



## **CITY OF BANNING**

### **Initial Study/Mitigated Negative Declaration**

**General Plan Amendment and Zone Change Related to adoption of the  
2008-2014 Banning Housing Element  
(General Plan Amendment No. 13-2504 and Zone Change No. 13-3502)**

**City of Banning  
Community Development Department  
99 E. Ramsey Street  
Banning, California 92220**

**May 29, 2013**

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**City of Banning Initial Study/Negative Declaration  
for  
General Plan Amendment and Zone Change related to the adoption of the  
2008-2014 Banning Housing Element**

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- 1. Project Title:** Banning 2008-2014 Housing Element (General Plan Amendment No. 13-2504 and Zone Change No. 13-3502)
- 2. Lead Agency Name and Address:** City of Banning, 99 E. Ramsey Street , Banning, CA 92220
- 3. Contact Person and Phone Number:** Zai Abu Bakar, Community Development Director, (951) 922-3131
- 4. Applicant Name and Address:** City of Banning, 99 E. Ramsey Street, Banning, CA 92220
- 5. Project Location:** City Wide (See Figures 1 through 3)
- 6. General Plan Designation:** Various (See Tables 1 through 3)
- 7. Project Description (describe the whole action involved, including, but not limited to, later phases of the project, and any secondary, support, or off-site features that are necessary for its implementation).**

The Project evaluated in this Initial Study includes three components: 1) adoption of the 2008-2013 Housing Element; 2) adoption of revisions to the General Plan (GP) Land Use Element text and General Plan Map; and 3) adoption of revisions to the Zoning Ordinance text and Zoning Map. Each of these components is described in greater detail below.

**1. 2008-2013 Housing Element Amendment**

California Government Code Section 65302(c) mandates that each city shall include a Housing Element in its General Plan. The Housing Element is required to identify and analyze existing and projected housing needs and include statements of the City's goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The City in adopting its Housing Element, must consider economic, environmental, and fiscal factors, as well as community goals as set forth in the General Plan. However, while cities have considerable flexibility in drafting the other elements of the General Plan, the Housing Element must comply with the statutory provisions of the California Government Code, which are codified in Section 65580 et. seq.

Many of the policies and programs contained in the Housing Element are intended to facilitate the preservation, maintenance and improvement of the City's existing housing

stock. These programs would not change development patterns or result in any physical environmental impacts. However, under state law each jurisdiction is also required to demonstrate that local land use plans and zoning regulations provide development opportunities to accommodate the jurisdiction's assigned fair share of the region's new housing needs. The process by which fair share housing needs are determined is called the "Regional Housing Needs Assessment" (RHNA). The RHNA is prepared by the Southern California Association of Governments (SCAG). Once the RHNA allocations are adopted by SCAG and accepted by HCD, they become final and no changes or judicial review are permitted under state law.

The RHNA identifies Banning's share of the regional housing need for the January 2006 through June 2014 projection period as 3,841 units. This total includes 873 very-low-income units, 618 low-income units, 705 moderate-income units, and 1,645 above-moderate-income units. In addition, the City must accommodate a RHNA carryover from the previous planning cycle of 598 lower-income units. State law requires the City to demonstrate the availability of adequate sites with appropriate zoning to accommodate the need for various types of housing units commensurate with the RHNA.

Under state law, a density of 20-30 housing units per acre is considered necessary to facilitate the production of housing affordable to lower-income households in Banning. The Banning General Plan and Zoning Ordinance currently allow a maximum residential density of 18 units/acre in the High Density Residential (HDR) district. As a result, the City's current land use regulations and inventory of developable land do not provide sufficient capacity to accommodate the state-mandated lower-income portion of the RHNA. Therefore amendments to the General Plan zoning are necessary to provide adequate sites to accommodate the City's fair share need for 2,089 additional lower-income units. The Housing Element includes program commitments to process General Plan and zoning amendments to accommodate new residential development commensurate with the RHNA and state mandates regarding the appropriate density for lower-income housing.

## 2. General Plan Land Use Element Amendment

In order to implement the Housing Element programs to accommodate development commensurate with the RHNA, the following revisions to the Land Use Element text and map are proposed:

- Create a new Very High Density Residential (VHDR) land use category with an allowable density range of 19-30 units/acre
- Revise the General Plan map to change the land use designations for the following properties:

Assessor's Parcel No.	Current General Plan Designation	Proposed General Plan Designation
537-190-018	MDR	VHDR
537-190-020	VLDR	VHDR
537-190-021	VLDR	VHDR

### 3. Zoning Text and Map Amendments

In addition to the General Plan revisions described above, the following changes to the Zoning Ordinance text and Zoning Map are proposed to implement Housing Element programs and accommodate additional lower-income housing development commensurate with the RHNA:

- Revise the development standards in the Downtown Commercial (D-C) zoning district to increase the allowable density for residential or mixed-use developments from 18 units/acre to 20 units/acre for developments with 16 units or more when 50% of units in the development are reserved for lower-income households. Parcels in the D-C zone are shown in Figure 1. The following parcels would currently qualify for this increased density:

APN	Address		Parcel size (acres)	Potential Units (current)	Potential Units (proposed)	Net increase (units)
541-145-012	255	E RAMSEY ST	0.8	13	16	3
541-150-004	447	E RAMSEY ST	1.3	20	25	5
541-150-010	553	E RAMSEY ST	2.2	34	43	9
<b>Totals</b>			<b>4.3</b>	<b>67</b>	<b>84</b>	<b>17</b>

- Establish a zoning designation of “HDR-20” allowing multi-family residential development by-right at a minimum density of 20 units/acre when 50% of units in the development are reserved for lower-income households
- Revise the Zoning Map to change the designations for the following properties (see Figure 2 West and Figure 2 East) from HDR to HDR-20:

APN	Parcel Size (acres)	Current Capacity @ 18 units/ac	Proposed Capacity @ 20 units/ac	Net Potential Increase
534-161-008	0.39	7	7	0
537-120-034	21.12	380	422	42
540-083-002	3.02	54	60	6
541-110-011	0.57	10	11	1
541-110-013	1.73	31	34	3
532-080-004	55.8	1004	1116	112
419-140-059	3.31	59	66	7
534-161-009	0.61	10	12	2
534-161-010	0.9	16	18	2
537-110-008	9.75	175	195	20
540-083-001	0.27	4	5	1
540-082-006	0.32	5	6	1
540-082-008	0.13	2	2	0
540-151-022	0.13	2	2	0
540-082-007	0.11	1	2	1
540-151-021	0.14	2	2	0
541-110-007	0.78	14	15	1
541-110-009	1.58	28	31	3
<b>Totals</b>	<b>100.66</b>	<b>1804</b>	<b>2006</b>	<b>202</b>

- Create a new Very High Density Residential (VHDR) zoning district with an allowable density range of 19-30 units/acre
- Establish a zoning designation of “VHDR-20” allowing multi-family residential development by-right at a minimum density of 20 units/acre when 50% of units in the development are reserved for lower-income households
- Revise the Zoning Map to change the designations for the following properties (see Figure 3):

APN	Parcel Size (acres)	Existing Zoning	Allowable Density (units/ac)	Potential Units (current)	Proposed Zoning	Proposed Density (units/ac)	Potential Units (proposed)	Net Potential Increase
537-190-018	26.0	MDR	10	260	VHDR-20	20	520	260
537-190-021	9.2	VLDR	2	18	VHDR-20	20	184	166
537-190-020	9.18	VLDR	2	18	VHDR-20	20	183	165
<b>Totals</b>	<b>44.38</b>			<b>296</b>			<b>887</b>	<b>591</b>

No specific development is currently proposed on any of the sites proposed for rezoning. The City is not required to build or provide funding for any housing developments on these parcels, but rather must designate sites with appropriate zoning to facilitate affordable housing development. No development application for housing construction has been submitted to the City for any of these sites.

This Initial Study/Mitigated Negative Declaration analyzes the potential environmental impacts that would be expected to result from the adoption of the Housing Element and the proposed changes to General Plan land use and zoning designations for the designated parcels. Subsequent review of the specific/precise development of housing projects for these sites will be required to ensure compliance with all applicable policies, standards, regulations and mitigation measures at such time as development applications are submitted for review.

**8. Surrounding Land Uses and Environmental Setting (describe the project's surroundings):**

**Housing Element**

The Housing Element establishes citywide policies and programs. The City of Banning is located in the San Gorgonio Pass area and is well served by major transportation routes. The US Interstate-10 corridor includes a significant portion of the City's developed area with vacant lands and lower density development generally located towards the northern and southern portions of the City. The City of Banning corporate limits encompass about 23.2 square miles. The City is situated across a variety of geographic and geologic conditions, including the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. The adjacent mountain canyons form the alluvial plains on which portions of the City have developed. The mountains provide dramatic and valuable viewsheds. The City is located in a transitional zone where coastal climates transition to desert, resulting in significantly differing landscape and geology.

## Downtown Commercial Parcels – Existing and Surrounding Uses

The table below shows the existing and surrounding uses for parcels affected by the proposed zoning amendments within the D-C district.

APN	Existing Use	North	South	East	West
540-170-037	Vacant	Single Family Dwelling (DC)	Parking Lot (DC)	Vacant (DC)	Mobile Home Park (MHP)
540-191-008	Vacant	Business (DC)	Business (DC)	Business (DC)	Business (DC)
541-141-005	Vacant	Residential (VLD)	Residential (VLD)	Vacant (VLD)	Residential (VLD)
541-141-006	Vacant	Business (DC)	Vacant (DC)	Residential (DC)	Business (DC)
541-145-012	Auto Sales	Government (DC) Courthouse Parking	Vacant (DC)	Government (DC)	Government (DC) PD parking
541-150-004	Vacant Structures	Vacant (DC)	Business (DC)	Vacant (DC)	Government (DC) Courthouse
541-150-007	Vacant	Vacant (DC)	Business/Church (DC)	Vacant Business (DC)	Vacant (DC) Multi
541-150-010	Vacant Structures	High Density Residential	Vacant (DC)	Vacant Business (DC)/Mobile Home Park (MHP)	Vacant Business (DC)
541-181-010	Parking Lot	Parking lot (DC)	Roadway/Freeway than Industrial	Parking lot (DC)	Parking lot (DC)
541-181-011	Parking Lot	Parking lot (DC)	Parking Lot (DC)	Parking lot (DC)	Parking lot (DC)
541-181-012	Parking Lot	Parking lot (DC)	Roadway/Freeway than Industrial	Parking lot (DC)	Parking lot (DC)
541-181-024	Parking Lot	Government (PF)	Parking Lot (DC)	Parking lot (DC)	Parking lot (DC)
541-181-025	Parking Lot	Business /Parking Lot (DC)	Roadway/Freeway than Industrial	Parking lot (DC)	Parking lot (DC)
541-181-026	Parking Lot	Parking lot (DC)	Roadway/Freeway than Industrial	Parking lot (DC)	Parking lot (DC)
541-181-027	Parking Lot / Vacant	Government (PF)	Parking Lot (DC)	Parking lot (DC)	Parking lot (DC)
541-181-028	Parking lot / Vacant	Government (PF)	Roadway/Freeway than Industrial	Vacant (DC)	Parking lot (DC)
541-183-001	Vacant	Government (PF)	Vacant (DC)	Vacant (DC)	Vacant (DC)
541-183-002	Vacant	Vacant (DC)	Roadway/Freeway than Industrial	Vacant (DC)	Vacant (DC)
541-183-003	Vacant	Vacant (DC)	Roadway/Freeway than Industrial	Vacant (DC)	Vacant (DC)
541-183-004	Vacant	Business (DC)	Roadway/Freeway than Industrial	Business (DC)	Vacant (DC)
541-184-002	Vacant	Government (DC) Courthouse	Vacant (DC)	Mixed Use ??? (DC)	Vacant (DC)
541-192-001	Vacant	Vacant Business (DC)	Vacant (DC)	Vacant (DC)	Business/Church (DC)
541-192-002	Vacant	Vacant (DC)	Vacant (DC)	Vacant (DC)	Vacant (DC)
541-192-003	Vacant	Vacant Business (DC)	Vacant (DC)	Apartments ???(DC)	Vacant (DC)
541-192-005	Vacant	Vacant (DC)	Vacant /Substation (DC)	Vacant (DC)	Vacant (DC)
541-192-007	Vacant	Business (DC)	Vacant (DC)	Apartments (DC)	Vacant (DC)
541-192-008	Vacant	Business (DC)	Vacant (DC)	Vacant Business (GC)	Vacant (DC)
541-192-009	Vacant	Vacant (DC)	Highway	Business (GC)	Apartment (DC)

## High Density Residential Parcels – Existing and Surrounding Uses

The table below shows the existing and surrounding uses for parcels affected by the proposed zoning amendments within the HDR district.

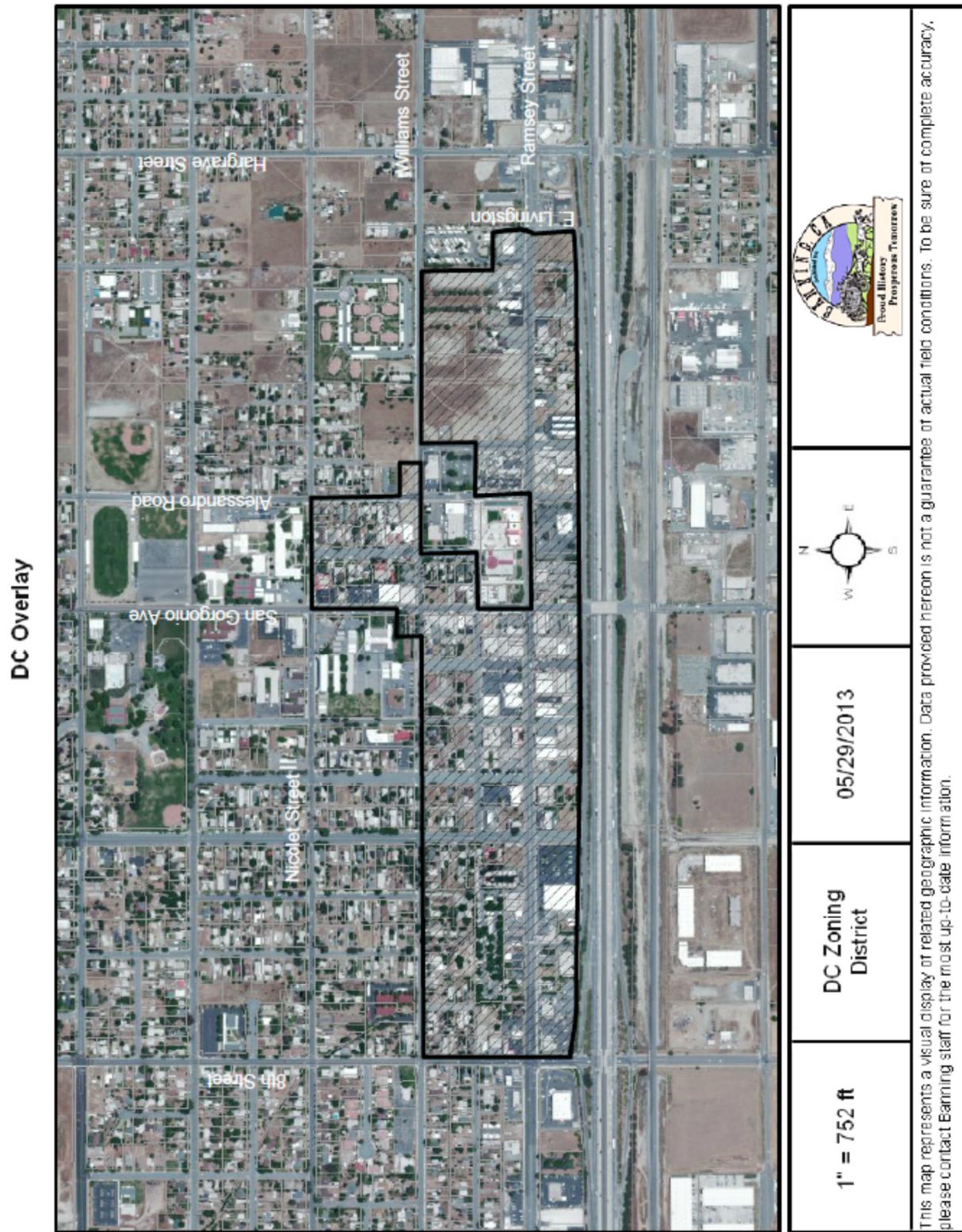
APN	Existing Use	North	South	East	West
534-161-008	Vacant	Multi-Family Residential (HDR)	Vacant (HDR)	Single Family (HDR)	Apartments (HDR)
537-120-034 (LDR/HDR)	Vacant	Vacant (MDR)	Vacant (LDR)	Vacant (LDR)	Vacant (PF/MDR)
540-083-002	Vacant / Church	Repllier Park (Open Space - Parks)	Church (HDR)	Business/Church (HDR)	Single Unit Dwellings/Senior Homes? (HDR)
541-110-011	Vacant	Multi-Famaily Unit/Vacant (HDR)	Mobile Home Park (MHP)	Multi-family Units (HDR)	Multi-Family Unit (HDR)
541-110-013	Vacant / Residential Unit (Multi-famiy)	Multi-Family Units / Single Family (HDR)	Multi-units (GC)	Single Family (HDR)	Multi-family Units (HDR)
532-080-004 (GC, MDR, HDR, Open Space Resources)	Vacant	Vacant (LDR, Open Space Resources)	Vacant (BP)	Vacant Land (Outside City Boundaries)	Vacant (GC, LDR, Outside City Boundaries)
419-140-059 (HDR Specific Plan)	Vacant	Vacant (GC)	Single Family Units (MDR Specific Plan)	Single Family Units (MDR)	Sun Lakes Retirment Community (HDR)
534-161-009	Vacant /Multi-famil parking	Single Family Dwelling (HDR)	Single Family Dwelling (LDR)	Vacant (HDR)	Apartments (HDR)
534-161-010	Vacant	Vacant (HDR)	Single Family Dwelling (LDR)	Single Family Dwellings (LDR)	Apartments (HDR)
540-083-001	Vacant	Vacant/ Church (HDR)	Vacant/ Church (HDR)	Vacant/ Church (HDR)	Apartment (HDR)
540-082-006	Vacant	Single Family Dwelling (HDR)	Vacant (HDR)	Multi-family Units (HDR)	Multi-family Dwelling ??? (HDR)
540-082-008	Single Family Dwelling / Vacant	Vacant (HDR)	Not sure maybe apartments (HDR)	Single Family/Multi-Fam Units (HDR)	Multi-family Dwelling ??? (HDR)
537-110-008 (Various)	Vacant	Vacant (GC)	Vacant (MDR, HDR, LDR, Open Space)	Single Family Dwelling (MDR)	Vacant (LDR, Open spact)
540-151-022	Vacant	Single Family Dwelling (HDR)	Vacant (HDR)	Multi-family Dwelling (HDR)	Single Family Dwelling (HDR)
540-082-007	Vacant	Single Family Dwelling (HDR)	Vacant (HDR)	Single Family Dwelling (HDR)	Single Family Dwelling (HDR)
540-151-021	Vacant	Vacant (HDR)	Single Family Dwelling (HDR)	Multi-family Dwelling (HDR)	Singl Family Dweling (HDR)
541-110-007	Vacant	Vacant (LDR)	Multi Family Units (HDR)	Multi-Family (HDR)	Multi-Family (HDR)
541-110-009	Vacant	Vacant (LDR)	Single Family Dwelling/Vacant (LDR)	Single Family Dwelling/Vacant (LDR)	Multi-Family (HDR)

### Very High Density Residential Parcels – Existing and Surrounding Uses

The table below shows the existing and surrounding uses for parcels proposed to be rezoned to the VHDR district.

