on the Regional Statistical Area (RSA) trip distribution information provided in the Los Angeles County CMP, and on existing traffic patterns and available transportation infrastructure serving the area. Trip distribution and assignment of project trips were accomplished using the Traffix software, which allows the assignment of traffic along a variety of paths for each origin and destination pair. The resulting project-related peak hour turning movements are shown on **Figure 8.**

PROJECT-RELATED TRAFFIC IMPACTS

The traffic-related impact associated with the Specific Plan land uses on the study intersections was assessed by adding the project-related traffic to the Future Without Project traffic volumes. A summary of the results of the analysis is provided below.

Future With Project peak hour traffic volumes are shown on **Figure 9**. The results of the analysis are summarized on **Table 4**. Also shown on this table is the project impact at each intersection.

Review of this table indicates that with the addition of the Specific Plan project traffic, the intersection of Artesia Boulevard and Pioneer Boulevard would continue to operate at LOS E in the evening peak hour. The project-related traffic would cause an increase in the v/c ratio of 0.035. The Specific Plan project would not cause any additional intersection to operate at a deficient Level of Service.

PROJECT MITIGATION

In order to achieve an acceptable peak hour Level of Service for the evening peak hour at the intersection of Artesia Boulevard and Pioneer Boulevard, the following improvement is recommended:

- Convert the existing northbound right-turn lane on Pioneer Boulevard to a through/right-turn lane.

Sufficient width exists on the northbound exit leg of the intersection (the north leg) to receive a third lane of through traffic. This improvement can be accomplished with signing and striping modifications on Pioneer Boulevard. The resulting Level of Service with this improvement is shown on Table 4.

TABLE 3
SUMMARY OF SPECIFIC PLAN TRIP GENERATION BY QUADRANT

Quadrant	Trip Generation Estimates						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1	1,187	16	13	29	35	36	71
2	423	6	3	9	12	13	25
3	6,439	96	92	188	207	195	402
4	2,243	33	20	53	64	68	132
Total	**10,292**	**151**	**128**	**279**	**318**	**312**	**630**