APN	Existing Use	North	South	East	West
537-190-018	Vacant	Vacant (PF & VLDR)	Oustide Boundaries	Vacant (LDR)	Vacant (VLDR)
537-190-020	Vacant	Vacant (VLDR)	Oustide Boundaries	Vacant (VLDR)	Vacant (VLDR)
537-190-021	Vacant	Vacant (VLDR)	Vacant (VLDR)	Vacant (VLDR)	Vacant (Open Space Parks)

**Figure 1.** Location Map Showing Parcels within the Downtown Commercial Zone



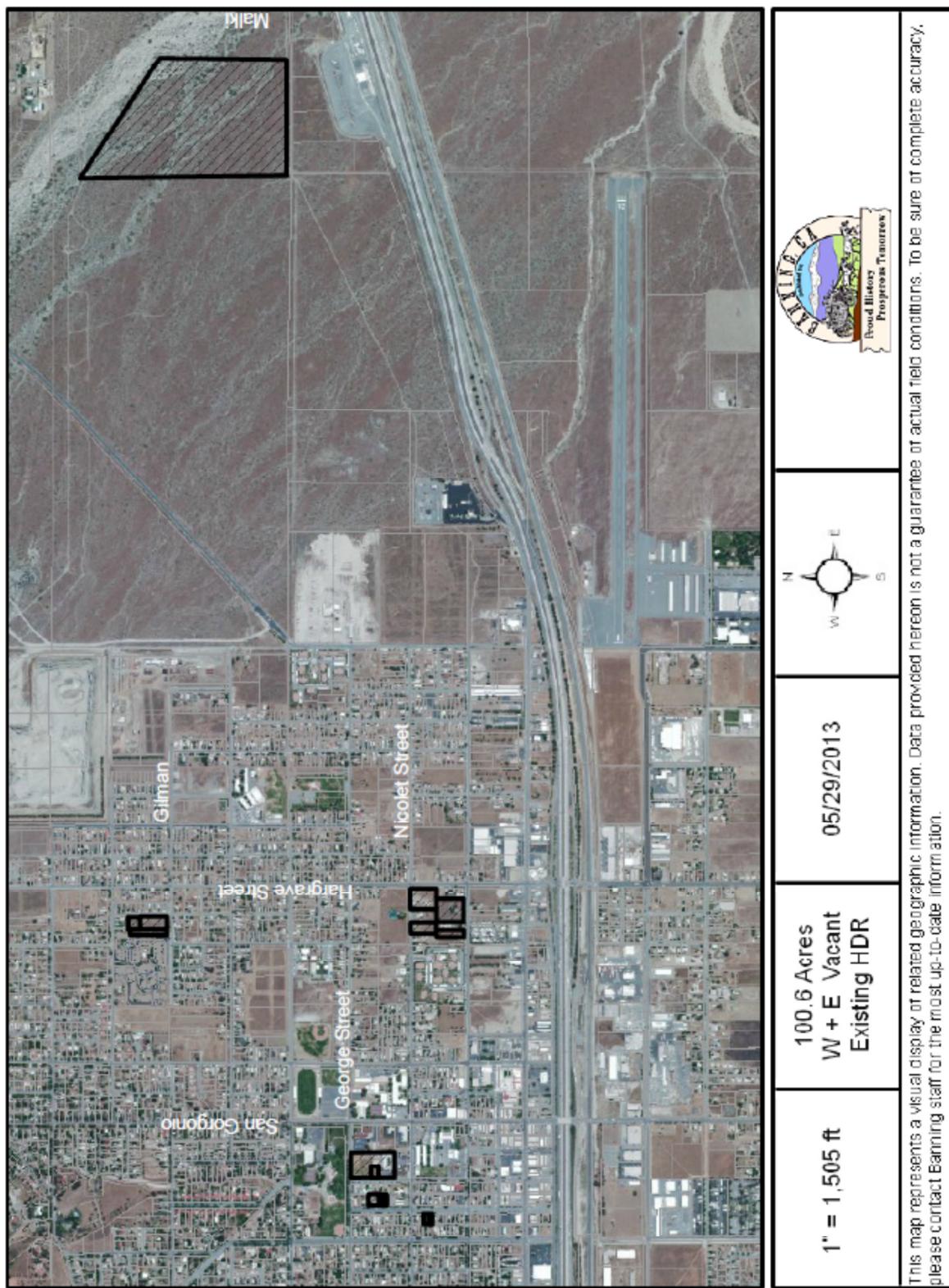
**Figure 2 West.** Location Map showing Parcels in the High Density Residential Zone proposed to be designated RHD-20

3 Parcels (West)

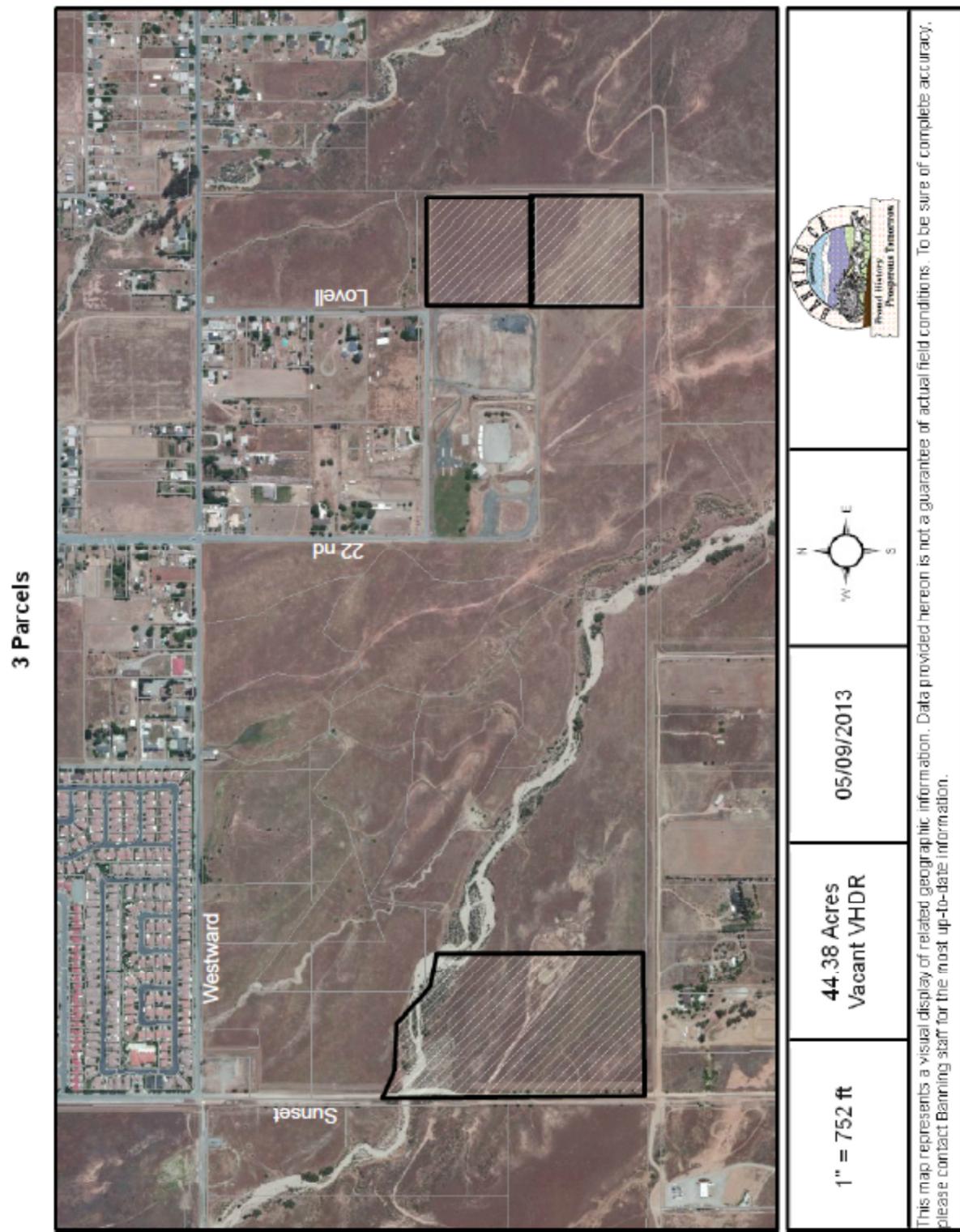


**Figure 2 East.** Location Map showing Parcels in the High Density Residential Zone proposed to be designated RHD-20

**15 Parcels (East)**



**Figure 3.** Location Map showing Candidate Parcels for re-zoning to Very High Density Residential in the Very Low Density Residential



**9. Public Agencies whose approval or Participation is Required (i.e., for permits, financing approval, or participation agreements):**

State law requires that the City submit the draft Housing Element to the California Department of Housing and Community Development (HCD) for review prior to adoption and that the City Council considered HCD's comments. The Draft Housing Element was submitted to the State on March 30, 2009, October 7, 2009, February 1, 2013, and March 19, 2013.

Review of specific development proposals by other governmental agencies may be required prior to development of new housing anticipated in the Housing Element. Appropriate public agency review will be determined at the time specific housing development applications are submitted to the City.

# ENVIRONMENTAL ANALYSIS

## 1. INTRODUCTION

### Purpose and Scope

This Initial Study/Mitigated Negative Declaration serves as the environmental review of the proposed Project, as required by the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., the State CEQA Guidelines, and the City of Banning Local Guidelines for Implementing CEQA.

In accordance with Section 15063 of the State CEQA Guidelines, the City of Banning is the lead agency and is required to prepare an Initial Study to determine if the Project may have a significant effect on the environment. This Initial Study is intended to be an informational document providing the Planning Commission, City Council, other public agencies, and the general public with an objective assessment of the potential environmental impacts that could result from the adoption of the Housing Element and related implementation actions. Since there is no specific housing project proposed on any of the sites affected by the proposed General Plan and zoning amendments, the environmental analysis is evaluates impacts that would be anticipated as a result of the implementation of the Housing Element to the extent they can be known at this time.

### PREVIOUS ENVIRONMENTAL DOCUMENTATION

A Final Environmental Impact Report (FEIR) for the Banning General Plan was prepared by the City of Banning in accordance with the California Environmental Quality Act (CEQA). The FEIR analyzed the environmental consequences of the development of the city according to the General Plan. The General Plan and FEIR were adopted by the Banning City Council on January 31, 2006 (Resolution No. 2006-13).

Prior to approval of subsequent actions, the City is required to determine whether the environmental effects of such actions are within the scope of the project covered by the FEIR, and whether additional environmental analysis is required. If the agency finds that pursuant to Sections 15162, 15164, and 15183 of the CEQA Guidelines no new effects would occur, nor would a substantial increase in the severity of previously identified significant effects occur, then no supplemental or subsequent EIR is required.

### PURPOSE OF THIS INITIAL STUDY

Pursuant to state law, the City is required to adopt General Plan policies and zoning regulations to accommodate the City's fair share of regional housing need. The adoption of amendments to the General Plan and Municipal Code is a "project" under CEQA. This Initial Study provides an analysis of whether the proposed General Plan and Zoning Code amendments would result in any new or more substantial adverse environmental effects than were previously analyzed in the General Plan FEIR pursuant to CEQA Guidelines Sections 15162. The City, as Lead Agency,

has the authority for project approval and certification of the accompanying environmental documentation.

## BASIS FOR A SUBSEQUENT NEGATIVE DECLARATION

Section 15162 of the State CEQA Guidelines states:

*(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:*

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
  - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
  - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
  - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but project proponents decline to adopt the mitigation measure or alternative.*

The Final EIR certified in 2006 for the Banning General Plan evaluated the potential impacts of development of the City according to the land use designations set forth in the Land Use Element of the General Plan. The General Plan EIR evaluated the impacts associated with development of 32,198 additional housing units during the time horizon of the General Plan within the 23,555-acre study area, of which 14,824± acres are within the City limits. The proposed amendments to the General Plan Land Use Element and zoning regulations would allow approximately 810 more housing units than allowed under the 2006 General Plan and current zoning, which represents a potential increase of about 2.5%. The level of development reflected in the proposed amendments is consistent with the current regional growth forecast, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the Regional Housing Needs Assessment (RHNA), and the City is required by state law to adopt land use plans and zoning regulations consistent with these regional plans and growth forecast.

Through the analysis presented in this document, the City of Banning has determined that potential impacts associated with the proposed General Plan and Zoning Code amendments are not substantial. There are no new significant impacts resulting from these changes, nor is there any substantial increase in the severity of any previously identified environmental impacts. In addition, the changes with respect to the circumstances under which the project will be undertaken would not result in new or more severe significant environmental impacts than previously analyzed.

## SUMMARY OF FINDINGS

Based on the Environmental Checklist prepared for the project and supporting environmental analysis and pursuant to Section 15162 of the CEQA Guidelines, the City of Banning has determined, on the basis of substantial evidence in the light of the whole record, that:

- (a) The proposed General Plan and Municipal Code amendments do not propose substantial changes to the project which would require major revisions to the FEIR due to new or substantially more severe significant environmental effects than previously analyzed in the FEIR;
- (b) There have been no substantial changes in circumstances under which the project will be undertaken that will require major revisions to the FEIR due to new or substantially more severe significant environmental effects than previously analyzed in the FEIR; and
- (c) No new information of substantial importance as described in subsection (a)(3) of Section 15162 has been revealed that would require major revisions to the FEIR or its conclusions.

Potential environmental impacts resulting from the adoption of the proposed General Plan and Zoning Code amendments have been evaluated and, except for those previously determined to be significant and unavoidable in the FEIR, the impacts would be less than significant or reduced to a level considered less than significant with mitigation.

## 2. EVALUATION OF ENVIRONMENTAL IMPACTS

An Environmental Checklist Form has been used to evaluate the potential environmental impacts associated with the proposed Project. The Form has been prepared by the Resources Agency of California to assist local governmental agencies, such as the City of Banning, in complying with the requirements of the Statutes and Guidelines for implementing CEQA.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant Impact”. Based on the analysis contained in this Initial Study, the following environmental factors are affected by the proposed project.

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

In the Form, a series of questions is asked about the Project for each of the above-listed environmental factors. A brief explanation is then provided for each question on the Form. There are four possible responses to each question:

### **A. Potentially Significant Impact.**

This response is used when the Project has the potential to have an effect on the environment that is considered to be significant and adverse.

### **B. Potentially Significant Unless Mitigation Incorporated.**

This response is used when the Project has the potential to have a significant impact, which is not expected to occur because:

- Mitigation measures have been incorporated into the Project design in order to reduce the impact to a less than significant level; or,
- Adherence to existing policies, regulations, and/or design standards would reduce the impact of the Project to a less than significant level.

### **C. Less Than Significant Impact.**

This response is used when the potential environmental impact of the Project is determined to be below known or measurable thresholds of significance and thus would not require mitigation.

### **D. No Impact.**

This response is used when the proposed Project does not have any measurable impact.

### **3. ENVIRONMENTAL DETERMINATION**

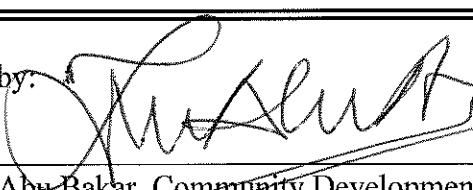
On the basis of this initial evaluation, the City finds that:

- The proposed Project could not have a significant effect on the environment, and a Negative Declaration will be prepared.
- Although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures, described in Exhibit C (attached), have been added to the Project. A Mitigated Negative Declaration will be prepared.
- The proposed Project may have a significant effect on the environment, and an Environmental Impact Report is required.
- The proposed Project may have a potentially significant impact unless mitigation is incorporated, but at least one of the impacts has been: 1) adequately analyzed in an earlier document pursuant to applicable legal standards and 2) addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An Environmental Impact Report is required, but it is to analyze only those impacts that have not already been addressed.
- 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 Environmental Impact Report (EIR) or in a Negative Declaration pursuant to applicable legal 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.

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Approved for distribution by:

Signature:



Zai Abu Bakar, Community Development Director

**Prepared by:** Zai Abu Bakar, Community Development Director

**Date:** May 29, 2013

**Public Review:** June 3 to July 3, 2013

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#### 4. ENVIRONMENTAL ANALYSIS CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS. Would the Project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### Explanation of Item I.a). Scenic Vista. Less Than Significant Impact

The City of Banning is located in the San Gorgonio Pass area of Riverside County. The San Gorgonio Pass divides the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. The dominant scenic vista associated with the Project sites are the backdrop of these mountains. The City's General Plan considers the mountain backdrops as significant visual features. The San Gorgonio Peak which is a top of the San Bernardino Mountains is 11,485 feet above mean sea level and is the highest peak in Southern California. The San Jacinto Peak which is the highest peak of the San Jacinto Mountains is located approximately six (6) miles south of the I-10 freeway. It rises to 10,831 feet above mean sea level and is the highest peak in Riverside County. The adjacent mountain canyons form the alluvial plains on which portions of the City has developed. The mountains provide dramatic and valuable viewsheds. The General Plan policy requires that, "The City protects the peaks and ridgelines within the City and encourages coordination with adjacent jurisdictions to protect the peaks and ridgelines within the City's area of influence, to protect the historic visual quality of the hillside areas and natural features of the Pass Area."<sup>1</sup> The proposed project will be developed in areas that are zoned for housing development. The height of the homes will be required to comply with the height limit of 60'. This height limit is a negligible height impact relative to height of these mountains and their peaks. No mitigation measure is required since the impact to the scenic vista is less than significant.

<sup>1</sup> Policy 3 for Open Space Land Uses, page III-24.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b><u>Explanation of Item I. b). Scenic Resources. Less Than Significant Impact</u></b>				
<p>The California Department of Transportation regulates scenic resources within State highway. In 1963, the California State Scenic Highway Program was established by State legislation (SB 1467). The purpose of the program is to help communities protect and enhance their natural and cultural uniqueness and beauty. According to Caltrans, a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers' enjoyment of the view. Caltrans defines a State Scenic Highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality, containing striking views, flora, geology, or other unique natural attributes.</p> <p>I-10 from SR-38 and SR 62 is an “eligible” State Scenic Highway. To be designated as ‘eligible’ for State Scenic Highway status, this Section of I-10 must meet the following criteria:</p> <ul style="list-style-type: none"> <li>a. Consist of scenic corridor that is comprised of a memorable landscape that showcases the natural scenic beauty or agriculture of California;</li> <li>b. Existing visual intrusions do not significantly impact the scenic corridor;</li> <li>c. Demonstration of strong local support for the proposed scenic highway designation; and</li> <li>d. The length of the proposed scenic highway is not less than a mile and is not segmented.</li> </ul> <p>The City must apply to Caltrans for the official designation, adopt the Corridor Protection Program, and receive notification from Caltrans that the highway has been officially designated State Scenic Highway. To receive Scenic Highway official designation, the scenic corridor of the highway must be identified and defined. Scenic corridor consists of land that is visible from the highway right-of-way and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. The City must adopt ordinances, zoning, and/or planning policies that are designed to protect the scenic quality of the corridor. These ordinances and/or policies make up the official “Corridor Protection Program.”</p> <p>The City of Banning has not adopted a Corridor Protection Plan for the portion of the I-10 that traverses the City. Though eligible for designation, this section of the I-10 is not officially designated State scenic highway.</p> <p>State Route 243 starts at Lincoln Street in Banning and traverses through the San Jacinto Mountains is designated State Scenic Highway. This portion of the highway is mostly visible from properties that are located immediately adjacent to State Route 243. The closest project site on Lovell and Victory streets are approximately one (1) mile away from State Route 243.</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b><u>Explanation for Items I. c).and d). Existing Visual Resources and light and glare.</u></b>				
<b>Potentially Significant Unless Mitigation Incorporated</b>				
The Housing Element identifies the need to provide sites to accommodate 2,089 lower-income housing units. The City's strategy is a three prong approach where the majority of the units will be provided using in-fill lots within the Downtown Commercial Zone and existing high density residential areas and rezoning approximately 44 acres of vacant properties from various zoning designations to very high density residential.				
The development of these housing units will occur at various sites throughout the City at locations shown in Figures 1 through 3 on pages 10-13 of this document. Development on vacant land regardless of their locations will impact its existing visual character of the site because the land will be developed with structures that require interior and exterior lighting, parking and circulation, infrastructure improvement such as road, water, sewer, storm drain, electricity, gas line, and cable television and landscaping for residents livability.				
The General Plan provides goals and policies for the development of housing to ensure that not only it provides for “a broad range of housing types to fill the needs of the City’s current and future residents” <sup>2</sup> but also ensure that, “projects adjacent to existing neighborhoods shall be carefully reviewed to ensure neighborhood character is protected” <sup>3</sup> and that residential development complies with design standards and guidelines of the Zoning Code to ensure “high quality resident development” <sup>4</sup> . In addition, the Land Use Element of the General Plan requires that the, “Zoning Ordinance include principles, standards, and guidelines which provide for high quality, high density mixed used residential development, in the Downtown Commercial zoning district”. The Banning Zoning Code Section 17.08.220 through 17.08.280 provides extensive design guidelines for single-family and multi-family residential development. The design guidelines include site planning and grading, varied building design and architecture, wall articulation, colors and finish materials, project entry design treatment, parking lot lay-out and design, garage, garage doors, and carport design, equipment screening, requirements for open space, landscaping, lighting intensity and fixture design, and security. The Banning Municipal Code Chapters 18.01 through 18.15 provides regulations regarding grading, erosion control, and sediment control. Compliance with the General Policies and Design Guidelines in the Zoning Ordinance ensures that the project is sensitive to the surrounding environment and ensures their visual compatibility with existing neighborhoods. Additionally, future developments on the parcels that are subject to the proposed zoning amendment will be required to comply with the following mitigation measures to reduce the project impacts to less than significant.				
<b>Mitigation Measure AES-1:</b> Development or revegetation shall be initiated within three months following initiation of mass grading or clearing activities, so as to limit the time graded surfaces				

<sup>2</sup> Goal 2 of the Land Use Element, page III-16

<sup>3</sup> Policy 2, Land Use Element, page III-16

<sup>4</sup> Policy 4, Land Use Element, page III-16

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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remain in their exposed state consistent with landscape design guidelines and landscape plans and the provisions of Title 18.15.020 of the City's Municipal Code regarding erosion and sediment control. A landscape plan shall be submitted for City's review and approval as part of each grading permit application.

**Mitigation Measure AES-2:** The faces of all slopes shall be prepared, protected and maintained to control erosion and to reduce the visual impacts of slope grading. Slopes in excess of ten feet in height shall be graded pursuant to City Code requirements. Devices or procedures for erosion protections shall be installed as prescribed by State law and regulations and Title 18 of the City's Municipal Code and shall be maintained in operable condition by the developer during the duration of the activity for which the grading permit was issued. The use of plastic sheeting for erosion control shall be avoided except where required in emergency conditions to prevent land slippage. Preferred means of erosion and sediment control on slopes and pads shall include hydromulching, placement of straw bales and wind fencing, and the use of straw blankets and similar devises.

**Mitigation Measure AES -3:** The Project developer shall maintain the site free of debris, which shall be promptly removed from the site when found at least daily during construction, and the Project developer shall monitor the site on a daily basis during construction to protect the site from illegal dumping.

II. AGRICULTURAL RESOURCES. Would the Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for , or cause rezoning of, forestland (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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
by Government Code section 51104(g))?				
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation for II. a) and e). Farmland and Conversion of Farmland. No Impact.**

The California Department of Conservation maintains information related to mapping and monitoring of farmland and farmland subject to Williamson Act contract. Based on the California Department of Conservation website at [www.consrv.ca.gov/dlrp/FMMP](http://www.consrv.ca.gov/dlrp/FMMP) and Riverside County Land Management System, there is no farmland that are of Statewide and regional importance on any of the candidate project sites. Therefore, the Project has no impact on Williamson Act Contract/Agriculture Preserve and it will not convert farmland to non-agricultural use. No mitigation measure is proposed.

**Explanation for II. b). Williamson Act Contract. No Impact.**

Collectively, the parcels proposed for re-zoning for the project currently have four zoning designations including Very Low Density Residential (VLDR), Medium Density Residential (MDR), Downtown Commercial (DC), and High Density Residential (HDR). The specific zoning designation for each parcel is shown in the Project Description section of this report. Agricultural use is not a permitted use in VLDR, MDR, DC, and HDR.

With regard to Williamson Act/Agricultural Preserve contract's existence on the parcels, research was done on the Riverside County Transportation and Land Use Department's website at: <http://www3.tlma.co.riverside.ca.us/pa/rclis/viewer>. The County's website reveals no Williamson Act/Agricultural Preservation contracts in the City of Banning. Therefore, the project has no conflict with zoning for agriculture use and it also has no impact on Williamson Act/Agriculture Preserves contract. No mitigation measure is required.

**Explanation for II. c) and d) Forestland. No Impact.**

As indicated in the Explanation for Item II. b) above, the parcels proposed for re-zoning for the project currently have four zoning designations including Very Low Density Residential (VLDR), Medium Density Residential (MDR), Downtown Commercial (DC), and High Density Residential (HDR) and are not zoned for forestland (as defined in PRC section 12220(g), timberland (as defined by PRC section 4526, or timberland zoned for timberland production (as defined by Government Code Section 51104(g). The specific zoning designation for each parcel

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
is shown in the Project Description section of this report. Therefore, the Project has no impact on forestland, timberland, or timberland zoned for timberland production and it will not convert any forestland to non-forest use. No mitigation measure is required.				
<b>III. AIR QUALITY. Would the Project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions with exceeded quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation for III. a) through e) Air Quality. Less Than Significant.**

The proposed project will generate short-term and long-term air quality impacts. Short-term air quality impacts occur during site preparation, grading, and subsequent construction of housing development. Sources of emissions includes emissions from grading and construction equipment, truck traffic for delivery and hauling of construction materials, and emissions from vehicles used by construction workers to and from the construction site. Long-term air quality impacts are those associated with project generated vehicle trips, as well as, from stationary sources related to the use of natural gas and electricity for heating, cooling, and lighting.

The City of Banning is located within the South Coast Air Basin where air quality is regulated by the South Coast Air Basin. The South Coast Air Basin regulates short-term and long term air quality impact from stationary and non-stationary pollution sources. The South Coast Air Quality

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<p>Management District (SCAQMD) adopted the latest Air Quality Management Plan in December 2012<sup>5</sup>. The Air Quality Management Plan includes development information from the cities general plan within the South Coast air district boundaries including the City of Banning. The City's General Plan requires that the "City cooperate with the South Coast Air Quality Management District to assure compliance with air quality standards"<sup>6</sup> and that the "development proposals mitigate any significant air quality impacts"<sup>7</sup> which include short- term construction related impacts and long terms air quality impacts associated with occupancy and project operations. The SCAQMD regulates fugitive dust emissions during construction through Rule 403.</p> <p>In addition, the proposed amendments are required by state law in order to conform the City's land use regulations to the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2012 Regional Housing Needs Assessment (RHNA) prepared by the Southern California Association of Governments (SCAG). The Final EIRs prepared by SCAG for the RTP/SCS<sup>8</sup> and by the SCAQMD for the AQMP<sup>9</sup> analyzed air pollutant emissions that would result from all development throughout the region, and concluded that significant impacts would occur for some types of pollutants. Since the proposed amendments are consistent with these regional plans, impacts to air quality have already been analyzed in the RTP/SCS and AQMP EIRs.</p> <p>The State continues to improve construction codes for the Building, Plumbing, and Energy Code. The Project is required to comply with the State Building Code to reduce air emissions related to heating, cooling, and lighting.</p> <p>The General Plan policies require that air quality impacts be mitigated including compliance with the City's Zoning Ordinance. In addition to compliance with the General Plan policies and Zoning Code, the Project is required to comply with the following mitigation measures:</p> <p><b>Mitigation Measure AQ-1:</b> Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the grading plan, building plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, in accordance with SCAQMD Rule 403, the applicant shall implement dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures are required:</p> <ul style="list-style-type: none"> <li>• All active portions of the construction site shall be watered at least twice daily to prevent</li> </ul>				

<sup>5</sup> <http://www.aqmd.gov/aqmp/2012aqmp/index.htm>

<sup>6</sup> Policy 1, Air Quality Element, page IV-78

<sup>7</sup> Policy 4, Air Quality Element, page IV-78.

<sup>8</sup> <http://rtpscs.scag.ca.gov/Pages/Draft-2012-PEIR.aspx>

<sup>9</sup> [http://www.aqmd.gov/ceqa/documents/2012/aqmd/finalEA/2012AQMP/2012aqmp\\_fpeir.html](http://www.aqmd.gov/ceqa/documents/2012/aqmd/finalEA/2012AQMP/2012aqmp_fpeir.html)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>excessive amounts of dust;</p> <ul style="list-style-type: none"> <li>• On-site vehicle speed shall be limited to 15 miles per hour;</li> <li>• All on-site permanent roads shall be paved, watered as needed, or chemically stabilized;</li> <li>• Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible through the use of dust suppressant techniques identified above;</li> <li>• All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;</li> <li>• Track-out devices shall be used at all construction site access points;</li> <li>• All delivery truck tires shall be watered down and/or scraped down prior to departing the job site; and</li> <li>• Replace groundcover on disturbed areas within the required timeframes identified in Rule 403.</li> </ul>				

**Mitigation Measure AQ-2:** All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F)(e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the Applicant shall contact and coordinate with the Public Works Department on hauling activities compliance.

**Mitigation Measure AQ-3:** Prior to the issuance of building permits, the City building official shall confirm that construction plans and specifications include the following measures, which shall be implemented to reduce ROG emissions resulting from application of architectural coatings:

- Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent;
- Coatings and solvents with a ROG content lower than required under Rule 1113 shall be used;
- Construction and building materials that do not require painting shall be used where readily available; and
- Pre-painted construction materials shall be used where readily available.

**Mitigation Measure AQ-4:** Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan, Building Plans and specifications stipulate that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of Public Works Director. A set of maintenance records shall be provided to the City before grading commences. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><b>Mitigation Measure AQ-5:</b> Prior to issuance of any Grading Permit, the grading plan shall indicate dust management measures for review and approval by the City Engineer, to identify viable dust control measures and include a monitoring plan to be implemented throughout the construction phases of the Project. In accordance with the City's Municipal Code, the dust management measures shall minimize wind-blown particles by including:</p> <ul style="list-style-type: none"> <li>• All applicable mitigation measures identified in this Initial Study/Mitigated Negative Declaration (related to dust control) and otherwise required by the City or SCAQMD;</li> <li>• An erosion and sediment control plan to minimize wind or waterborne transport of soil onto adjacent properties, streets, storm drains, or drainages; and</li> <li>• A Revegetation Plan to address interim conditions between initial grading and final site development. The Revegetation Plan, although focused on the control of wind and water erosion, shall consider compatibility with fuel modification zone requirements, and drought tolerant landscape requirements. Special techniques such as wind fences shall also be considered, to minimize surface soil and dust during high wind events.</li> </ul> <p><b>Mitigation Measure AQ-6:</b> The following measures shall be implemented during construction to substantially reduce NO<sub>x</sub> related emissions. They shall be included in the Grading Plan, Building Plans, and specifications.</p> <ul style="list-style-type: none"> <li>• Off-road diesel equipment operators shall be required to shut down their engines rather than idle for more than five (5) minutes, and shall ensure that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation and SCAQMD Rule 2449.</li> <li>• The contractor and applicant, if the applicant's equipment is used, shall maintain construction equipment engines by keeping them tuned and regularly serviced to minimize exhaust emissions.</li> <li>• Low sulfur fuel for stationary construction equipment shall be required. This is required by SCAQMD Rules 431.1 and 431.2.</li> <li>• Existing power sources (i.e., power poles) shall be used when available.</li> <li>• Construction parking shall be located on-site where possible and shall be configured to minimize traffic interference.</li> <li>• Obstruction of through-traffic lanes shall be minimized by providing temporary traffic controls such as flag persons, cones and/or signage during all phases of construction when needed to maintain smooth traffic flow. Construction shall be planned so that lane closures on existing streets are kept to a minimum.</li> <li>• Construction operations affecting traffic shall be scheduled for off-peak hours, except in situations deemed necessary.</li> <li>• Develop a traffic plan to minimize traffic flow interference from construction activities. The plan shall specify the times during which construction activities will occur and particular times when travel lanes cannot be blocked (e.g., peak traffic periods as directed by the affected City Engineer). The plans shall provide details regarding the placement of</li> </ul>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>traffic control, warning devices and detours. As a supplement to the traffic plan, the construction contractor shall coordinate with the affected agency to determine the need for a public information program which would inform area residents, employers and business owners of the details concerning construction schedules and expected travel delays, detours, and blocking of turning movements lanes at intersections. The public information programs could utilize various media venues (e.g., newspaper, radio, television, telephone hot lines, internet website, etc.) to disseminate information such as:</p> <ul style="list-style-type: none"> <li>o Overview of project information</li> <li>o Weekly updates on location of construction zones;</li> <li>o Identification of street(s) affected by construction;</li> <li>o Times when construction activities will occur and when traffic delays, and blockage of intersection turning movements can be expected; and</li> <li>o Identification of alternate routes which could be used to avoid construction.</li> </ul>				
<p>Compliance with the State construction code requirements and the mitigation measures indicated above will help to reduce the project's air quality impacts, however as previously analyzed in the RTP/SCS EIR, regional impacts to air quality will continue to be significant. Since the proposed project is consistent with regional plans, air quality impacts would not be substantially greater than previously analyzed.</p>				
<b>IV. BIOLOGICAL RESOURCES.</b> <b>Would the Project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservancy Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation Item IV. a) through c) Habitat and Wildlife Resources. Potentially Significant Unless Mitigation Incorporated.**

The City of Banning is a signatory to the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP). Within the MSHCP, there are requirements for which the City must comply with if the biological resources are affected. There are three features that are present in the City of Banning General Plan Study area which include: criteria areas, special linkage areas, and special survey area. The General Plan EIR on pages III-126 and III-127 and General Plan on page IV-48 define these areas in detail. The sites for the Project are located on vacant land that are either surrounded by existing development or located adjacent to an existing development and are not located in the criteria cell, special linkage areas, and special survey area. Prior to commencement of site clearance and grading, the Project is required to comply with the following mitigation measures:

**Mitigation Measure BIO-1:** Prior to the commencement of grading during the nesting season (approximately mid-February through mid-August), all suitable habitat shall be surveyed for the presence of nesting birds by a qualified biologist prior to site disturbance. Should any active nests be located, construction must comply with Migratory Bird Treaty Act requirements, including a 300-foot construction buffer around active nests or avoiding construction during the

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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nesting season if a 300-foot buffer is infeasible.

**Mitigation Measure BIO-2:** A preconstruction clearance survey for burrowing owl will be performed within 30 days prior to ground disturbance in potentially suitable habitat within the site, pursuant to the California Department of Fish and Game protocols. The preconstruction survey will include a 300-foot buffer if between February 1st and August 31st (nesting season) and a 100-foot buffer if outside of this period. If owls are found within the survey area during the nesting season, construction activities will not occur within 300 feet of the occupied burrows until nesting is completed. A qualified biologist must confirm that the nesting effort has been completed prior to the removal of the work buffer restriction. If owls are found within the disturbance footprint outside of the February 1st through August 31st period, passive relocation (e.g. use of one way doors and collapse of burrows) will occur. These surveys and mitigation for burrowing owl are consistent with Section 6.3.2, Additional Survey Needs and Procedures of the MSHCP.

**Mitigation Measure BIO-3:** Prior to the issuance of the grading permits the developer shall complete and submit all required protocol and habitat assessment studies required to demonstrate compliance with the MSHCP. Specifically, a DBESP (Determination of Biologically Equivalent or Superior Preservation), following approval of all required permits for the California Department of Fish and Game (CDFG) and United States Army Corps of Engineer (USACE), shall be prepared, which shall be reviewed by the CDFG and United States Fish and Wildlife Services (USFWS) and approved by City staff, in compliance with Section 6.1.2 of the MSHCP. The applicant shall implement the approved DBESP as a condition of the issuance of a grading permit and comply with all biological mitigation measures contained within the DBESP.

Development on vacant land also is required to pay a mitigation fee for the conservation of wildlife and their habitat in accordance with the MSHCP regulations. Payment of the MSHCP fees and compliance with the above mitigation measures would reduce the project impact to less than significance.

**Explanation Item IV. d) through f) . Fish or Wildlife Species, Biological Resources, Trees, and Conservation Plan. No Impact**

The project will not impact fish or wildlife species, habitat, corridors or wildlife nursery sites or conflict City policies or ordinances protecting biological resources including tree preservation or habitat conservation. The project analyzed in this environmental review is at a conceptual level since there is no specific development application.

V. CULTURAL RESOURCES. Would the Project:				
a) Cause a substantial adverse change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation of V. a). Historical Resources. No Impact.**

The City's General Plan and General Plan EIR provides a listing of structures that are designated heritage properties and recorded historic era buildings. The majority of sites that are subject to the proposed amendments are vacant land, therefore no historical resources are likely to be impacted on these vacant sites. However, it is possible that sites with existing structures could contain historical resources that could be damaged or destroyed by development. The following mitigation measure would reduce this potential impact below the level of significance.

**Mitigation Measure CUL-1:** Prior to issuance of any demolition, grading or building permit for any site containing an existing structure, the applicant shall provide evidence acceptable to the Community Development Director demonstrating either 1) that no historical resources are present on the site, or 2) that a qualified historical resource investigator has been retained to survey the property and prepare a report describing the site's historical significance. If historical resources are determined to be present, the investigator shall prepare recommendations for preserving the resources consistent with all applicable federal, state and local laws, which shall be carried out by the project applicant.

**Explanation of V. b) and c). Archeological and Paleontological Resources. Potentially Significant Unless Mitigation Incorporated.**

The General Plan indicated that less than one-third of the total acreage within the General Plan study area has been surveyed for archeological resources. The majority of the areas previously surveyed are located in the southern portion of the City on the Valley Floor, and these surveys encountered relatively few archeological sites or other cultural resources. Per the General Plan, Downtown area is considered a moderate sensitivity area for cultural resources. Twenty eight (28) parcels within the Downtown area are candidate parcels for the Project; therefore, the project may have the potential to impact archeological resources. In order to minimize impact to unknown archeological resources, the following mitigation measure is applied to the project:

**Mitigation Measure CUL-2:** Monitoring by a qualified archeologist shall be required during all earthmoving activities, grading, grubbing, trenching or other earth-moving activities on the project site. A City-approved project archeologist must create a mitigation-monitoring plan prior to earth-moving in the project area, a pre-grade meeting associated with the details of that plan must occur between the monitoring archeologist, the City representative, and the grading contractor before issuance of a grading permit. The Plan must discuss contingency plans associated with Native American tribal representation if any pre-historic artifacts are found during earth-moving. The mitigation-monitoring plan document must contain a description of how and where artifacts will be curated if found during monitoring.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Explanation of V. d). Human Remains. Potentially Significant Unless Mitigation Incorporated.**

Health and Safety Code Section 7050.5 requires that the Project follow the proper protocol when human remains are found on a construction project site. The following mitigation measure is incorporated into the Project to ensure that the project impact is mitigated to less than significant:

**Mitigation Measure CUL-3:** If previously unknown cultural resources, including human remains, are identified during grading activities, a qualified archaeologist shall be retained to assess the nature and significance of the find. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the discovery site. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

With incorporation of the above mitigation measure, the Project impact regarding human remains is reduced to less than significant.

VI. GEOLOGY AND SOILS. Would the Project:				
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems if sewers are not available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item VI a) i) through iii) and c) Exposure to Risk to Earthquake.**

**Potentially Significant Unless Mitigation Incorporated**

The City's General Plan Table V-1<sup>10</sup> shows the various faults names, proximity to Banning, and seismic intensities. Exhibit V-3<sup>11</sup> shows approximate locations of these fault zones including San Andreas fault. The entire area of the City is therefore susceptible to seismically induced ground shaking. To minimize potential earthquake and ground rupture hazards to structures and people, the following mitigation measures are required for the project:

**Mitigation Measure GEO-1:** All structures on the Project site shall be constructed pursuant to the most current applicable seismic standards as part of the subdivision map, grading plan, and building permit review processes, with building setbacks as recommended by the soils and geotechnical report. Design criteria developed for Project structures shall also be based on the most current standards of practice and design parameters suggested by the Structural Engineers Association of California based on the recommendations and amendments to the California Building Code for specific types of buildings and occupancies.

**Mitigation Measure GEO-2:** A detailed analysis of site geotechnical conditions, field

<sup>10</sup> Page V-12 of the Banning General Plan, Environmental Hazards

<sup>11</sup> Page V-13 of the Banning General Plan, Environmental Hazards

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>investigation and slope stability analyses shall be conducted as 40-scale grading plans for mass and fine grading are prepared for the Project site. These studies shall be submitted to the City Building Department or Building Official, and their recommendations incorporated into Project design to the satisfaction of the City Engineer, prior to the issuance of any grading permits, including those for mass grading, in areas where slopes of 10 feet or more in height are anticipated and/or where evidence of debris flows or past landslides is found.</p> <p><b>Mitigation Measure GEO-3:</b> The Project site shall be constructed pursuant to the following mitigation measure contained in the City of Banning General Plan EIR, Geotechnical Element:</p> <ul style="list-style-type: none"> <li>• During the site grading, all existing vegetation and debris shall be removed from areas that are to receive compacted fill. Any trees to be removed shall have a minimum of 95 percent of the root systems extracted. Man-made objects shall be over excavated and exported from the site. Removal of unsuitable materials may require excavation to depths ranging from 2 to 4 feet or more below the existing site grade.</li> <li>• All fill soil, whether on site or imported, shall be approved by the individual Project soils engineer prior to placement as compaction fill. All fill soil shall be free from vegetation, organic material, cobbles and boulders greater than 6 inches in diameter, and other debris. Approved soil shall be placed in horizontal lifts or appropriate thickness as prescribed by the soils engineer and watered or aerated as necessary to obtain near-optimum moisture-content.</li> <li>• Fill materials shall be completely and uniformly compacted to not less than 90 percent of the laboratory maximum density, as determined by American Society for Testing and Materials (ASTM) Test Method D-1557-78, or equivalent test method acceptable to the City Building Department. The project soils engineer shall observe the placement of fill and take sufficient tests to verify the moisture content, uniformity, and degree of compaction obtained.</li> <li>• Finish cut slopes generally shall not be inclined steeper than 2:1 (horizontal to vertical). Attempts to excavate near-vertical temporary cuts for retaining walls or utility installation in excess of 5 feet may result in gross failure of the cut and may possibly damage equipment and injure workers. All cut slopes must be inspected during grading to provide additional recommendations for safe construction.</li> <li>• Finish fill slopes shall not be inclined steeper than 2:1 (horizontal to vertical). Fill slope surfaces shall be compacted to 90 percent of the laboratory maximum density by either overfilling and cutting back to expose a compacted core or by approved mechanical methods.</li> <li>• Foundation systems that utilize continuous and spread footings are recommended for the support of one- and two-story structures. Foundations for higher structures must be evaluated based on structure design and on-site soil conditions.</li> <li>• Retaining walls shall be constructed to adopted building code standards and inspected by the Building Inspector.</li> </ul>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> <li>Positive site drainage shall be established during finish grading. Finish lot grading shall include a minimum positive gradient of 2 percent away from structures for a minimum distance of 3 feet and a minimum gradient of 1 percent to the street or other approved drainage course.</li> <li>Utility trench excavations in slope areas or within the zone of influence of structures should be properly backfilled in accordance with the following: <ul style="list-style-type: none"> <li>Pipes shall be bedded with a minimum of 6 inches of pea gravel or approved granular soil. Similar material shall be used to provide a cover of at least 1 foot over the pipe. This backfill shall then be uniformly compacted by mechanical means or jetted to a firm and unyielding condition.</li> <li>Remaining backfill may be fine-grained soils. It shall be placed in lifts not exceeding 6 inches in thickness or as determined appropriate, watered, or aerated to near optimum moisture content, and mechanically completed to a minimum of 90 percent of the laboratory maximum density.</li> <li>Pipes in trenches within 5 feet of the top of slopes or on the face of slopes shall be bedded and backfilled with pea gravel or approved granular soils as described above. The remainder of the trench backfill shall comprise typical on-site fill soil mechanically completed as described in the previous paragraph.</li> </ul> </li> </ul>				

**Explanation on Item VI. a. iv) Landslides. Less Than Significant Impact**

The Project sites are relatively flat and are not in the vicinity of slopes that are susceptible to landslide. No mitigation measure is required.