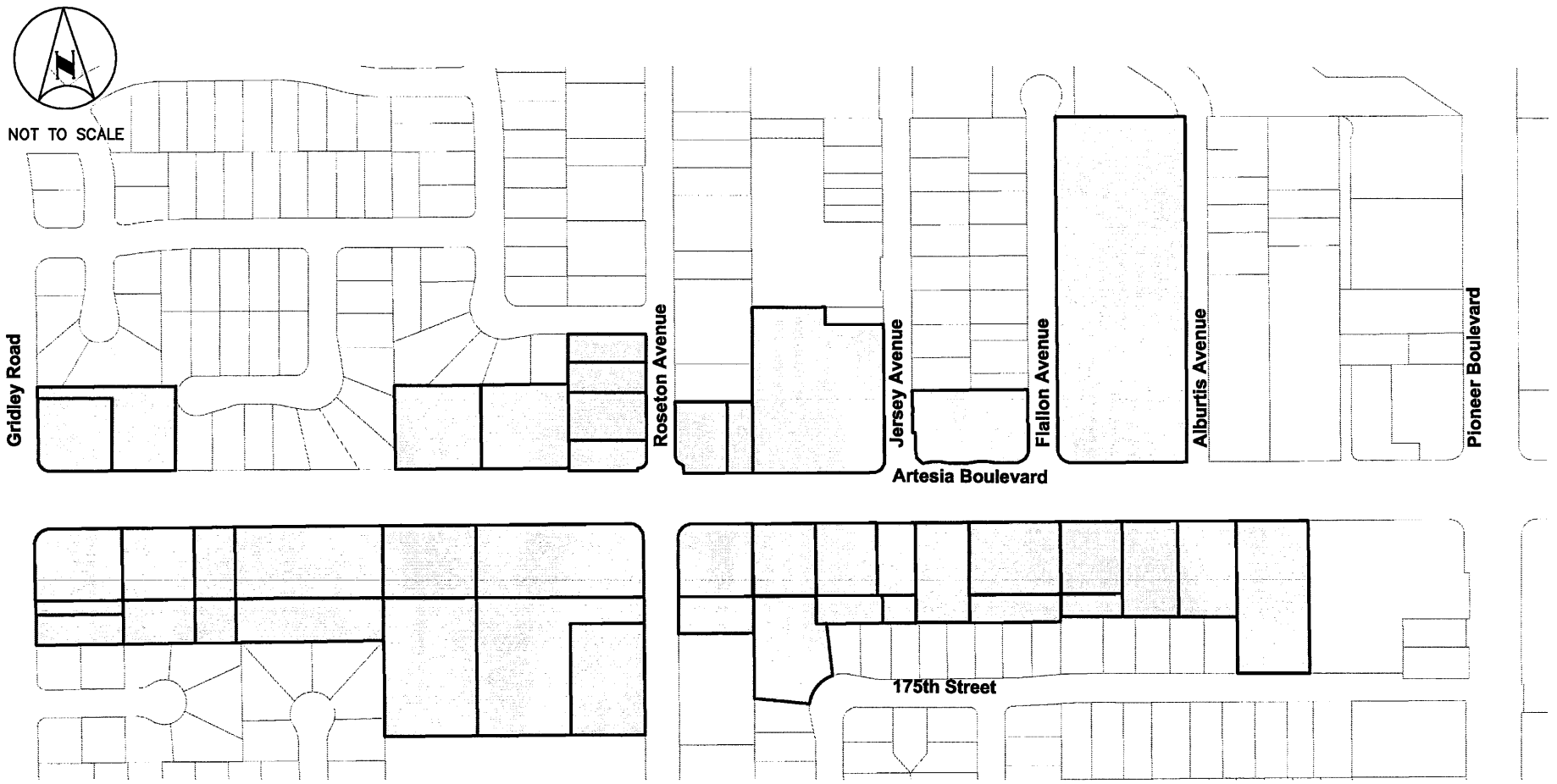


FIGURE 8
PROJECT-RELATED PEAK HOUR TRAFFIC VOLUMES

FILENAME: Sep 30, 2011 – 11:46am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