**Explanation on Item VI. b) Soil Erosion. Less Than Significant Impact**

Development of the sites would create the potential for soil erosion by removing existing vegetation or existing structures. In the short-term, construction activity associated with project development may result in wind and water driven soil erosion and loss of topsoil due to grading activities is stockpiled or exposed. The Project is required to adhere to conditions under the National Pollution Discharge Elimination System permit issued by the Regional Water Quality Control Board and prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to be administered through out project construction. The SWPPP will incorporate best management practices to ensure that the potential water quality impacts during construction from soil erosion would be reduced to less than significant levels. In the long-term, previously undisturbed soil will be replaced with structures, pavement, and new landscaping as part of the project. These improvements will not contribute to the conditions that result in on-site soil erosion or off-site. Therefore, impacts would be less than significant. No mitigation measures are required.

**Explanation on Item VI. d) Expansive Soil. Less Than Significant Impact**

The Project sites are located in low-lying areas of the City that are proposed for development. The General Plan indicates that low-lying areas of the City are underlain by alluvial fan sediments that are composed primarily from granular soils and thus the expansion potential for

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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soils ranges from low to very low<sup>12</sup>. The project is required to submit a soils and geotechnical report and recommendations in the soils report are to be incorporated into the project which reduced the project impact to less than significant. No mitigation measure is required.

**Explanation on Item VI. e) Septic Tank. No Impact**

The Project is required to use the City's sewer system and not use a septic system. No mitigation measure is required.

VII. GREENHOUSE GAS EMISSIONS. Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Item VII. a) and b). Greenhouse Gas Emission. Less than Significant Impact**

The proposed Housing Element and results of its implementation will generate greenhouse gas emissions during short-term construction and long-term operation of the project. The short-term emissions are primarily the result of fuel combustion by construction equipment, delivery and haul trucks, and motor vehicles used by construction worker to travel to and from the project site. Based on the emission calculations for the different types of pollutants in Appendix A, the short-term construction would exceed 2.5 times daily threshold for NOx set by the South Coast Air Quality Management District if all of the properties affected by the proposed amendments were to be developed at the same time. Construction of the specific projects expected to occur after adoption of the Housing Element and the related amendments will proceed is based on market demand over many years. Therefore, the greenhouse gas emissions resulting from the project at any particular time will be much less than the maximum worst-case estimate shown in Appendix A.

Over the long-term, the project will result in greenhouse gas emissions primarily from the consumption of electricity and use of automobiles and vehicles by the residents who live in the project site. Under state law, the City is required to adopt plans and land use regulations to accommodate at least 2,089 lower-income housing units pursuant to the RHNA for the 2008-2014 Housing Element cycle. The South Coast Air Quality Management District and SCAG have prepared the latest Air Quality Management Plan (2012 AQMP) and Regional

<sup>12</sup> Banning General Plan, Paragraph 1, page V-9, Environmental Hazards

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Transportation Plan/Sustainable Communities Strategy (2012 RTP/SCS), respectively, which are based upon the land uses and housing units required under the RHNA. Therefore, greenhouse gas emissions resulting from the proposed amendments have been analyzed in the previous EIRs prepared for the AQMP and RTP/SCS. Since the proposed Project is consistent with those regional plans, potential impacts to greenhouse gas emissions would not be substantially greater than previously analyzed and no new significant impacts would occur.				
The City of Banning General Plan incorporates policies that “promotes energy conservation throughout all areas of the community and sectors of the local economy and encourage the expanded use of public transit, vehicles fueled by compressed natural gas and hydrogen, buses with bike racks and other improvements that enhance overall operations and energy conservation” <sup>13</sup> .				
The California Building and Energy Codes continue to be updated to provide for more efficient building and energy conservation. The manufacturers of household appliances continue to make energy efficient appliances for consumers such as clothes washers and dryers, and dishwashers. Old appliances within the homes would be replaced with new energy efficient appliances which should help reduce greenhouse gas emission. The City does not regulate mobile sources of air pollution as they are regulated at the regional level through SCAQMD, State EPA, and Federal EPA. However, the City of Banning through its General Plan policies and programs will continue to support development that promotes conservation of resources which should help contribute to the overall reduction of the greenhouse gas.				
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the Project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>13</sup> Policies 1 and 2, Page IV-89, Environmental Resources Element, Banning General Plan.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
existing or proposed school?				
d) Be located on a site included on the list of hazardous materials sites compiled per Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 it result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item VIII. a), b), c), e), and f). Hazardous Materials. No Impact**

During project construction, there are potential pollutants that are generated from construction-related equipment and fluids from washing construction equipment and vehicles before they leave the project site. The South Coast Air Quality Management District regulates pollution from construction equipment. Construction water impact is regulated through the National Pollution Discharge Elimination System (NPDES) and State Water Pollution and Prevention Program as part of grading plan requirements. In the long-term, housing developments typically use cleaning and solvent products for household cleaners, swimming pool, landscape maintenance, and washing of automobiles. Use of these products are governed by the manufacturer's materials safety and data sheet which will not create hazards to people, environment, schools, and airport. No mitigation measure is required.

**Explanation of Item VIII. d) Hazardous Materials Site. No Impact**

The project site is not located on list of hazardous materials sites compiled per Government Code Section 65962.5. No mitigation measure is required.

**Explanation of Item VIII. g) Emergency Response. No Impact**

The project is a housing development that is required to meet the fire department and emergency personnel access and route for emergency response and therefore will not interfere with the emergency response and evacuation plan. No mitigation measure is required.

**Explanation of Item VIII. h) Wildland Fire. No Impact**

The Project sites are located in low-lying areas within and adjacent to other developments and not adjacent to wildlands. Furthermore, the homes are required to comply with the Uniform Fire Code for which a sprinkler system is required for fire protection. No mitigation measure is required.

IX. HYDROLOGY AND WATER QUALITY. Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 or planned land uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 such a way as to result in flooding either on-site or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water exceeding the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place, within a 100-year flood hazard area, structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item IX. a) Water Quality & Waste Discharge. Potentially Significant Unless Mitigation Incorporated**

The U.S. Environmental Protection Agency (EPA) regulates the Clean Water Act. Under Section 402 of the Clean Water Act, the EPA regulates and control storm water discharge into the waters of the U.S. through a program called National Pollution Discharge Elimination System (NPDES). In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program. The SWRCB works in coordination with the local Water Quality control Board to preserve, protect, enhance, and restore water quality. The City of Banning is within the jurisdiction of the Colorado River Water Quality Control Board.

Construction activities associated with housing development is subject to the NPDES requirements. NPDES requires best management practices for site design, source control, and treatment of pollutants which include conservation of natural area, construct street, sidewalks, and parking lot aisles to the minimum width necessary, and minimize the use of impervious surfaces in landscape design. Source control best management practices include street sweeping, roof run-off controls, and water efficient irrigation systems for landscaping. Treatment control best management practices include biofilters for trash and debris, bacteria and viruses, and oils and grease.

The following mitigation measure is required by the Project.

**Mitigation Measure HWQ-1:** Prior to issuance of building permits, a final water quality control management plan shall be submitted by the project and approved by the City's Public Works Department, and strict adherence to the program is required.

With incorporation of this mitigation measure, the project impact to water quality is less than significant.

**Explanation of Item IX. b). Less Than Significant Impact**

The Project is a housing development that would occur in the area that is zoned for development. The Project will connect to the City's water supply system for household use and irrigation. The proposed development is a very high density housing development with a minimum 20 dwelling units per acre. The City is a water purveyor and evaluates the water supply needs every five (5) years through its water master plan. The demand included in the water master plan is sufficient

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>to accommodate the projected water demand for the proposed project. The Banning Municipal Code requires that the project pay for its demand for water through water connection fees to reduce impact to water supply. Compliance with the Municipal Code ensures that the project impact is less than significant. The project sites are located in areas proposed for development and are not being used as ground water recharge so it is not anticipated that the natural aquifer recharge process will be impacted. No mitigation measure is required.</p> <p><b><u>Explanation of Item IX. c) and e) Less Than Significant Impact.</u></b></p> <p>The project will be developed on vacant sites. Development on vacant sites will create impervious surfaces and increase the amount of surface run-off. The City of Banning Municipal Code requires that the project contain the storm water run-off on site so as not to exceed the pre-development condition so that the drainage pattern in the area is not altered. The on-site storm drain system is required to comply with the NPDES requirements to control siltation during rain. No mitigation is required.</p> <p><b><u>Explanation of Item IX. d) Less Than Significant Impact.</u></b></p> <p>The City of Banning Municipal Code requires that the project submit a hydrology study that will determine pre- and post development flow of storm water. The recommendation of the hydrology study is required to be incorporated onto the grading plan to ensure that the project does not create flooding on- and off-site. Furthermore, the project site has no streams or rivers on site. Compliance with the City of Banning Municipal Code will reduce the project impact to less than significant. No mitigation measure is required.</p> <p><b><u>Explanation of Item IX. f) Less Than Significant Impact.</u></b></p> <p>Potential water pollutants that could be released from the project site include construction related pollutants, sediment, vehicle and equipment fluids, commercial cleaning agents, trash, landscaping by-products, and other typical urban storm-water pollutants. Impacts from these pollutants are adequately addressed in Questions VIII (a), VIII (c) and VIII (e) of this Initial Study Checklist. Therefore, the project would not otherwise degrade water quality.</p> <p><b><u>Explanation of Item IX. g), h), i) and j) No Impact.</u></b></p> <p>According to the National Flood Insurance Program, the Project sites are located on Map Index Community Panel No. 06065C, Map revised August 28, 2008. None of the sites identified are within a 100-year flood hazard area, in and adjacent area to the levee or dam area. Therefore, no structures will be placed within the flood hazard area. There is no water bodies in the area where in the event of an earthquake could create inundation by seiche, tsunami, or mudflow. No mitigation measure is required.</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b> <b>Would the Project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item X a) and c). No Impact.**

The housing projects will not divide an established community as the sites are located in an area within or adjacent to existing development. Additionally, it will not conflict with any applicable habitat conservation plan or natural community conservation plan as the housing development are proposed within areas of the City that are designed for development. The City is also a signatory to the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) where development project are required to pay in-lieu fees for development or provide mitigation consistent with the program.

**Explanation of Item X b). Less Than significant Impact.**

As part of the Project, a General Plan Amendment, a Zone Change, and Zone Text Amendment is requested to allow for Very High Density Development. The General Plan Amendment, Zone change, and Zone Text Amendment would make Zoning and Land Use Map and text internally consistent. No mitigation measure is required.

<b>XI. MINERAL RESOURCES.</b> <b>Would the Project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Explanation of Item XI. a) and b). Mineral Resources. No Impact**

Based on the General Plan Map for Mineral Resources Zone, the Project sites are located outside of the area zones for Mineral Resources Zone<sup>14</sup>. Therefore, the project will not result in loss of the availability of known mineral resources that are of value to the State, the Pass Area, and to the City. No mitigation measure is required.

<b>XII. NOISE. Would the Project:</b>				
a) Expose persons to a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Expose persons to a generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item XII. a), b), and d). Potentially Significant Unless Mitigation Incorporated.**

<sup>14</sup> Exhibit IV-8 of the City of Banning General Plan, page IV-84.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The project sites are located in various areas of the City that are surrounding by existing development or are located adjacent to existing development. The Noise Element of the General Plan identifies construction activities as one of the noise generators in the community that could result in unacceptable noise levels. During construction, temporary noise will be generated by construction equipment/machinery that is used for site clearance and grading, trucks that are used to deliver construction materials or haul construction debris/trash to off-site location, and use of passenger vehicles by construction workers to and from the construction sites. The City's Municipal Code regulates noise levels within the City including construction noise. To mitigate short-term noise impacts, the Project is required to comply with the following mitigation measure.</p> <p><b>Mitigation Measure NOI-1:</b> As a condition of approval of all grading and building permits, the Project shall comply with the following list of noise reduction measures, subject to inclusion of additional provisions at the discretion of the Building Official as appropriate:</p> <ul style="list-style-type: none"> <li>• Excavation, grading, and other noise-intensive construction activities related to the proposed Project shall be restricted to the hours of operation allowed under Section 8.44.090.E of the Municipal Code, which is from 7:00 a.m. to 6 p.m. This Section prohibits unnecessary noise from construction, landscape maintenance or repair. Any deviations from these standards shall require the written approval of the City Building Official. The days and hours shall also apply to any servicing of equipment and to the movement of materials to and from the site. There shall be no grading/construction activities on Sundays or nationally recognized holidays.</li> <li>• The developer shall require, as a condition of contract, that all construction equipment operating on the site be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an unmuffled exhaust.</li> <li>• The developer shall require all contractors, as a condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions.</li> <li>• Stockpiling and vehicle staging areas shall be located away from occupied residences, and screened from these uses by a solid noise attenuation barrier where necessary to achieve City Municipal Code-required noise attenuation levels.</li> <li>• Solid noise attenuation barriers (temporary barriers or noise curtains) with a sound transmission coefficient (STC) of at least 20 shall be used along Project boundaries adjacent to sensitive receptors, where noise monitoring, performed by a qualified noise monitor, indicates exceedance of City Municipal Code noise levels for more than 15 minutes in any one hour period.</li> </ul> <p>1. Construction activities that occur outside the allowable hours per City standards 6 P.M. to 7 A.M.) shall require approval of the City Building Official based on demonstration of unusual circumstances and avoidance of significant impacts to neighboring sensitive receptors. Construction noise exceeding City standards (i.e., interior noise in excess of 50</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>dBA or exterior noise in excess of 65 dBA) and statutory time limits is anticipated, shall require implementation of additional noise attenuation measures such as temporary noise “curtains” to reduce construction noise to meet City Standards.</p> <ul style="list-style-type: none"> <li>• All stationary construction equipment (e.g., air compressor, generators, etc.) shall be operated as far away from the residential and institutional uses as practicable. If necessary to meet the City’s noise standards, the equipment shall be shielded with temporary sound barriers, sound aprons, or sound skins to the satisfaction of the Building Official.</li> <li>• In areas subject to potentially significant construction noise impacts, the developer shall be required to monitor and document compliance with all applicable noise level limits.</li> <li>• Construction haul routes for large equipment and material import/export shall be specified to minimize the use of routes affecting sensitive receptors (e.g., residential, parks, hospitals, schools, convalescent homes, etc.). In all cases, trucks shall utilize a route that is least disruptive to sensitive receptors. Construction trucks shall avoid weekday and Saturday A.M. and P.M. peak hours (7 A.M. to 9 A.M. and 4 P.M. to 6 P.M.).</li> </ul>				

**Explanation of Item XII. c), and e). Permanent Increase in Noise and Exposure of People to Airport Noise. Less Than Significant Impact**

The project will create an increase in noise levels once the buildings are occupied. The increase in noise levels are associated with equipment for cooling and heating of the buildings, lawn mowers, and the opening and closing of passenger vehicles used by the occupants. In addition, the City operates a municipal airport that would result in noise generation from the take-off and landing of the aircraft. The General Plan policy<sup>15</sup> and its EIR<sup>16</sup> require that interior noise levels for residential development shall not exceed 45 dBA in accordance with the California Noise Insulation standards. During plan check process, the building and safety division will ensure that the interior noise levels of the residence meet the standard. In addition, the Project is required to incorporate the following mitigation measure to reduce impacts from mechanical equipment for heating, air conditioning and ventilation:

**Mitigation Measure NOI-2:** Prior to issuance of any mechanical permits, the City shall review the proper sizing and placement of equipment for Heating, Air Conditioning, and Ventilation in such a manner that their locations are located as far practicable from nearby residences surrounding the project site.

With compliance with the General Plan policy and General Plan EIR and mitigation measure above, the project impact related to a permanent increase in noise and noise from the airport, is reduced to less than significant.

<sup>15</sup> Paragraph 1, the Community Noise and Land Use Compatibility Model, page V-49 of the General Plan Noise Element

<sup>16</sup> Pages III-186 through III-188 of the General Plan Noise Element.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Explanation of Item XII. f). Private Airstrip. No Impact**

The project will not impact a private air strip as there is no private airport within the City.

XIII. POPULATION AND HOUSING. Would the Project:				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace a substantial number of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item XIII. a). Population Growth. Less Than Significant Impact.**

The project will create housing development that will house Banning residents who are in need of low cost housing consistent with the State mandate. The development is expected to provide infrastructure commensurate with its population needs that include street, sewer, water, storm drain, electricity, gas, and cable. Additionally, the development is required to provide amenities for enjoyment of the residents, including payment of parks impact fees. No mitigation measure is required as the impact is less than significant.

**Explanation of Item XIII. b) and c). Displacement of Housing and People. No Impact.**

The project is proposed on vacant sites or sites developed with non-residential uses, and would not displace existing housing and people. No mitigation is required.

XIV. PUBLIC FACILITIES. Would the Project:				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant Environmental impacts, in order to maintain acceptable				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
service ratios, response times or other performance objectives for any of the public services.				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Item XIV. a) through e). Public Facilities. Less Than Significant Impact.**

The proposed project would result in a cumulative net increase of 810 housing units as compared to existing regulations, which would generate approximately 2,187 additional residents based on an average of 2.7 persons per dwelling unit. The increase in population will generate demand for fire protection, police protection, schools, parks, and additional public facilities.

Fire Protection - The City's General Plan policy requires that the Fire Department maintain a 5-minute response time<sup>17</sup>. Currently, fire protection services are provided by the County through Cal-Fire. The City has a three-party agreement with the City of Beaumont and Cal-Fire with regard to providing fire protection services for the City using Station 20 that is located at 1550 E. 6<sup>th</sup> Street in Beaumont in addition to services provided by the current station at 170 N. Murray Street. The California Building Code currently requires that new homes provide fire sprinkler system which would help reduce the impact to fire services. Additionally, new housing projects are required to pay fire impact fees which would provide for future facilities as the cities develop.

Police Protection - The General Plan policy requires that the Police Department maintain a level of service goal of 2.0 sworn officers per 1000 residents. The Project is required to pay police impact fees to mitigate impacts to police services. Payment of the impact fees reduces the Project impact to less than significant. No mitigation measure is required.

Schools – The Banning Unified School District provides educational facilities and services to students that would be generated by the Project. As the individual housing project site develop, the Project is required to pay school impact fees consistent with State law. Payment of school impact fees is deemed to have mitigated the impacts to schools which reduces the Project impact to less than significant. No mitigation measure is necessary.

Parks – The City's General Plan requires that parks are maintained at a standard of 5 acres per 1,000 population.<sup>18</sup> The proposed project is required to provide amenities for its population to enjoy in addition to payment of park impact fee for future development of park and facilities as the City grows. Payment of park impact fees mitigates the project impacts to less than

<sup>17</sup> Policy 9 page VI-38, Public Services and Facilities Element of the General Plan

<sup>18</sup> Program 1.B page III-98, Community Development Element of the General Plan

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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significant. No mitigation measure is necessary.

Other Public Facilities – The Banning Public Library provides library services to the residents of Banning. The Library is funded by a library taxing district. The Project is required to pay its fair share costs to the County library district which in turn pays for providing the library system, including staffing and equipment.

XV. RECREATION:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Item XV. a) and b) Recreation. Less Than Significant Impact.**

The project sites are vacant lots that are located in various areas of the cCity. At the time of development, the project will be required to provide on-site amenities such as common open space and recreational facilities for its residents in addition to payment of parks impact fees. The expansion of the recreational facilities is subject to the City's siting of facilities consistent with the adopted Parks Master Plan to fill the need of the residents generated by the development and future residents. Payment of park impact fees will mitigate the project impacts to recreation to less than significant.

XVI. TRANSPORTATION/TRAFFIC. Would the Project:				
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,	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b><u>Explanation of Item XVI. a). Circulation System Effectiveness. Less than Significant Impact with Mitigation Incorporated.</u></b>				
The City's General Plan Circulation Element establishes level of service D for City's roadway performance. At General Plan build-out and without the project, two on- and off ramps at 8 <sup>th</sup> Street and Hargrave Street are projected to operate at an unacceptable level of service.				
I-10/8 <sup>th</sup> Street on-and off ramps – At the general plan build-out, the westbound ramps are projected to operate at a Level of Service E in the p.m. peak. With the project, assuming no additional roadway improvements, the level of service during the p.m. peak period would still be at E but would be worsened. The I-10 eastbound ramps at 8 <sup>th</sup> Street are projected to operate at Level of Service F at general Plan build-out. With the project, the level of service would				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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continue to be at LOS F but would be worsened unless improvements are constructed.

I-10/Hargrave Street on- and off-ramps –At the general plan build-out, Hargrave Street at I-10 east and westbound on and off ramps is projected to operate at a level of service F during the PM peak period. With the project, the level of service would continue to be at LOS F but would be worsened unless improvements are constructed.

In order to mitigate these impacts, the future developments affected by the proposed amendments shall be required to incorporate the following mitigation measure including payment of the Traffic Uniform Mitigation Fee (TUMF) to Western Riverside Council of Governments as part of mitigation fee for regional roadway/freeways and traffic impact fees to the City.

**Mitigation Measure T-1:** Prior to approval of any tentative subdivision map for a specific housing project that will result from the adoption of Zone Change No. 13-3502, the applicant shall submit a traffic study for review and approval by the City Engineer. The traffic study shall identify impacts that would result from development of the project and mitigation measures required to comply with City and County level of service standards. Any required improvements needed to maintain acceptable levels of service shall be included as conditions of approval on the tentative map in a manner meeting the approval of the City Engineer. Such mitigation measures/conditions of approval may include, but may not be limited to, providing traffic signal synchronization at Ramsey Street and 8<sup>th</sup> Street, and at Ramsey Street and Hargrave Street; road widening along 8<sup>th</sup> Street and along Hargrave Street; and installation of traffic signals at the I-10 on- and off-ramps at 8<sup>th</sup> Street and at Hargrave Street.

The City's General Plan encouraged various modes of transportation to connect people to various areas of the City including parks and shopping. The specific housing project will be reviewed to ensure that the project provides area for bike rack locations and pedestrian access to the sidewalk and transit service.

**Explanation of Item XVI. b). Congestion Management Program. Less Than Significant Impact.**

Riverside County Transportation Commission is the Congestion Management Agency for Riverside County. The project will not conflict with the Congestion Management program as the project will be required to pay the Transportation Uniform Mitigation Fees (TUMF) to minimize the project traffic impact to freeway and major highways, and must also comply with Mitigation Measure T-1 to mitigate specific local impacts.

**Explanation of Item XVI. c). Change to Air Traffic. No Impact.**

The adoption of the housing element and subsequent housing projects are proposed in areas where housing development is allowed and will not impact the airport or area surrounding the airport. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Explanation of Item XVI. d). Road Design. No Impact.**

Subsequent housing projects that result from the adoption of the Housing Element will be reviewed for compliance with the City standards as established in the City's Municipal Code and Zoning Code including road design. Mitigation measures are not required as the project is required to comply with the City's Municipal Code and Zoning Code.

**Explanation of Item XVI. e). Emergency Access. No Impact.**

All elements related to the housing project such as access to and from the project to public right-of-way including road and road grade, driveway and driveway grade, drive aisle, and two points of access into and out of the project are required to be in compliance with the City's Municipal Code and Zoning Code. Subsequent housing projects that result from the adoption of the Housing Element are required to be reviewed by the City for compliance with the City Code prior to issuance of grading and buildings permits. No mitigation is required.

**Explanation of Item XVI. f). Parking Capacity. No Impact.**

Subsequent housing development resulting from the adoption of the housing element is required to provide adequate parking including number of number of covered parking stalls and stall size in compliance with the Zoning Code. No mitigation is required.

**Explanation of Item XVI. g). Transit, Non-motorized transportation. No Impact.**

The General Plan encourages people to rely on other modes of transportation including public transit, walking and bicycling. The subsequent housing projects that is proposed will be reviewed to ensure that the project will accommodate bicycle racks within the project so the residents can park their bicycles, in addition to ensuring that there is adequate pedestrian access to sidewalk and streets for people to walk and ride bicycles. No mitigation measure is required as the project will not impact transit, bicycling, and pedestrian facilities.

XVII. UTILITIES AND SERVICE SYSTEMS. Would the Project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Item XVII. a) Waste Water Treatment. Less Than Significant Impact.**

The Project would develop new housing on vacant in-fill sites throughout the City. The waste water to be generated by the project is domestic sewage. The project, including future housing developments, will be required to connect to the City's sewer system and pay their sewer connection fees. Any surface run-off from the project is addressed in Responses to Questions IX a), c), e), and f) of this Initial Study. Therefore, the waste water treatment requirements of the Regional Water Quality Control Board are not expected to be exceeded. In addition, the payment of fees for sewer connection will reduce the project impact to less than significant. No mitigation measure is required.

**Explanation of Item XVII. b) New Waste Water or Expansion of Facility. Less Than Significant Impact.**

The project will be required to connect to the City's water and wastewater system. This includes on-site pipelines and unit connections to the City's existing water and wastewater system. The construction of the on-site water and wastewater have been addressed as part of the Initial Study and impacts were found to be less than significant. The project will not require or result in

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
construction or expansion of new water or waste water treatment facilities off-site. Therefore, there is no significant environmental effects associated with respect to water and wastewater.				

**Explanation of Item XVII. c) New Storm Water or Expansion of Facility. Less Than Significant Impact.**

The project is an in-fill development of housing on vacant lots located in various areas of the City. The projects are required to provide on-site storm water systems to prevent on-site flooding and impact to the adjacent development. The project also will be required to tie into the City's storm drain system. The construction of the storm drain facilities has been considered in other parts of this Initial Study and is considered not to be significant. At the time of a specific project application, the City shall review the storm drain system plan in detail to ensure that it meets the requirement of the Municipal Code. Compliance with the Municipal Code will reduce the project impact to less than significant. No mitigation measure is required.

**Explanation of Item XVII. d) Water Supply. Less Than Significant Impact.**

The City's 2010 Urban Water Management System which was adopted on June 28, 2011 anticipates that the City is capable of meeting the water demand of its customers in normal, single dry, and multiple dry years between 2015 and 2035. The City's water supply comes from ground water and imported State water project through San Gorgonio Pass Water Agency. Eighty Seven (87) percent of the water supply comes from ground water in the Banning, Banning Bench, Banning Canyon, Cabazon, and Beaumont basins and less reliance on State imported water. The 2010 Urban Water Management Plan also includes a variety of best management practices<sup>19</sup> to comply with the State mandate for water availability and conservation. In addition, the City is currently installing recycled water infrastructure to help off-site the demand for ground water. Furthermore by 2015, the extension of pipelines for EBX1 (State Water Project) to bring water to the City of Banning. Collectively, these measures will help ensure that the City has adequate water to support the demand of its customers including the project.

<sup>19</sup> Pages 98 through 114 of the adopted 2010 Urban Water Management Plan.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
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 an endangered threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	■	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulatively considerable? (Are the incremental effects of the Project considerable when viewed in connection with those of past Projects, those of other current Projects, and those of probable future Projects?)	<input type="checkbox"/>	■	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	■	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation of Item XVIII Mandatory Findings of Significance.**

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 an endangered threatened species, or eliminate important examples of the major periods of California history or prehistory?**

Based on the analysis contained in this Initial Study/Mitigated Negative Declaration, the Project has no impact on Agricultural Resources and Mineral Resources.

Impacts to Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Population and Housing, Public Facilities, Recreation, Utilities and Service Systems are less than significant impact and no mitigation measure is required.

Impacts to Aesthetics would be significant unless mitigated. Mitigation Measures AES 1 through AES-3 are required of the project.

Impacts to Air Quality would be significant unless mitigated. Mitigation Measures AQ-1 through AQ-6 are required of the project.

Impacts to Biological Resources would be significant unless mitigated. Mitigation Measures BIO-1 through BIO-3 are required of the project.

Impacts to Cultural Resources would be significant unless mitigated. Mitigation Measures CUL-1 through CUL-2 are required of the project.

Impacts to Geology and Soils would be significant unless mitigated. Mitigation Measures GEO-1 through GEO-3 are required of the project.

Impact to Hydrology and Water would be significant unless mitigated. Mitigation Measure HWQ-1 is required of the project.

Impact to Noise would be significant unless mitigated. Mitigation Measure NO-1 through NO-2 are required of the Project.

Impact to Transportation would be significant unless mitigated. Mitigation Measure T-1 is required of the Project.

The implementation of the Mitigation Measures identified above would result in less than significant impacts to Aesthetics, Air Quality, Biological Resources, Cultural, geology and Soils, Hydrology and Water Supply, Noise and Transportation. Therefore the project will not 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 an endangered threatened species, 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? (Are the incremental effects of the Project considerable when viewed in connection with those of past Projects, those of other current Projects, and those of probable future Projects?)**

The Project involves various actions that are necessary to implement the proposed housing element in order to meet RHNA requirement assigned to the City of Banning in order to receive certification from the State HCD. HCD is requiring that the City rezone sites to accommodate the housing density of 20-30 dwelling units per acre. The Project does not include a specific development proposal at this time, and future residential developments shall be required to comply with applicable policies, standards, regulations and mitigation measures identified herein, which would reduce potential impacts to a level that is less than significant..

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

As discussed in the above Sections, future residential developments shall be required to comply with applicable policies, standards, regulations and mitigation measures identified herein, which would reduce potential impacts, either directly or indirectly, on human beings to a level that is less than significant.

## INCORPORATION BY REFERENCE

This Initial Study is based in part on the information and analysis contained in other environmental and planning documents as authorized by Section 15150 of the State CEQA Guidelines. The following references were utilized during preparation of this Initial Study. These documents are available for review at the City of Banning City Hall located at 99 E. Ramsey Street, Banning, CA 92220.

**City of Banning General Plan.** The City of Banning General Plan (“General Plan”) was adopted on January 31, 2006. It is a statement of community values and priorities and contains the plan for the future development and operation of the City. The 2006 General Plan Update, which brought the General Plan into conformance with changes in State law and other legal requirements: reflects changes in local population and economy since 1986; incorporates recent projections and assumptions regarding future growth; and responds to the issues, challenges and opportunities created by recent trends and developments.

The City of Banning General Plan incorporates the State-mandated and Non-mandated elements. The seven (7) mandated elements are: land use, housing, traffic circulation, safety, parks and recreation, conservation, and noise. The rest of the elements are non-mandated elements. The General Plan is structured into five (5) major policy areas listed below:

1. Community Development: The Community Development Element includes five (5) elements: Land Use, Economic Development, Circulation, Parks and Recreation and Housing elements.
2. Environmental Resources: The Environmental Resources include six (6) elements: Water Resources, Open Space and Conservation, Biological Resources, Archeological and Historic Resources, Air Quality, and Energy and Mineral Resources elements.
3. Environmental Hazards: The Environmental Hazards include Geotechnical, Flooding and Hydrology, Noise, Wildland Fire, and Hazardous and Toxic Materials elements.
4. Public Services and Facilities: Public Services and Facilities include Water, Wastewater, and Utilities, Public Buildings and Facilities, School and Libraries, Police, and Fire Protection, and Emergency Preparedness elements.

Background and policy information from the General Plan is utilized in several sections of this Initial Study to provide setting and context and establish the regulatory framework, which governs development of the candidate sites.

**City of Banning General Plan Final Environmental Impact Report (Certified January 31, 2006).** This document, which was certified through City Council Resolution 2006-13, is comprised of the Draft and Final EIR. The analysis evaluated the impacts resulting from implementation of the City of Banning General Plan 2006. The General Plan EIR concluded that implementation of the General Plan would result in housing stock between 26,595 and 31,503 dwelling units at build-out in 2030. Additionally, the General Plan EIR concluded the build-out

population would be between 67,697 and 80,226 persons. The General Plan EIR was utilized throughout this Initial Study as a source of baseline and build-out conditions.

**City of Banning General Plan Circulation Element Amendment Final Environmental Impact Report (Certified March 26, 2013).** This document was certified through the City Council Resolution 2013-34, and comprised of the Draft and Final EIR. The analysis evaluated the impacts resulting from changing the citywide policy for roadway level of service (LOS) from LOS C to D and removing of Highland Home Road interchange from the City's General Plan Circulation Element. This Circulation Element Final EIR is utilized throughout this Initial Study as a source of baseline and build-out conditions.

**Banning Municipal Code (BMC).** The City's ordinances are codified in the "Banning Municipal Code" (BMC). The BMC consists of all of the City's regulatory and penal ordinances and some of its administrative ordinances, codified pursuant to the California Government Code. Information within the BMC was utilized in various sections of this Initial Study, in order to establish the existing regulatory framework.

**Banning Zoning Ordinance (BZO).** In contrast with the General Plan, which is comprehensive, long-range, general policy statement for the entire community, the Banning Zoning Ordinance (BZO) is a specific statement of permissible uses of land by zoning district designed to control the use, type, bulk, height, space, and location of buildings and land. The Zoning Ordinance is the primary tool by which the City implements the General Plan policies. The Zoning Ordinance is intended to be applied to the City based on land use designations established in the General Plan. Information within the BZO was utilized in various sections of this Initial Study, in order to establish the existing regulatory framework.

#### **PERSONS CONSULTED FOR THE PREPARATION OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Duane Burk, Director of Public Works, City of Banning, 99 E. Ramsey Street, Banning, CA 92220

Kahono Oei, City Engineer, City of Banning, CA 92220

Ken Garthwaite and Keith Lay, LSA Associates, Inc.

John Douglas, J.H. Douglas & Associates

# APPENDIX A

## TRAFFIC AND AIR QUALITY SENSITIVITY ANALYSES



LSA ASSOCIATES, INC.  
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BERKELEY  
CARLSBAD  
FORT COLLINS

FRESNO  
PALM SPRINGS  
PT. RICHMOND

RIVERSIDE  
ROCKLIN  
SAN LUIS OBISPO

May 30, 2013

Ms. Zai Abu Bakar  
Community Development Director  
City of Banning  
99 E. Ramsey Street  
Banning, CA 92220

Subject: City of Banning Housing Element – Traffic and Air Quality Sensitivity Analyses

Dear Ms. Abu Bakar:

LSA Associates, Inc. (LSA) has prepared sensitivity analyses to assist the City of Banning (City) with the update to its Housing Element. Specifically, LSA has evaluated the changes in traffic and air quality conditions based on the addition of approximately 932 residential dwelling units (apartments) within the City.

### Traffic

LSA analyzed 12 intersections in the vicinity of the proposed housing parcels. General Plan build out conditions were analyzed for baseline (without additional units) and with project (additional residential units) conditions for the a.m. and p.m. peak hours. The data for this analysis was referenced from the City of Banning General Plan Circulation Element 2005, Appendix F, General Plan Update Traffic Study, by Kunzman Associates (March 21, 2005). Trips for the additional residential units were generated using trip rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 9<sup>th</sup> Edition, and manually distributed to the street system. Intersections were analyzed using the Highway Capacity Manual (HCM) level of service (LOS) methodology. The results of the LOS analysis are provided in Table A (all tables attached). In addition, a roadway segment on 22<sup>nd</sup> Street was evaluated and its LOS summarized in Table B.

### Air Quality

Air Quality and greenhouse gas emissions were evaluated using the CalEEMod model. LSA calculated the mobile and stationary source criteria pollutant and greenhouse gas emissions associated with the increase in housing units. In addition, using the Caline4 model, LSA calculated the carbon monoxide (CO) concentrations in the vicinity of the 12 intersections evaluated in the traffic analysis. The results of the modeling are provided as an attachment.

LSA ASSOCIATES, INC.

LSA appreciates the opportunity to provide its consulting services to the City. If you have any questions, please call me at (949) 553-0666.

Sincerely,

**LSA ASSOCIATES, INC.**



Ken Wilhelm  
Principal

Attachments: Traffic LOS Summary Tables  
CO Concentrations and CalEEMod Summary

## **LEVEL OF SERVICE (LOS) SUMMARY**

**Table A: Banning Housing Element Buildout Plus Project Peak Hour Intersection Level of Service Summary**

Intersection	General Plan Buildout No Project Condition <sup>1</sup>				General Plan Buildout Plus Project Condition <sup>2</sup>			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1 Sunset Avenue/Ramsey Street	30.9	C	52.1	D	31.4	C	53.1	D
2 Sunset Avenue/I-10 Westbound Ramps	20.9	C	48.6	D	24.6	C	54.7	D
3 Sunset Avenue/I-10 Eastbound Ramps	17.2	B	39.5	D	18.5	C	52.8	D
4 Sunset Avenue/Lincoln Street	24.5	C	35.0	C	25.2	C	37.5	D
5 8th Street/Ramsey Street	28.1	C	51.9	D	28.5	C	53.2	D
6 8th Street/I-10 Westbound Ramps	19.4	B	75.3	E	19.5	B	76.7	E
7 8th Street/I-10 Eastbound Ramps	25.7	C	101.8	F	25.8	C	103.1	F
8 8th Street/Lincoln Street	25.9	C	34.7	C	26.1	C	35.1	D
9 Hargrave Street/Ramsey Street	24.6	C	48.7	D	25.9	C	49.8	D
10 Hargrave Street/I-10 Westbound Ramps	11.4	B	185.0	F	11.5	B	185.8	F
11 Hargrave Street/I-10 Eastbound Ramps	22.7	C	136.6	F	22.8	C	136.7	F
12 Hargrave Street/Lincoln Street	29.6	C	34.3	C	29.6	C	34.3	C

Notes:

<sup>1</sup> City of Banning General Plan Circulation Element 2005, Appendix F, General Plan Update Traffic Study by Kunzman Associates, March 21, 2005<sup>2</sup> LOS generated after addition of trips from Proposed Housing Units in City of Banning, LSA Associates, Inc., May 2013**Table B: Banning Housing Element Buildout Plus Project ADT Roadway Segment Level of Service Summary**

Roadway Segment	General Plan Buildout No Project Condition			General Plan Buildout With Project Condition		
	ADT	LOS	ADT	LOS	ADT	LOS
22nd Street south of I-10 Westbound Ramps <sup>1</sup>	18,164	B			20,321	B

Notes:

<sup>1</sup> 22nd Street is a Secondary Highway based on City of Banning General Plan Circulation Element 2005

## CO CONCENTRATIONS

## CO Concentrations without/with Proposed Project

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (Meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						(20 ppm)	8-Hr (9 ppm)
Sunset and Ramsey	14 / 14	3.9 / 3.9	0.0	2.1 / 2.1	0.0	No	No
	14 / 14	3.8 / 3.8	0.0	2.0 / 2.0	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	14 / 14	3.6 / 3.7	0.1	1.9 / 2.0	0.1	No	No
Sunset and I-10 WB	7 / 7	3.5 / 3.6	0.1	1.8 / 1.9	0.1	No	No
	7 / 7	3.2 / 3.2	0.0	1.6 / 1.6	0.0	No	No
	10 / 7	3.2 / 3.2	0.0	1.6 / 1.6	0.0	No	No
	7 / 10	3.1 / 3.2	0.1	1.5 / 1.6	0.1	No	No
Sunset and I-10 EB	7 / 7	3.2 / 3.3	0.1	1.6 / 1.7	0.1	No	No
	7 / 7	3.2 / 3.3	0.1	1.6 / 1.7	0.1	No	No
	7 / 7	3.2 / 3.3	0.1	1.6 / 1.7	0.1	No	No
	7 / 7	3.1 / 3.2	0.1	1.5 / 1.6	0.1	No	No
Sunset and Lincoln	12 / 12	3.6 / 3.7	0.1	1.9 / 2.0	0.1	No	No
	12 / 12	3.4 / 3.5	0.1	1.8 / 1.8	0.1	No	No
	12 / 12	3.3 / 3.4	0.1	1.7 / 1.8	0.1	No	No
	12 / 12	3.3 / 3.3	0.0	1.7 / 1.7	0.0	No	No
8th and Ramsey	12 / 12	3.6 / 3.7	0.1	1.9 / 2.0	0.1	No	No
	12 / 12	3.6 / 3.7	0.1	1.9 / 2.0	0.1	No	No
	12 / 12	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	12 / 12	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
8th and I-10 WB	7 / 7	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	7 / 7	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	8 / 7	3.5 / 3.5	0.0	1.8 / 1.8	0.0	No	No
	7 / 7	3.4 / 3.5	0.1	1.8 / 1.8	0.1	No	No
8th and I-10 EB	7 / 7	3.4 / 3.4	0.0	1.8 / 1.8	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	1.7 / 1.7	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	1.7 / 1.7	0.0	No	No
	7 / 7	3.2 / 3.2	0.0	1.6 / 1.6	0.0	No	No
8th and Lincoln	8 / 8	3.8 / 3.8	0.0	2.0 / 2.0	0.0	No	No
	10 / 8	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	8 / 10	3.6 / 3.7	0.1	1.9 / 2.0	0.1	No	No
	8 / 8	3.4 / 3.4	0.0	1.8 / 1.8	0.0	No	No
Hargrave and Ramsey	14 / 14	3.8 / 3.8	0.0	2.0 / 2.0	0.0	No	No
	12 / 12	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	14 / 14	3.5 / 3.5	0.0	1.8 / 1.8	0.0	No	No
Hargrave and I-10 WB	7 / 7	4.1 / 4.1	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	4.1 / 4.1	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	4.1 / 4.1	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	4.1 / 4.1	0.0	2.2 / 2.2	0.0	No	No
Hargrave and I-10 EB	7 / 7	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	7 / 7	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	7 / 7	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	7 / 7	3.5 / 3.5	0.0	1.8 / 1.8	0.0	No	No
Hargrave and Lincoln	8 / 8	3.7 / 3.7	0.0	2.0 / 2.0	0.0	No	No
	10 / 10	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	1.9 / 1.9	0.0	No	No
	10 / 10	3.5 / 3.5	0.0	1.8 / 1.8	0.0	No	No

Source: LSA Associates, Inc., May 2013.