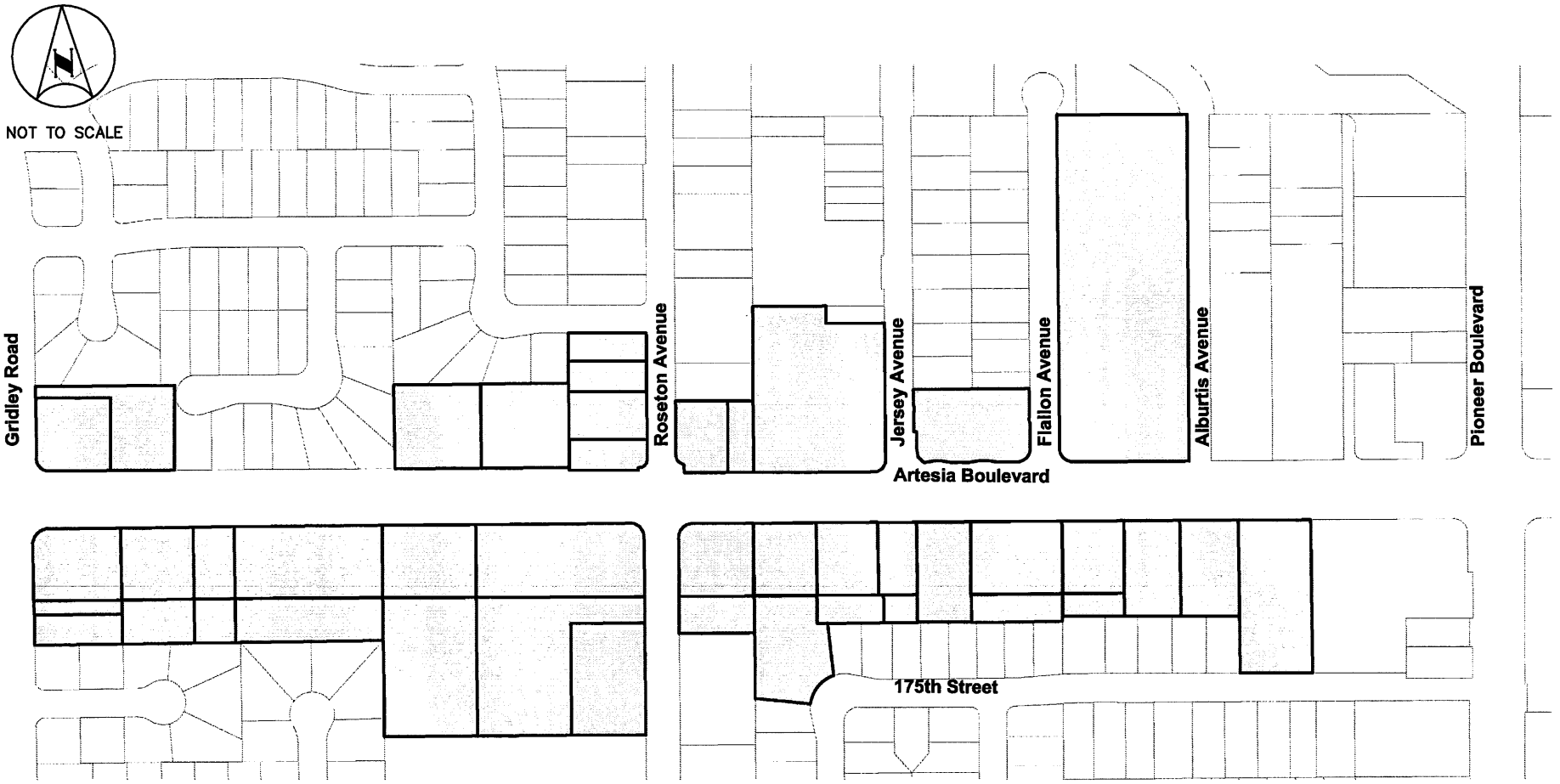


FIGURE 9
FUTURE WITH PROJECT PEAK HOUR TRAFFIC VOLUMES

FILENAME: Sep 30, 2011 – 11:47am K:\ORA_TPTO\ZSAC\Projects\Artesia Boulevard Specific Plan\CADD\Figures.dwg

Kimley–Horn and Associates, Inc.

TABLE 4
SUMMARY OF INTERSECTION OPERATION
FUTURE WITH PROJECT CONDITIONS

Int. #	Intersection	Control	AM Peak Hour		PM Peak Hour	
			ICU	LOS	ICU	LOS
1	Artesia Boulevard at Gridley Road	S	0.685	B	0.743	C
2	Artesia Boulevard at Roseton Avenue	S	0.573	A	0.587	A
3	Artesia Boulevard at Pioneer Boulevard	S	0.792	C	0.935	**E**
3	Artesia Boulevard at Pioneer Boulevard - with mitigation: Convert northbound right-turn lane to a through/right lane	S	0.792	C	0.852	D

S = Signalized intersection

Bold and shaded values indicate intersections operating at LOS E or LOS F.

LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM COMPLIANCE

The Congestion Management Program (CMP) of the County of Los Angeles became effective statewide in 1992 as a result of Proposition 111. The Los Angeles County CMP is implemented by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP requires that the traffic impact of individual development projects of potential regional significance be analyzed. The CMP system is made up of a system of arterial roadways, freeways, and monitoring intersections in Los Angeles County. The CMP requires that all arterial monitoring intersections where the proposed project is expected to add 50 or more peak hour trips be analyzed.

The San Gabriel River Freeway (I-605), and the Artesia Freeway (SR-91) are designated CMP routes in the vicinity of the City of Artesia. There are no CMP monitoring intersections in the City of Artesia. The closest CMP monitoring intersections in adjacent cities are:

- South Street and Lakewood Boulevard, in the City of Lakewood (3 miles to the west of the Specific Plan area);
- Artesia Boulevard and Lakewood Boulevard, in the City of Bellflower (3-1/2 miles to the southwest of the Specific Plan area);

The Specific Plan would not add 50 peak hour trips to these intersections, and no further analysis is required. The CMP also requires that all CMP freeway-monitoring locations where the proposed project adds 150 or more peak hour trips in either direction to be analyzed. Since the Specific Plan project would not add 150 peak hour trips to a freeway mainline, no additional CMP freeway analysis was required.

SPECIFIC PLAN MOBILITY RECOMMENDATIONS

Roadways

Artesia Boulevard is a four-lane divided Primary roadway that is currently built to its General Plan standards throughout the Specific Plan area. The roadway has been improved with a raised and landscaped median. The median not only beautifies the corridor, it also provides a physical barrier between opposing flows of traffic, and reduces side friction by limiting left turns to and from driveways and minor side streets. For both aesthetic and traffic flow reasons, the presence of a raised, landscaped median on Artesia Boulevard should be maintained throughout the Specific Plan area.

Access to Specific Plan Properties

As pointed out in the Existing Conditions section, the Artesia Boulevard corridor through the Specific Plan area has numerous driveways providing separate and exclusive access to individual parcels – 11 curb cuts on the north side of the street and 23 on the south side (see Figure 3). These numerous and close-spaced driveways create side friction between through traffic and vehicles turning in and out of the driveways. They also impact the development potential on each parcel, and create confusion and added

conflicts for drivers on the corridor, especially when the driveways for separate parcels are closely spaced.