Includes ambient one-hour concentration of 1.6 ppm and ambient eight-hour concentration of 0.5 ppm. Measured at the FS-590 Racquet Club Ave, Palm Springs, CA AQ Station in Riverside County.

## CALEEMOD SUMMARY

Summary table only showing maximum of summer and winter emission rates

Table C: Long-Term Regional Operational Emissions

Category	Pollutant Emissions, lbs/day						2
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
Area	41	0.93	79	0	1.7	1.7	3
Energy	1.1	9.5	4.1	0.06	0.77	0.77	4
Mobile	33	80	310	0.57	65	3.8	5
<b>Total Project Emissions</b>	<b>75</b>	<b>90</b>	<b>390</b>	<b>0.63</b>	<b>67</b>	<b>6.3</b>	6
<b>SCAQMD Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>	7
<b>Significant?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	8

Source: LSA Associates, Inc., June 2013.

CO = carbon monoxide

ROG = reactive organic compounds

lbs/day = pounds per day

SCAQMD = South Coast Air Quality Management District

NO<sub>x</sub> = nitrogen oxides

SO<sub>x</sub> = sulfur oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

Table D: Long-Term Operational Greenhouse Gas Emissions

Category	Pollutant Emissions, MT/year						1.16%
	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2e</sub>	
Construction emissions amortized over 30 years	0	164	164	0.016666667	0	165	4.94%
Area	0	695	695	0.04	0.01	699	28.17%
Energy	0	3,967	3,967	0.13	0.07	3,992	59.33%
Mobile	0	8,398	8,398	0.34	0	8,405	3.51%
Waste	222	0	222	13	0	497	2.89%
Water	0	354	354	1.9	0.05	410	100.00%
<b>Total Project Emissions</b>	<b>222</b>	<b>13,579</b>	<b>13,801</b>	<b>16</b>	<b>0.13</b>	<b>14,168</b>	

Source: LSA Associates, Inc., June 2013.

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

Bio-CO<sub>2</sub> = biologically generated CO<sub>2</sub>

lbs/day = pounds per day

CH<sub>4</sub> = methane

N<sub>2</sub>O = nitrous oxide

CO<sub>2</sub> = carbon dioxide

NBio-CO<sub>2</sub> = non-biologically generated CO<sub>2</sub>

CO<sub>2e</sub> = carbon dioxide equivalent

Source	Pollutant Emissions, lbs/day						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub> e
<b>Construction-Summer</b>							
2013	67.52	251.14	155.87	0.27	41.26	27.27	28423.78
2014	65.54	234.41	150.12	0.27	40.05	26.06	28387.85
<b>Construction-Winter</b>							
2013	67.59	251.44	155.37	0.27	41.26	27.27	28258.08
2014	65.61	234.67	149.64	0.27	40.06	26.06	28224.55

Summary table only showing maximum of summer and winter emission rates

Table E: Short-Term Regional Construction Emissions

Source	Pollutant Emissions, lbs/day						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub> e
2013	68	250	160	0.27	41	27	28,000
2014	66	230	150	0.27	40	26	28,000
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
Peak Daily Construction	68	250	160	0.27	41	27	28,000
SCAQMD Thresholds	75	100	550	150	150	55	No
Significant?	No	Yes	No	No	No	No	Threshold

Construction Phase	Onsite Pollutant Emissions, lbs/day														
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>	Exhaust Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
3.2 Site Preparation - 2013	9.9	79.99	45.35	0.07	18.07	3.93	9.93	3.93	0	7997.69	0	0.39	0	8016.38	
3.2 Site Preparation - 2014	9.37	74.88	43.05	0.07	18.07	3.61	9.93	3.61	0	7997.69	0	0.84	0	8015.31	
3.3 Grading - 2013	11.35	97.47	52.85	0.1	6.66	4.59	3.31	4.59	0	10856.66	0	1.06	0	10878.9	
3.3 Grading - 2014	11.22	90.65	50.83	0.1	6.66	4.18	3.31	4.18	0	10856.65	0	1	0	10877.72	
3.4 Building Construction - 2013	4.4	32.65	21.27	0.04	0	2.09	0	2.09	0	3833.33	0	0.39	0	3841.58	
3.4 Building Construction - 2014	4.04	30.13	21.1	0.04	0	1.85	0	1.85	0	3833.33	0	0.36	0	3840.91	
3.5 Paving - 2013	5.53	33.81	20.89	0.03	0	2.93	0	2.93	0	2917.64	0	0.5	0	2928.05	
3.5 Paving - 2014	5.2	32.09	20.7	0.03	0	2.74	0	2.74	0	2917.65	0	0.47	0	2927.48	
3.6 Architectural Coating - 2013	34.54	2.96	1.94	0	0	0.27	0	0.27	0	281.19	0	0.04	0	282.1	
3.6 Architectural Coating - 2014	34.5	2.77	1.92	0	0	0.24	0	0.24	0	281.19	0	0.04	0	282.03	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Max daily	34.54	97.47	52.85	0.1	22	13.86	0	13.86	0	10856.66	0	1.06	0	10878.9	

Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	Offsite Pollutant Emissions, lbs/day					
									PM <sub>10</sub>	PM <sub>2.5</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
3.2 Site Preparation - 2013	0.11	0.11	1.16	0.00	0.23	0.01	0.00	0.01	0.00	0.00	193.08	0.00	0.01	193.31
3.2 Site Preparation - 2014	0.10	1.07	0.00	0.23	0.01	0.00	0.01	0.01	0.00	0.00	189.72	0.00	0.01	189.94
3.3 Grading - 2013	0.12	0.13	1.29	0	0.26	0.01	0	0	0.01	0	214.53	0	0.01	214.79
3.3 Grading - 2014	0.11	0.12	1.19	0	0.26	0.01	0	0	0.01	0	210.8	0	0.01	211.05
3.4 Building Construction - 2013	0.67	3.8	5.85	0.02	0.96	0.15	0.01	0.13	0	0	1186.93	0	0.06	0
3.4 Building Construction - 2014	0.61	3.45	5.37	0.02	0.96	0.13	0.01	0.12	0	0	1177.09	0	0.05	0
3.5 Paving - 2013	0.09	0.1	0.97	0	0.2	0.01	0	0	0.01	0	160.9	0	0.01	0
3.5 Paving - 2014	0.08	0.09	0.89	0	0.2	0.01	0	0.01	0	0	158.1	0	0.01	0
3.6 Architectural Coating - 2013	0.4	0.42	4.32	0.01	0.87	0.03	0.01	0.03	0	0	718.67	0	0.04	0
3.6 Architectural Coating - 2014	0.37	0.39	3.98	0.01	0.87	0.03	0.01	0.03	0	0	706.19	0	0.04	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of days in site preparation phase: 370

Summary table only showing maximum of summer and winter emission rates

Table F: Short-Term Regional Construction Emissions

Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	Total Regional Pollutant Emissions, lbs/day						
									PM <sub>10</sub>	PM <sub>2.5</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Site Preparation	10	80	47	0.07	18	3.9	9.9	9.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Grading	12	98	54	0.1	6.9	4.6	3.3	3.3	4.6	3.3	4.6	3.3	4.6	3.3	4.6
Building Construction	5.1	36	27	0.06	0.96	2.2	0.01	0.01	2.2	0.01	2.2	0.01	2.2	0.01	2.2
Paving	5.6	34	22	0.03	0.2	2.9	0	0	2.9	0	2.9	0	2.9	0	2.9
Architectural Coating	3.5	3.4	6.3	0.01	0.87	0.3	0.01	0.01	0.87	0.3	0.87	0.3	0.87	0.3	0.87

Table G: Short-Term Regional Construction Emissions

Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	Total Regional Pollutant Emissions, lbs/day						
									PM <sub>10</sub>	PM <sub>2.5</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Site Preparation	10	80	47	0.07	22	14	14	14	22	14	22	14	22	14	22
Grading	12	98	54	0.1	6.9	4.6	3.3	3.3	6.9	4.6	6.9	4.6	6.9	4.6	6.9
Building Construction	5.1	36	27	0.06	3.2	2.2	2.2	2.2	3.2	2.2	3.2	2.2	3.2	2.2	3.2
Paving	5.6	34	22	0.03	3.1	2.9	0	0	3.1	2.9	3.1	2.9	3.1	2.9	3.1
Architectural Coating	3.5	3.4	6.3	0.01	1.2	0.31	0.31	0.31	1.2	0.31	1.000	0.31	1.000	0.31	1.000
Total Emissions	68	251	156	0.27	41	27	27	27	41	27	28,400	27	28,400	27	28,400
SCAQMD Thresholds	75	100	550	150	150	55	55	55	150	55	No	No	No	No	No
Significant Emissions?	No	Yes	No	No	No	No	No	No	No	No	Threshold	Threshold	Threshold	Threshold	Threshold

Source: LSA Associates, Inc., June 2013.

CO = carbon monoxide

CO<sub>e</sub> = carbon dioxide equivalent

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

ROG = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

SO<sub>x</sub> = sulfur oxides

Table H: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions, lbs/day				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Site Preparation	8,191	0.9	0	8,210	
Grading	11,071	1.1	0	11,094	
Building Construction	5,020	0.45	0	5,030	
Architectural Coating	3,079	0.51	0	3,089	
Paving	1,000	0.08	0	1,002	
Total Daily Emissions	28,361	3.0	0	28,424	

Source: LSA Associates, Inc., June 2013.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

lbs/day = pounds per day

N<sub>2</sub>O = nitrous oxide

Construction-Annual	Pollutant Emissions, tons/year				
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>
2013	4.45	16.57	10.27	0.02	5.83
2014	8.29	29.65	18.95	0.03	6.67
Total	12.74	46.22	29.22	0.05	12.5

Construction Phase	Total Regional Pollutant Emissions, mt/yr				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Site Preparation	938	0.1	0	940	
Grading	1,268	0.12	0	1,271	
Building Construction	570	0.04	0	571	
Architectural Coating	570	0.04	0	571	
Paving	109	0	0	109	

Source: LSA Associates, Inc., June 2013.

lbs/day = pounds per day

N<sub>2</sub>O = nitrous oxide

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

Table I: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions, mt/yr				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Site Preparation	938	0.1	0	940	
Grading	1,268	0.12	0	1,271	
Building Construction	570	0.04	0	571	
Architectural Coating	570	0.04	0	571	
Paving	109	0	0	109	

Source: LSA Associates, Inc., June 2013.

lbs/day = pounds per day

N<sub>2</sub>O = nitrous oxide

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

Construction Phase	Onsite Pollutant Emissions, tons/year										Onsite Pollutant Emissions, metric tons/year					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e			
3.2 Site Preparation - 2013	0.65	5.28	2.99	0	3.48	0.26	1.91	0.26	0	478.72	478.72	0.05	0	479.84		
3.2 Site Preparation - 2014	1.19	9.47	5.44	0.01	3.48	0.46	1.91	0.46	0	917.56	917.56	0.1	0	919.58		
3.3 Grading - 2013	0.78	6.43	3.49	0.01	1.28	0.3	0.65	0.3	0	649.86	649.86	0.06	0	651.19		
3.3 Grading - 2014	1.42	11.46	6.43	0.01	1.28	0.53	0.65	0.53	0	1245.56	1245.56	0.12	0	1247.98		
3.4 Building Construction - 2013	0.29	2.15	1.4	0	0	0.14	0	0.14	0	229.45	229.45	0.02	0	229.95		
3.4 Building Construction - 2014	0.51	3.81	2.67	0.01	0	0.23	0	0.23	0	439.79	439.79	0.04	0	440.66		
3.5 Paving - 2013	0.36	2.23	1.38	0	0	0.19	0	0.19	0	174.64	174.64	0.03	0	175.27		
3.5 Paving - 2014	0.66	4.06	2.62	0	0	0.35	0	0.35	0	334.73	334.73	0.05	0	335.86		
3.6 Architectural Coating - 2013	2.28	0.2	0.13	0	0	0.02	0	0.02	0	16.83	16.83	0	0	16.89		
3.6 Architectural Coating - 2014	4.37	0.35	0.24	0	0	0.03	0	0.03	0	32.26	32.26	0	0	32.36		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max daily	4.37	11.46	6.43	0.01	0	3.94	0	2.37	0	1245.56	1245.56	0.12	0	1247.98		
Offsite Pollutant Emissions, tons/year																
Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e			
3.2 Site Preparation - 2013	0.01	0.01	0.07	0.00	0.01	0.00	0.00	0.00	0.00	10.89	10.89	0.00	0.00	10.90		
3.2 Site Preparation - 2014	0.01	0.01	0.13	0.00	0.03	0.00	0.00	0.00	0.00	20.50	20.50	0.00	0.00	20.53		
3.3 Grading - 2013	0.01	0.01	0.08	0.00	0.02	0.00	0.00	0.00	0.00	12.10	12.10	0.00	0.00	12.11		
3.3 Grading - 2014	0.01	0.01	0.14	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81		
3.4 Building Construction - 2013	0.04	0.24	0.38	0.00	0.06	0.01	0.00	0.01	0.00	68.72	68.72	0.00	0.00	68.78		
3.4 Building Construction - 2014	0.08	0.41	0.68	0.00	0.11	0.01	0.00	0.01	0.00	130.65	130.65	0.00	0.00	130.76		
3.5 Paving - 2013	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08		
3.5 Paving - 2014	0.01	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.00	17.08	17.08	0.00	0.00	17.10		
3.6 Architectural Coating - 2013	0.02	0.03	0.27	0.00	0.05	0.00	0.00	0.00	0.00	40.52	40.52	0.00	0.00	40.57		
3.6 Architectural Coating - 2014	0.04	0.04	0.48	0.00	0.10	0.00	0.00	0.00	0.00	76.31	76.31	0.00	0.00	76.40		
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	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00

Source	Pollutant Emissions, lbs/day						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub> e
<b>Construction-Summer</b>							
2013	67.52	251.14	155.87	0.27	27.66	19.98	28423.78
2014	65.54	234.41	150.12	0.27	26.46	18.78	28357.85
<b>Construction-Winter</b>							
2013	67.59	251.44	155.37	0.27	27.66	19.99	28258.08
2014	65.61	234.67	149.54	0.27	26.46	18.78	28224.55

Summary table only showing maximum of summer and winter emission rates

**Table J: Short-Term Regional Construction Emissions**

Source	Pollutant Emissions, lbs/day						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub> e
2013	68	250	160	0.27	28	20	28,000
2014	66	230	150	0.27	26	19	28,000
Peak Daily Construction	68	250	160	0.27	28	20	28,000
SCAQMD Thresholds	75	100	550	150	55	No	
Significant?	No	Yes	No	No	No	Threshold	

Construction Phase	Onsite Pollutant Emissions, lbs/day						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive	Exhaust	CO <sub>2</sub> e
3.2 Site Preparation - 2013	9.9	79.99	45.35	0.07	8.13	3.93	4.47
3.2 Site Preparation - 2014	9.37	74.88	43.05	0.07	8.13	3.61	4.47
3.3 Grading - 2013	11.85	97.47	52.85	0.1	3	4.59	4.59
3.3 Grading - 2014	11.22	90.65	50.83	0.1	3	4.18	4.18
3.4 Building Construction - 2013	4.4	32.65	21.27	0.04	0	2.09	0
3.4 Building Construction - 2014	4.04	30.13	21.1	0.04	0	1.85	0
3.5 Paving - 2013	5.53	33.81	20.89	0.03	0	2.93	0
3.5 Paving - 2014	5.2	32.09	20.7	0.03	0	2.74	0
3.6 Architectural Coating - 2013	34.54	2.96	1.94	0	0	0.27	0
3.6 Architectural Coating - 2014	34.5	2.77	1.92	0	0	0.24	0
Max daily	34.54	97.47	52.85	0.1	12.06	8.4	10856.66
							10878.9

Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Offsite Pollutant Emissions, lbs/day					
							PM <sub>2.5</sub>	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
3.2 Site Preparation - 2013	0.11	0.11	1.16	0.00	0.23	0.01	0.00	0.01	0.00	193.08	0.00	0.01
3.2 Site Preparation - 2014	0.10	0.10	1.07	0.00	0.23	0.01	0.00	0.01	0.00	189.72	0.00	0.01
3.3 Grading - 2013	0.12	0.13	1.29	0	0.26	0.01	0	0.01	0	214.53	0	0.01
3.3 Grading - 2014	0.11	0.12	1.19	0	0.26	0.01	0	0.01	0	210.8	0	0.01
3.4 Building Construction - 2013	0.67	3.8	5.85	0.02	0.96	0.15	0.01	0.13	0	1186.93	0	0.06
3.4 Building Construction - 2014	0.61	3.45	5.37	0.02	0.96	0.13	0.01	0.12	0	1177.09	0	0.05
3.5 Paving - 2013	0.09	0.1	0.97	0	0.2	0.01	0	0.01	0	160.9	0	0.01
3.5 Paving - 2014	0.08	0.09	0.89	0	0.2	0.01	0	0.01	0	158.1	0	0.01
3.6 Architectural Coating - 2013	0.4	0.42	4.32	0.01	0.87	0.03	0.01	0.03	0	718.67	0	0.04
3.6 Architectural Coating - 2014	0.37	0.39	3.98	0.01	0.87	0.03	0.01	0.03	0	706.19	0	0.04
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
Number of days in site preparation phase: 370										370		

Summary table only showing maximum of summer and winter emission rates

Table K: Short-Term Regional Construction Emissions

Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Total Regional Pollutant Emissions, lbs/day						CO <sub>2</sub> e
					Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	Fugitive PM <sub>5</sub>	Exhaust PM <sub>5</sub>	
Site Preparation	10	80	47	0.07	8.4	3.9	4.5	4.5	3.9	3.9	8,210
Grading	12	98	54	0.1	3.3	4.6	1.5	4.6	11,094		
Building Construction	5.1	36	27	0.06	0.96	2.2	0.01	2.2	5,030		
Paving	5.6	34	22	0.03	0.2	2.9	0	2.9	3,089		
Architectural Coating	35	3.4	6.3	0.01	0.87	0.3	0.01	0.3	1,002		
SCAQMD Thresholds	75	100	550	150	150	55	No	No	No	Threshold	
Significant Emissions?	No	Yes	No	No	No	No	No	No	No	No	

Source: LSA Associates, Inc., June 2013.

CO = carbon monoxide

CO<sub>2</sub>e = carbon dioxide equivalent

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

ROG = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

SO<sub>x</sub> = sulfur oxides

Table M: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions, lbs/day				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Site Preparation	8,191	0.9	0	8,210	
Grading	11,071	1.1	0	11,094	
Building Construction	5,020	0.45	0	5,030	
Architectural Coating	3,079	0.51	0	3,089	
Paving	1,000	0.08	0	1,002	
<b>Total Daily Emissions</b>	<b>28,361</b>	<b>3.0</b>	<b>0</b>	<b>28,424</b>	

Source: LSA Associates, Inc., June 2013.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

lbs/day = pounds per day

N<sub>2</sub>O = nitrous oxide

Construction-Annual	Pollutant Emissions, tons/year				
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>
2013	4.45	16.57	10.27	0.02	3.22
2014	8.29	29.65	18.95	0.03	4.05
<b>Total</b>	<b>12.74</b>	<b>46.22</b>	<b>29.22</b>	<b>0.05</b>	<b>7.27</b>
					4,855
					4938.6

Source: LSA Associates, Inc., June 2013.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

Table N: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions, m <sup>3</sup> /yr				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Site Preparation	938	0.1	0	940	
Grading	1,268	0.12	0	1,271	
Building Construction	570	0.04	0	571	
Architectural Coating	570	0.04	0	571	
Paving	109	0	0	109	

Source: LSA Associates, Inc., June 2013.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

lbs/day = pounds per day

N<sub>2</sub>O = nitrous oxide

Construction Phase	Onsite Pollutant Emissions, tons/year										Onsite Pollutant Emissions, metric tons/year					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive	Exhaust	Fugitive	Exhaust	PM <sub>2.5</sub>	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
3.2 Site Preparation - 2013	0.65	5.28	2.99	0.01	1.56	0.26	0.86	0.26	0	478.72	478.72	0.05	0	479.84		
3.2 Site Preparation - 2014	1.19	9.47	5.44	0.01	1.56	0.46	0.86	0.46	0	917.56	917.56	0.1	0	919.58		
3.3 Grading - 2013	0.78	6.43	3.49	0.01	0.58	0.3	0.29	0.3	0	649.86	649.86	0.06	0	651.19		
3.3 Grading - 2014	1.42	11.46	6.43	0.01	0.58	0.53	0.29	0.53	0	1245.56	1245.56	0.12	0	1247.98		
3.4 Building Construction - 2013	0.29	2.15	1.4	0	0	0.14	0	0.14	0	229.45	229.45	0.02	0	229.95		
3.4 Building Construction - 2014	0.51	3.81	2.67	0.01	0	0.23	0	0.23	0	439.79	439.79	0.04	0	440.66		
3.5 Paving - 2013	0.36	2.23	1.38	0	0	0.19	0	0.19	0	174.64	174.64	0.05	0	175.27		
3.5 Paving - 2014	0.66	4.06	2.62	0	0	0.35	0	0.35	0	334.73	334.73	0.05	0	335.86		
3.6 Architectural Coating - 2013	2.28	0.2	0.13	0	0	0.02	0	0.02	0	16.83	16.83	0	0	16.89		
3.6 Architectural Coating - 2014	4.37	0.35	0.24	0	0	0.03	0	0.03	0	32.26	32.26	0	0	32.36		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Max daily	4.37	11.46	6.43	0.01	2.02	0	1.32	0	0	1245.56	1245.56	0.12	0	1247.98		
Offsite Pollutant Emissions, tons/year																
Construction Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Fugitive	Exhaust	Fugitive	Exhaust	PM <sub>2.5</sub>	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
3.2 Site Preparation - 2013	0.01	0.01	0.07	0.00	0.01	0.00	0.00	0.00	0	10.89	10.89	0.00	0.00	10.90		
3.2 Site Preparation - 2014	0.01	0.01	0.13	0.00	0.03	0.00	0.00	0.00	0	20.50	20.50	0.00	0.00	20.53		
3.3 Grading - 2013	0.01	0.01	0.08	0.00	0.02	0.00	0.00	0.00	0	12.10	12.10	0.00	0.00	12.11		
3.3 Grading - 2014	0.01	0.01	0.14	0.00	0.03	0.00	0.00	0.00	0	22.78	22.78	0.00	0.00	22.81		
3.4 Building Construction - 2013	0.04	0.24	0.38	0.00	0.06	0.01	0.00	0.01	0	68.72	68.72	0.00	0.00	68.78		
3.4 Building Construction - 2014	0.08	0.41	0.68	0.00	0.11	0.01	0.00	0.01	0	130.65	130.65	0.00	0.00	130.76		
3.5 Paving - 2013	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0	9.07	9.07	0.00	0.00	9.08		
3.5 Paving - 2014	0.01	0.01	0.11	0.00	0.02	0.00	0.00	0.00	0	17.08	17.08	0.00	0.00	17.10		
3.6 Architectural Coating - 2013	0.02	0.03	0.27	0.00	0.05	0.00	0.00	0.00	0	40.52	40.52	0.00	0.00	40.57		
3.6 Architectural Coating - 2014	0.04	0.04	0.48	0.00	0.10	0.00	0.00	0.00	0	76.31	76.31	0.00	0.00	76.40		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00		

**Banning Housing**  
South Coast Air Basin, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	932	Dwelling Unit

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)		Utility Company	Southern California Edison
Climate Zone	10		2.2		

Precipitation Freq (Days)

31

### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - .

Off-road Equipment -

Grading - .

Trips and VMT - .

Vehicle Trips - Trip rate

Woodstoves - .

Construction Off-road Equipment 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					
2013	67.52	251.14	155.87	0.27	27.26	14.00	41.26	13.28	13.99	27.27	0.00	28,360.61	0.00	3.01	0.00	28,423.78
2014	65.54	234.41	150.12	0.27	27.26	12.80	40.05	13.28	12.79	26.06	0.00	28,328.41	0.00	2.83	0.00	28,387.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### 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					
2013	67.52	251.14	155.87	0.27	13.66	14.00	27.66	5.99	13.99	19.98	0.00	28,360.61	0.00	3.01	0.00	28,423.78
2014	65.54	234.41	150.12	0.27	13.66	12.80	26.46	5.99	12.79	18.78	0.00	28,328.41	0.00	2.83	0.00	28,387.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 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	41.15	0.93	79.38	0.00	0.00	1.67	0.00	1.66	0.00	19,876.51	0.00	0.52	0.35	19,999.78		
Energy	1.12	9.54	4.06	0.08	0.00	0.77	0.00	0.77	0.00	12,173.77	0.00	0.23	0.22		12,247.85	
Mobile	31.84	73.73	311.06	0.57	61.33	3.44	64.77	0.87	2.94	3.80	56,498.86	0.00	2.16		56,544.32	
Total	74.11	84.20	394.50	0.63	61.33	3.44	67.21	0.87	2.94	6.23	0.00	85,549.24	0.00	2.91	0.58	85,701.95

#### 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	41.15	0.93	79.38	0.00		0.00	1.67		0.00	1.66	0.00	18,876.61		0.52	0.36	19,999.76
Energy	1.12	9.54	4.08	0.08		0.00	0.77		0.00	0.77		121,173.77		0.23	0.22	12,247.85
Mobile	31.84	73.73	311.06	0.57	61.33	3.44	64.77	0.87	2.94	3.80		50,498.86		2.16		56,544.32
Total	74.11	84.26	394.50	0.63	61.33	3.44	67.21	0.87	2.94	6.23	0.00	88,549.24		2.91	0.58	88,791.95

### 3.0 Construction Detail

#### 3.1 Mitigation Measures Construction

Water Exposed Area

#### 3.2 Site Preparation - 2013

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.90	79.99	45.35	0.07		3.93	3.93		3.93	3.93		7,997.69		0.89		8,016.38
Total	9.90	79.99	45.35	0.07	18.07	3.93	22.00	9.93	3.93	13.66		7,997.69		0.89		8,016.38

##### 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	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	0.00
Worker	0.10	0.10	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		193.08		0.01		193.31
Total	0.10	0.10	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		193.08		0.01		193.31

##### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.13	0.00	8.13	4.47	0.00	4.47						0.00
Off-Road	9.90	79.99	45.35	0.07		3.93	3.93		3.93	3.93	0.00	7,997.69		0.89		8,016.38
Total	9.90	79.99	45.35	0.07	8.13	3.93	12.06	4.47	3.93	8.40	0.00	7,997.69		0.89		8,016.38

##### 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	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	0.00
Worker	0.10	0.10	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		193.08		0.01		193.31
Total	0.10	0.10	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		193.08		0.01		193.31

#### 3.2 Site Preparation - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61	7,997.69		0.84			8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54	7,997.69		0.84			8,015.31

#### 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	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	0.00
Worker	0.09	0.09	1.07	0.00	0.23	0.01	0.24	0.00	0.01	0.01	169.72		0.01			169.94
Total	0.09	0.09	1.07	0.00	0.23	0.01	0.24	0.00	0.01	0.01	169.72		0.01			169.94

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.13	0.00	8.13	4.47	0.00	4.47						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61	7,997.69		0.84			8,015.31
Total	9.37	74.88	43.05	0.07	8.13	3.61	11.74	4.47	3.61	8.08	0.00	7,997.69		0.84		8,015.31

#### 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	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	0.00
Worker	0.09	0.09	1.07	0.00	0.23	0.01	0.24	0.00	0.01	0.01	169.72		0.01			169.94
Total	0.09	0.09	1.07	0.00	0.23	0.01	0.24	0.00	0.01	0.01	169.72		0.01			169.94

### 3.3 Grading - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.66	0.00	6.66	3.31	0.00	3.31						0.00
Off-Road	11.65	87.47	52.85	0.10		4.59	4.59		4.59	4.59	10,856.66		1.06			10,878.90
Total	11.65	97.47	52.85	0.10	6.66	4.59	11.25	3.31	4.59	7.90	10,856.66		1.06			10,878.90

#### 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	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	0.00
Worker	0.11	0.11	1.29	0.00	0.26	0.01	0.27	0.00	0.01	0.01	214.53		0.01			214.79
Total	0.11	0.11	1.29	0.00	0.26	0.01	0.27	0.00	0.01	0.01	214.53		0.01			214.79

#### Mitigated Construction On-Site

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

Category	lb/day										lb/day			
	Fugitive Dust	3.00	0.00	3.00	1.49	0.00	1.49							0.00
Off-Road	11.85	87.47	52.85	0.10	4.59	4.59		4.59	4.59	0.00	10,856.65		1.06	10,878.90
Total	11.85	97.47	52.85	0.10	3.00	4.59	7.59	1.49	4.59	6.08	0.00	10,856.65	1.06	10,878.90

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	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	0.00	0.00
Worker	0.11	0.11	1.29	0.00	0.26	0.01	0.27	0.00	0.01	0.01		214.53		0.01	214.79	214.79
Total	0.11	0.11	1.29	0.00	0.26	0.01	0.27	0.00	0.01	0.01		214.53		0.01	214.79	214.79

#### **3.3 Grading - 2014**

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					6.66	0.00	6.66	3.31	0.00	3.31			0.00	0.00	0.00	0.00
Off-Road	11.22	80.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	6.66	4.18	10.84	3.31	4.18	7.49		10,856.65		1.00		10,877.72

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	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	0.00	0.00
Worker	0.10	0.10	1.19	0.00	0.26	0.01	0.27	0.00	0.01	0.01		210.80		0.01	211.05	211.05
Total	0.10	0.10	1.19	0.00	0.26	0.01	0.27	0.00	0.01	0.01		210.80		0.01	211.05	211.05

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
	lb/day										lb/day						
Fugitive Dust					3.00	0.00	3.00	1.49	0.00	1.49			0.00	0.00	0.00	0.00	
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		0.00	10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	3.00	4.18	7.18	1.49	4.18	5.67	0.00	10,856.65		1.00		10,877.72	

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	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	0.00	0.00
Worker	0.10	0.10	1.19	0.00	0.26	0.01	0.27	0.00	0.01	0.01		210.80		0.01	211.05	211.05
Total	0.10	0.10	1.19	0.00	0.26	0.01	0.27	0.00	0.01	0.01		210.80		0.01	211.05	211.05

#### **3.4 Building Construction - 2013**

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09		3,833.33		0.39		3,841.58
Total	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09		3,833.33		0.39		3,841.58

#### 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	0.00	0.00	0.00	0.00
Vendor	0.30	3.27	1.98	0.01	0.18	0.11	0.30	0.00	0.10	0.11	543.35	0.01	543.36	0.01	543.36	543.36
Worker	0.33	0.33	3.87	0.01	0.78	0.03	0.81	0.01	0.02	0.03	643.58	0.04	643.58	0.04	643.58	643.58
Total	0.63	3.60	5.85	0.02	0.96	0.14	1.11	0.01	0.12	0.14	1,186.93	0.05	1,186.93	0.05	1,186.93	1,186.93

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09	0.00	3,833.33		0.39		3,841.58
Total	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09	0.00	3,833.33		0.39		3,841.58

#### 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	0.00	0.00	0.00	0.00
Vendor	0.30	3.27	1.98	0.01	0.18	0.11	0.30	0.00	0.10	0.11	543.35	0.01	543.36	0.01	543.36	543.36
Worker	0.33	0.33	3.87	0.01	0.78	0.03	0.81	0.01	0.02	0.03	643.58	0.04	643.58	0.04	643.58	643.58
Total	0.63	3.60	5.85	0.02	0.96	0.14	1.11	0.01	0.12	0.14	1,186.93	0.05	1,186.93	0.05	1,186.93	1,186.93

#### 3.4 Building Construction - 2014

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.04	30.13	21.10	0.04		1.85	1.85		1.85	1.85	0.00	3,833.33		0.38		3,840.91
Total	4.04	30.13	21.10	0.04		1.85	1.85		1.85	1.85	0.00	3,833.33		0.38		3,840.91

##### 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	0.00	0.00	0.00	0.00
Vendor	0.27	2.98	1.81	0.01	0.18	0.10	0.29	0.00	0.09	0.10	544.68	0.01	544.69	0.01	544.69	544.69
Worker	0.31	0.30	3.56	0.01	0.78	0.03	0.81	0.01	0.02	0.04	632.41	0.04	632.41	0.04	632.41	632.41
Total	0.58	3.28	5.37	0.02	0.98	0.13	1.10	0.01	0.11	0.14	1,177.09	0.05	1,177.09	0.05	1,177.09	1,177.09

##### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.04	30.13	21.10	0.04		1.85	1.85		1.85	1.85	0.00	3,833.33		0.36		3,840.91
Total	4.04	30.13	21.10	0.04		1.85	1.85		1.85	1.85	0.00	3,833.33		0.36		3,840.91

##### 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					
Proj-S																

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.27	2.98	1.81	0.01	0.18	0.10	0.29	0.00	0.09	0.10	544.68	0.01	0.01	544.96	
Worker	0.31	0.30	3.58	0.01	0.78	0.03	0.81	0.01	0.02	0.04	632.41	0.04	0.04	633.14	
Total	0.58	3.28	5.37	0.02	0.96	0.13	1.10	0.01	0.11	0.14	1,177.09	0.05	0.05	1,178.10	

### 3.5 Paving - 2013

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	2,917.64		0.50		2,928.05	
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	2,917.64		0.50		2,928.05	

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	
Worker	0.08	0.08	0.97	0.00	0.20	0.01	0.20	0.00	0.01	0.01	160.90		0.01		161.09	
Total	0.08	0.08	0.97	0.00	0.20	0.01	0.20	0.00	0.01	0.01	160.90		0.01		161.09	

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	
Worker	0.08	0.08	0.97	0.00	0.20	0.01	0.20	0.00	0.01	0.01	160.90		0.01		161.09	
Total	0.08	0.08	0.97	0.00	0.20	0.01	0.20	0.00	0.01	0.01	160.90		0.01		161.09	

### 3.5 Paving - 2014

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	2,917.65		0.47		2,927.48	
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	2,917.65		0.47		2,927.48	

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	
Worker	0.08	0.08	0.89	0.00	0.20	0.01	0.20	0.00	0.01	0.01	158.10		0.01		158.29	
Total	0.08	0.08	0.89	0.00	0.20	0.01	0.20	0.00	0.01	0.01	158.10		0.01		158.29	

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day										lb/day						
Off-Road	5.20	32.08	20.70	0.03			2.74	2.74		2.74	0.00	2,917.65		0.47		2,927.48
Paving	0.00						0.00	0.00		0.00	0.00					0.00
Total	5.20	32.08	20.70	0.03			2.74	2.74		2.74	0.00	2,917.65		0.47		2,927.48

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.08	0.08	0.89	0.00	0.20	0.01	0.20	0.00	0.01	0.01		158.10		0.01		158.29
Total	0.08	0.08	0.89	0.00	0.20	0.01	0.20	0.00	0.01	0.01		158.10		0.01		158.29

#### **3.6 Architectural Coating - 2013**

##### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day										lb/day						
Archit. Coating	34.05						0.00	0.00		0.00	0.00					0.00
Off-Road	0.49	2.95	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	34.54	2.95	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

##### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.37	0.37	4.32	0.01	0.87	0.03	0.90	0.01	0.03	0.04		718.67		0.04		719.55
Total	0.37	0.37	4.32	0.01	0.87	0.03	0.90	0.01	0.03	0.04		718.67		0.04		719.55

##### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day										lb/day						
Archit. Coating	34.05						0.00	0.00		0.00	0.00					0.00
Off-Road	0.49	2.95	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	34.54	2.95	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

##### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.37	0.37	4.32	0.01	0.87	0.03	0.90	0.01	0.03	0.04		718.67		0.04		719.55
Total	0.37	0.37	4.32	0.01	0.87	0.03	0.90	0.01	0.03	0.04		718.67		0.04		719.55

#### **3.6 Architectural Coating - 2014**

##### 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	34.05						0.00	0.00		0.00	0.00					0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	34.50	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

#### 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	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	0.00	0.00
Worker	0.35	0.34	3.98	0.01	0.87	0.03	0.90	0.01	0.03	0.04			706.19		0.04	707.01
Total	0.35	0.34	3.98	0.01	0.87	0.03	0.90	0.01	0.03	0.04			706.19		0.04	707.01

#### 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	34.05						0.00	0.00		0.00	0.00					0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	34.50	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

#### 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	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	0.00	0.00
Worker	0.35	0.34	3.98	0.01	0.87	0.03	0.90	0.01	0.03	0.04			706.19		0.04	707.01
Total	0.35	0.34	3.98	0.01	0.87	0.03	0.90	0.01	0.03	0.04			706.19		0.04	707.01

## 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	31.84	73.73	311.06	0.57	61.33	3.44	64.77	0.87	2.94	3.80		56,498.66		2.16		56,544.32
Unmitigated	31.84	73.73	311.06	0.57	61.33	3.44	64.77	0.87	2.94	3.80		56,498.66		2.16		56,544.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Single Family Housing	6,197.80	6,524.00	5,675.88	17,523,086		17,523,086	
Total	6,197.80	6,524.00	5,675.88	17,523,086		17,523,086	

### 4.3 Trip Type Information

Proj-S	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
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60

## 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
lb/day																
NaturalGas Mitigated	1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85
NaturalGas Unmitigated	1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85
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
kBTU																	
Single Family Housing	103477	1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85
Total		1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85

#### 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
kBTU																	
Single Family Housing	103477	1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85
Total		1.12	9.54	4.06	0.06	0.00	0.77	0.77	0.00	0.77	0.77	12,173.77		0.23	0.22		12,247.85

## 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	
lb/day																	
Mitigated	41.15	0.93	79.38	0.00	0.00	1.67	1.67	0.00	1.66	1.66	0.00	19,876.61		0.52	0.36		19,999.78
Unmitigated	41.15	0.93	79.38	0.00	0.00	1.67	1.67	0.00	1.66	1.66	0.00	19,876.61		0.52	0.36		19,999.78
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	
lb/day																	
Architectural Coating	3.59				0.00	0.00		0.00	0.00							0.00	
Consumer Products	33.22				0.00	0.00		0.00	0.00							0.00	
Hearth	1.61	0.00	0.10	0.00	0.00	1.25		0.00	1.24		0.00	19,735.47		0.36	0.36		19,855.58
Landscaping	2.54	0.93	79.29	0.00	0.00	0.42		0.00	0.42		0.00	140.13		0.15			143.19
Total	41.16	0.93	79.39	0.00	0.00	1.67		0.00	1.66		0.00	19,876.60		0.53	0.36		19,999.77

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	3.59					0.00	0.00			0.00						0.00
Consumer Products	53.22					0.00	0.00			0.00						0.00
Hearth	1.81	0.00	0.10	0.00		0.00	1.25		0.00	1.24	0.00	19,736.47		0.38	0.36	19,856.58
Landscaping	2.54	0.93	79.29	0.00		0.00	0.42		0.00	0.42		140.13		0.15		143.19
Total	41.16	0.93	79.39	0.00		0.00	1.67		0.00	1.66	0.00	19,876.60		0.53	0.36	19,999.77

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Vegetation

**Banning Housing**  
South Coast Air Basin, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	932	Dwelling Unit

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	Utility Company	Southern California Edison
Climate Zone	10	2.2	Precipitation Freq (Days)	

### 1.3 User Entered Comments

Project Characteristics -	31
Land Use -	
Construction Phase -	
Off-road Equipment -	
Grading -	
Trips and VMT -	
Vehicle Trips - Trip rate	
Woodstoves -	
Construction Off-road Equipment Mitigation -	

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	lb/day								lb/day							
2013	67.59	251.44	155.37	0.27	27.26	14.01	41.26	13.28	13.99	27.27	0.00	28,195.00	0.00	3.00	0.00	28,258.08
2014	65.61	234.67	149.64	0.27	27.29	12.80	40.06	13.28	12.79	26.05	0.00	28,165.21	0.00	2.83	0.00	28,224.55
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	lb/day								lb/day							
2013	67.59	251.44	155.37	0.27	13.86	14.01	27.66	5.99	13.99	19.99	0.00	28,195.00	0.00	3.00	0.00	28,258.08
2014	65.61	234.67	149.64	0.27	13.86	12.80	26.46	6.99	12.79	18.78	0.00	28,165.21	0.00	2.83	0.00	28,224.55
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 2.2 Overall Operational

#### Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
	lb/day								lb/day								
Area	41.15	0.93	79.38	0.00			0.00	1.67		0.00	1.66	0.00	19,876.61		0.52	0.38	19,999.78
Energy	1.12	9.54	4.06	0.06			0.00	0.77		0.00	0.77		12,173.77		0.23	0.22	12,247.85
Mobile	32.72	79.64	302.80	0.53	61.33	3.47	64.80	0.87	2.95	3.83		52,597.68		2.18		52,643.49	
Total	74.99	90.11	386.34	0.59	61.33	3.47	67.24	0.87	2.95	6.26	0.00	84,648.06		2.93	0.58	84,891.12	

#### 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	41.16	0.93	78.38	0.00		0.00	1.67		0.00	1.56	0.00	19,876.81		0.52	0.36	19,999.78
Energy	1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77		12,173.77		0.23	0.22	12,247.65
Mobile	32.72	79.64	302.90	0.53	61.33	3.47	64.80	0.87	2.98	3.83		52,597.68		2.16		52,643.49
Total	74.99	90.11	386.34	0.59	61.33	3.47	67.24	0.87	2.96	6.26	0.00	84,648.06		2.93	0.50	84,691.12