Wherever possible, as parcels along the corridor redevelop, driveway access should be consolidated to reduce the number of curb cuts. This can be accomplished through:

a. consolidation of two or more parcels to create a larger parcel with an appropriate (fewer) number of access points; or,
b. If parcels cannot be consolidated, require or encourage cross-access agreements between adjacent parcels, and/or modify the access to provide one shared driveway at the boundary between two parcels.
c. Access to corner parcels should be from the side street, to the extent possible.

Parking

Although on-street parking is generally allowed (with some time-of-day and usage restrictions) on both sides of the Artesia Boulevard throughout the study area, it is not heavily used on a typical daily basis. One exception, as noted earlier, is the street parking near the East West Ice Palace on event days. On these days, at peak times, the street parking on both sides of the street is heavily used, and people who park on the north side of the street often cross mid-block without the benefit of a cross-walk or crossing guard, creating a safety concern.

As the corridor redevelops, the opportunity for shared parking assistance for the Ice Palace may present itself, particularly with businesses that may have available parking at the times when the Ice Palace event parking is at its peak (evenings and weekends). The City should look for opportunities for shared parking arrangements through a reciprocal agreement to accommodate some of the Ice Palace overflow parking. For safety purposes, the City should consider signage and/or some type of physical barrier to pedestrians in the center median, to keep people from crossing Artesia Boulevard mid-block to get to street parking on the north side of the street.

New mixed-use developments should also be encouraged to enter into shared parking agreements with complementary uses (office and retail, residential and office, etc.) to maximize developable area and avoid constructing more parking than necessary to serve the development.

Pedestrian Facilities

The sidewalk system throughout the Corridor is generally in good physical condition, with some areas of the Corridor featuring improved, attractively landscaped parkways and decorative, meandering walkways. As properties redevelop, this improved sidewalk standard should be continued along the frontage of any new parcel development. Wherever possible, pedestrian access between parcels should be encouraged, to reduce the need to drive from one parcel to the next in order to patronize more than one business. A clear line of travel for pedestrians should be maintained from the public right-of-way / sidewalk and from bus stops to the business entrances.

Transit

There are minimal transit amenities on the Corridor – one bus stop location with a bus bench and trash receptacle, and two bus stops with a sign only. Bus stop facilities with a shelter, bench, trash receptacle, and signage provide the opportunity to create a consistent or themed look throughout the Corridor. If improved bus stop facilities are to be provided in the future, care should be taken to select a consistent look, and to install the same facilities in each location along the Corridor.

Bus turn-outs on Artesia Boulevard are not necessary, because the outside curb lanes are wide enough on both sides of the street to allow a bus to pull to the curb and not block through traffic. The curb along each bus stop location should continued to be painted with red curb (no parking) markings.

SUMMARY OF FINDINGS AND CONCLUSIONS

- The Artesia Boulevard Corridor Specific Plan contemplates the redevelopment or revitalization of some of the parcels along Artesia Boulevard between Gridley Road and Pioneer Boulevard.

- This Traffic Impact Analysis has evaluated the project impact at 3 key intersections in the Specific Plan area:
    - Artesia Boulevard and Gridley Road
    - Artesia Boulevard and Roseton Avenue
    - Artesia Boulevard and Pioneer Boulevard.

- Under current conditions, all study intersections are currently operating at an acceptable Level of Service in both peak hours.

- With ambient growth in traffic, the intersection of Artesia Boulevard and Pioneer Boulevard is forecasted to worsen to a deficient LOS E in the evening peak hour.

- The total net new trips that would be generated by the Specific Plan development is estimated to be 10,292 daily trips, with 279 trips in the morning peak hour, and 630 trips in the evening peak hour.

- The addition of project traffic will not cause any additional study intersections to worsen to a deficient Level of Service. The intersection of Artesia Boulevard and Pioneer Boulevard would continue to operate at Level of Service E in the evening peak hour with the addition of the Specific Plan project traffic.

- The conversion of the northbound right-turn lane to a through/right lane would result in Level of Service D operations at the intersection of Artesia Boulevard and Pioneer Boulevard. Sufficient width exists on the northbound exit leg of the intersection (the north leg) to receive a third lane of through traffic. This improvement can be accomplished with signing and striping modifications on Pioneer Boulevard.