### 3.0 Construction Detail

#### 3.1 Mitigation Measures Construction

Water Exposed Area

#### 3.2 Site Preparation - 2013

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.90	79.99	45.35	0.07		3.93	3.93		3.93	3.93		7,997.69		0.89		8,016.38
Total	9.90	79.99	45.35	0.07	18.07	3.93	22.00	9.93	3.93	13.86		7,997.69		0.89		8,016.38

##### 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	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	0.00
Worker	0.11	0.11	1.08	0.00	0.23	0.01	0.24	0.00	0.01	0.01		176.92		0.01		177.14
Total	0.11	0.11	1.08	0.00	0.23	0.01	0.24	0.00	0.01	0.01		176.92		0.01		177.14

##### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.13	0.00	8.13	4.47	0.00	4.47						0.00
Off-Road	9.90	79.99	45.35	0.07		3.93	3.93		3.93	3.93	0.00	7,997.69		0.89		8,016.38
Total	9.90	79.99	45.35	0.07	8.13	3.93	12.06	4.47	3.93	8.40	0.00	7,997.69		0.89		8,016.38

##### 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	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	0.00
Worker	0.11	0.11	1.08	0.00	0.23	0.01	0.24	0.00	0.01	0.01		176.92		0.01		177.14
Total	0.11	0.11	1.08	0.00	0.23	0.01	0.24	0.00	0.01	0.01		176.92		0.01		177.14

#### 3.2 Site Preparation - 2014

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61		7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54		7,997.69		0.84		8,015.31

### 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		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		0.00
Worker	0.10	0.10	1.00	0.00	0.23	0.01	0.24	0.00	0.01	0.01		173.82		0.01		174.03
Total	0.10	0.10	1.00	0.00	0.23	0.01	0.24	0.00	0.01	0.01		173.82		0.01		174.03

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.13	0.00	8.13	4.47	0.00	4.47						0.00	
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61		0.00	7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	8.13	3.61	11.74	4.47	3.61	8.08		0.00	7,997.69		0.84		8,015.31

### 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		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		0.00
Worker	0.10	0.10	1.00	0.00	0.23	0.01	0.24	0.00	0.01	0.01		173.82		0.01		174.03
Total	0.10	0.10	1.00	0.00	0.23	0.01	0.24	0.00	0.01	0.01		173.82		0.01		174.03

### 3.3 Grading - 2013

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.66	0.00	6.66	3.31	0.00	3.31						0.00
Off-Road	11.85	97.47	52.85	0.10		4.59	4.59		4.59	4.59		10,856.66		1.06		10,878.90
Total	11.85	97.47	52.85	0.10	6.66	4.59	11.25	3.31	4.59	7.90		10,856.66		1.06		10,878.90

### 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		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		0.00
Worker	0.12	0.13	1.21	0.00	0.26	0.01	0.27	0.00	0.01	0.01		196.57		0.01		196.82
Total	0.12	0.13	1.21	0.00	0.26	0.01	0.27	0.00	0.01	0.01		196.57		0.01		196.82

### 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							
	3.00	0.00	3.00	1.49	0.00	1.49										
Fugitive Dust																0.00
Off-Road	11.85	87.47	52.85	0.10		4.59	4.59		4.59	4.59	0.00	10,856.65		1.06		10,878.90
Total	11.85	97.47	52.85	0.10	3.00	4.59	7.59	1.49	4.59	6.08	0.00	10,856.65		1.06		10,878.90

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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		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		0.00
Worker	0.12	0.13	1.21	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.57		0.01		193.62
Total	0.12	0.13	1.21	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.57		0.01		193.62

#### 3.3 Grading - 2014

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day								lb/day							
Fugitive Dust					6.68	0.00	6.68	3.31	0.00	3.31			0.00	0.00		0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	6.68	4.18	10.84	3.31	4.18	7.49		10,856.65		1.00		10,877.72

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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		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		0.00
Worker	0.11	0.12	1.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.13		0.01		193.36
Total	0.11	0.12	1.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.13		0.01		193.36

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day								lb/day							
Fugitive Dust					3.00	0.00	3.00	1.49	0.00	1.49			0.00	0.00		0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	3.00	4.18	7.18	1.49	4.18	5.67	0.00	10,856.65		1.00		10,877.72

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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		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		0.00
Worker	0.11	0.12	1.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.13		0.01		193.36
Total	0.11	0.12	1.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.13		0.01		193.36

#### 3.4 Building Construction - 2013

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day								lb/day							
Off-Road	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09		3,833.33		0.39		3,841.58
Total	4.40	32.65	21.27	0.04		2.09	2.09		2.09	2.09		3,833.33		0.39		3,841.58

#### 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	0.00	0.00	0.00	0.00	0.00	
Vendor	0.31	3.42	2.23	0.01	0.18	0.12	0.30	0.00	0.11	0.11	0.00	539.32	0.02	539.65	0.02	0.02	539.65	
Worker	0.36	0.38	3.62	0.01	0.78	0.03	0.81	0.01	0.02	0.03	0.00	589.72	0.04	590.47	0.04	0.04	590.47	
Total	0.67	3.80	5.85	0.02	0.96	0.15	1.11	0.01	0.13	0.14	0.00	1,129.04	0.06	1,130.12	0.06	0.06	1,130.12	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day														lb/day			
Off-Road	4.40	32.65	21.27	0.04	0.00	2.09	2.09	0.00	2.09	2.09	0.00	3,833.33	0.39	3,841.58	0.39	0.39	3,841.58	
Total	4.40	32.65	21.27	0.04	0.00	2.09	2.09	0.00	2.09	2.09	0.00	3,833.33	0.39	3,841.58	0.39	0.39	3,841.58	

#### 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	0.00	0.00	0.00	0.00	0.00	
Vendor	0.31	3.42	2.23	0.01	0.18	0.12	0.30	0.00	0.11	0.11	0.00	539.32	0.02	539.65	0.02	0.02	539.65	
Worker	0.36	0.38	3.62	0.01	0.78	0.03	0.81	0.01	0.02	0.03	0.00	589.72	0.04	590.47	0.04	0.04	590.47	
Total	0.67	3.80	5.85	0.02	0.96	0.15	1.11	0.01	0.13	0.14	0.00	1,129.04	0.06	1,130.12	0.06	0.06	1,130.12	

#### 3.4 Building Construction - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day														lb/day			
Off-Road	4.04	30.13	21.10	0.04	0.00	1.85	1.85	0.00	1.85	1.85	0.00	3,833.33	0.36	3,840.91	0.36	0.36	3,840.91	
Total	4.04	30.13	21.10	0.04	0.00	1.85	1.85	0.00	1.85	1.85	0.00	3,833.33	0.36	3,840.91	0.36	0.36	3,840.91	

#### 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	0.00	0.00	0.00	0.00	0.00	
Vendor	0.28	3.10	2.05	0.01	0.18	0.10	0.29	0.00	0.10	0.10	0.00	540.55	0.01	540.64	0.01	0.01	540.64	
Worker	0.33	0.35	3.32	0.01	0.78	0.03	0.81	0.01	0.02	0.04	0.00	579.36	0.03	580.08	0.03	0.03	580.08	
Total	0.61	3.45	5.37	0.02	0.96	0.13	1.10	0.01	0.12	0.14	0.00	1,119.93	0.04	1,120.92	0.04	0.04	1,120.92	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day														lb/day			
Off-Road	4.04	30.13	21.10	0.04	0.00	1.85	1.85	0.00	1.85	1.85	0.00	3,833.33	0.36	3,840.91	0.36	0.36	3,840.91	
Total	4.04	30.13	21.10	0.04	0.00	1.85	1.85	0.00	1.85	1.85	0.00	3,833.33	0.36	3,840.91	0.36	0.36	3,840.91	

#### 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			
Proj-W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.28	3.10	2.05	0.01	0.18	0.10	0.29	0.00	0.10	0.10	540.55	0.01	540.84	
Worker	0.33	0.35	3.32	0.01	0.78	0.03	0.81	0.01	0.02	0.04	579.38	0.03	580.08	
Total	0.61	3.45	5.37	0.02	0.95	0.13	1.10	0.01	0.12	0.14	1,119.93	0.04	1,120.92	

### 3.5 Paving - 2013

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day								lb/day							
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	2,917.64		0.50		2,928.05	
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	2,917.64		0.50		2,928.05	

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- 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	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	0.00	0.00	0.00	0.00
Worker	0.09	0.10	0.90	0.00	0.20	0.01	0.20	0.00	0.01	0.01	147.43		0.01		147.62	
Total	0.09	0.10	0.90	0.00	0.20	0.01	0.20	0.00	0.01	0.01	147.43		0.01		147.62	

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day								lb/day							
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- 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	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	0.00	0.00	0.00	0.00
Worker	0.09	0.10	0.90	0.00	0.20	0.01	0.20	0.00	0.01	0.01	147.43		0.01		147.62	
Total	0.09	0.10	0.90	0.00	0.20	0.01	0.20	0.00	0.01	0.01	147.43		0.01		147.62	

### 3.5 Paving - 2014

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day								lb/day							
Off-Road	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	2,917.65		0.47		2,927.48	
Paving	0.00					0.00	0.00		0.00	0.00					0.00	
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	2,917.65		0.47		2,927.48	

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- 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	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	0.00	0.00	0.00	0.00
Worker	0.08	0.09	0.83	0.00	0.20	0.01	0.20	0.00	0.01	0.01	144.85		0.01		145.02	
Total	0.08	0.09	0.83	0.00	0.20	0.01	0.20	0.00	0.01	0.01	144.85		0.01		145.02	

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day										lb/day							
Off-Road	5.20	32.09	20.70	0.03			2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48
Paving	0.00						0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03			2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.08	0.09	0.83	0.00	0.20	0.01	0.20	0.00	0.01	0.01	144.85		0.01		0.01	145.02
Total	0.08	0.09	0.83	0.00	0.20	0.01	0.20	0.00	0.01	0.01	144.85		0.01		0.01	145.02

#### **3.6 Architectural Coating - 2013**

##### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day										lb/day							
Archit. Coating	34.05						0.00	0.00		0.00	0.00					0.00	
Off-Road	0.49	2.96	1.94	0.00			0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	34.54	2.96	1.94	0.00			0.27	0.27		0.27	0.27		281.19		0.04		282.10

##### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.40	0.42	4.04	0.01	0.87	0.03	0.90	0.01	0.03	0.04	658.52		0.04		0.04	659.36
Total	0.40	0.42	4.04	0.01	0.87	0.03	0.90	0.01	0.03	0.04	658.52		0.04		0.04	659.36

##### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day										lb/day							
Archit. Coating	34.05						0.00	0.00		0.00	0.00					0.00	
Off-Road	0.49	2.96	1.94	0.00			0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	34.54	2.96	1.94	0.00			0.27	0.27		0.27	0.27		281.19		0.04		282.10

##### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	0.00	0.00	0.00	0.00
Worker	0.40	0.42	4.04	0.01	0.87	0.03	0.90	0.01	0.03	0.04	658.52		0.04		0.04	659.36
Total	0.40	0.42	4.04	0.01	0.87	0.03	0.90	0.01	0.03	0.04	658.52		0.04		0.04	659.36

#### **3.6 Architectural Coating - 2014**

##### 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	34.05						0.00	0.00		0.00						0.00
Off-Road	0.45	2.77	1.92	0.00			0.24	0.24		0.24	0.24		281.19		0.04	282.03
Total	34.50	2.77	1.92	0.00			0.24	0.24		0.24	0.24		281.19		0.04	282.03

#### 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	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	0.00
Worker	0.37	0.39	3.71	0.01	0.87	0.03	0.90	0.01	0.03	0.04			646.98		0.04	647.76
Total	0.37	0.39	3.71	0.01	0.87	0.03	0.90	0.01	0.03	0.04			646.98		0.04	647.76

#### 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	34.05						0.00	0.00		0.00						0.00
Off-Road	0.45	2.77	1.92	0.00			0.24	0.24		0.24	0.24		281.19		0.04	282.03
Total	34.50	2.77	1.92	0.00			0.24	0.24		0.24	0.24		281.19		0.04	282.03

#### 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	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	0.00
Worker	0.37	0.39	3.71	0.01	0.87	0.03	0.90	0.01	0.03	0.04			646.98		0.04	647.76
Total	0.37	0.39	3.71	0.01	0.87	0.03	0.90	0.01	0.03	0.04			646.98		0.04	647.76

## 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	32.72	79.64	302.90	0.53	61.33	3.47	64.80	0.87	2.96	3.83		52,597.68		2.18		52,643.49
Unmitigated	32.72	79.64	302.90	0.53	61.33	3.47	64.80	0.87	2.96	3.83		52,597.68		2.18		52,643.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Single Family Housing	6,197.80	6,524.00	5,675.88	17,523,086	17,523,086
Total	6,197.80	6,524.00	5,675.88	17,523,086	17,523,086

### 4.3 Trip Type Information

	Miles	Trip %
Proj-W		

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
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60

## 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
<b>Category</b>										<b>lb/day</b>						
<b>NaturalGas Mitigated</b>										<b>lb/day</b>						
NaturalGas Mitigated	1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	
NaturalGas Unmitigated	1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	
<b>Total</b>	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
<b>Land Use</b>										<b>lb/day</b>							
<b>kBTU</b>										<b>lb/day</b>							
Single Family Housing	103477	1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	
<b>Total</b>		1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	

#### 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
<b>Land Use</b>										<b>lb/day</b>							
<b>kBTU</b>										<b>lb/day</b>							
Single Family Housing	103,477	1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	
<b>Total</b>		1.12	9.54	4.06	0.06		0.00	0.77		0.00	0.77	12,173.77		0.23	0.22	12,247.85	

## 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
<b>Category</b>										<b>lb/day</b>						
<b>Mitigated</b>										<b>lb/day</b>						
Mitigated	41.15	0.93	79.38	0.00		0.00	1.67		0.00	1.66	0.00	19,876.61		0.52	0.36	19,999.78
Unmitigated	41.15	0.93	79.38	0.00		0.00	1.67		0.00	1.66	0.00	19,876.61		0.52	0.36	19,999.78
<b>Total</b>	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
<b>SubCategory</b>										<b>lb/day</b>						
<b>Architectural Coating</b>										<b>lb/day</b>						
Architectural Coating	3.59						0.00	0.00		0.00	0.00					0.00
Consumer Products	33.22						0.00	0.00		0.00	0.00					0.00
Hearth	1.81	0.00	0.10	0.00		0.00	1.25		0.00	1.24	0.00	19,730.47		0.38	0.36	19,856.58
Landscaping	2.54	0.63	79.29	0.00		0.00	0.42		0.00	0.42		140.13		0.15		143.19
<b>Total</b>	41.16	0.93	79.39	0.00		0.00	1.67		0.00	1.66	0.00	19,876.60		0.53	0.35	19,999.77

**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	Inventory										Inventory						
Architectural Coating	3.59					0.00	0.00		0.00	0.00						0.00	
Consumer Products	33.22					0.00	0.00		0.00	0.00						0.00	
Hearth	1.81	0.00	0.10	0.00		0.00	1.25		0.00	1.24	0.00	19,736.47		0.38	0.36	19,856.58	
Landscaping	2.54	0.93	79.28	0.00		0.00	0.42		0.00	0.42		140.13		0.15		143.18	
<b>Total</b>	<b>41.16</b>	<b>0.93</b>	<b>79.39</b>	<b>0.00</b>		<b>0.00</b>	<b>1.67</b>		<b>0.00</b>	<b>1.66</b>	<b>0.00</b>	<b>19,876.60</b>		<b>0.53</b>	<b>0.36</b>	<b>19,999.77</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Vegetation**

**Banning Housing**  
South Coast Air Basin, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Use	Size	Metric
Single Family Housing	932	Dwelling Unit

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	Southern California Edison
Climate Zone	10	2.2	

Precipitation Freq (Days)

31

### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - .

Off-road Equipment -

Grading - .

Trips and VMT - .

Vehicle Trips - Trip rate

Woodstoves - .

Construction Off-road Equipment 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 Total	Bio: CO2	NBio: CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	4.45	16.57	10.27	0.02	4.91	0.92	5.83	2.56	0.92	3.49	0.00	1,690.81	1,690.81	0.18	0.00	1,694.58
2014	8.29	29.65	18.95	0.03	5.05	1.62	6.67	2.57	1.62	4.18	0.00	3,237.21	3,237.21	0.32	0.00	3,244.02
Total	12.74	46.22	29.22	0.05	9.96	2.54	12.50	5.13	2.54	7.67	0.00	4,928.02	4,928.02	0.50	0.00	4,938.60

#### 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					
2013	4.45	16.57	10.27	0.02	2.29	0.92	3.22	1.16	0.92	2.08	0.00	1,690.81	1,690.81	0.18	0.00	1,694.58
2014	8.29	29.65	18.95	0.03	2.43	1.62	4.05	1.16	1.62	2.77	0.00	3,237.21	3,237.21	0.32	0.00	3,244.02
Total	12.74	46.22	29.22	0.05	4.72	2.54	7.27	2.32	2.54	4.85	0.00	4,928.02	4,928.02	0.50	0.00	4,938.60

### 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	7.25	0.17	14.46	0.00		0.00	0.12		0.00	0.12	0.00	694.61	694.61	0.04	0.01	699.20
Energy	0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	3,967.31	3,967.31	0.13	0.07	3,991.81
Mobile	5.28	12.91	52.93	0.09	9.52	0.59	10.11	0.15	0.51	0.66	0.00	8,398.23	8,398.23	0.34	0.00	8,405.36
Waste						0.00	0.00		0.00	0.00	221.88	0.00	221.88	13.11	0.00	497.25
Water						0.00	0.00		0.00	0.00	354.38	0.00	354.38	1.87	0.05	409.77
Total	12.73	14.82	68.13	0.10	9.52	0.59	10.37	0.15	0.51	0.92	221.88	13,414.53	13,636.41	15.49	0.13	14,003.39

### 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	7.25	0.17	14.46	0.00		0.00	0.12		0.00	0.12	0.00	694.61	694.61	0.04	0.01	699.20
Energy	0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	3,967.31	3,967.31	0.13	0.07	3,991.81
Mobile	5.28	12.91	52.93	0.09	9.52	0.59	10.11	0.16	0.51	0.66	0.00	8,398.23	8,398.23	0.34	0.00	8,405.35
Waste						0.00	0.00		0.00	0.00	221.88	0.00	221.88	13.11	0.00	497.25
Water						0.00	0.00		0.00	0.00	0.00	354.38	354.38	1.87	0.05	409.77
Total	12.73	14.82	68.13	0.10	9.52	0.59	10.37	0.15	0.51	0.92	221.88	13,414.53	13,636.41	15.49	0.13	14,003.39

### **3.0 Construction Detail**

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### **3.2 Site Preparation - 2013**

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.48	0.00	3.48	1.91	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.65	5.28	2.99	0.00		0.26	0.26		0.26	0.26	0.00	478.72	478.72	0.05	0.00	479.84
Total	0.65	5.28	2.99	0.00	3.48	0.26	3.74	1.91	0.26	2.17	0.00	478.72	478.72	0.05	0.00	479.84

##### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	10.89	10.89	0.00	0.00	0.00	10.90
Total	0.01	0.01	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	10.89	10.89	0.00	0.00	0.00	10.90

##### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.56	0.00	1.56	0.86	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.65	5.28	2.99	0.00		0.26	0.26		0.26	0.26	0.00	478.72	478.72	0.05	0.00	479.84
Total	0.65	5.28	2.99	0.00	1.56	0.26	1.82	0.86	0.26	1.12	0.00	478.72	478.72	0.05	0.00	479.84

##### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	10.89	10.89	0.00	0.00	10.90	
Total	0.01	0.01	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	10.89	10.89	0.00	0.00	10.90	

### 3.2 Site Preparation - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					3.48	0.00	3.48	1.91	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	1.19	9.47	5.44	0.01		0.46	0.46		0.46	0.46	917.56	917.56	0.10	0.00	919.58		
Total	1.19	9.47	5.44	0.01	3.48	0.46	3.94	1.91	0.46	2.37	0.00	917.56	917.56	0.10	0.00	919.58	

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	20.50	20.50	0.00	0.00	20.53	
Total	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	20.50	20.50	0.00	0.00	20.53	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					1.56	0.00	1.56	0.86	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	1.19	9.47	5.44	0.01		0.46	0.46		0.46	0.46	917.56	917.56	0.10	0.00	919.58		
Total	1.19	9.47	5.44	0.01	1.56	0.46	2.02	0.86	0.46	1.32	0.00	917.56	917.56	0.10	0.00	919.58	

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	20.50	20.50	0.00	0.00	20.53	
Total	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	20.50	20.50	0.00	0.00	20.53	

### 3.3 Grading - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					1.28	0.00	1.28	0.65	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	0.78	6.43	3.49	0.01		0.30	0.30		0.30	0.30	649.86	649.86	0.06	0.00	651.19		
Total	0.78	6.43	3.49	0.01	1.28	0.30	1.58	0.65	0.30	0.95	0.00	649.86	649.86	0.06	0.00	651.19	

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	12.10	12.10	0.00	0.00	12.11	
Total	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	12.10	12.10	0.00	0.00	12.11	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Fugitive Dust					0.58	0.00	0.58	0.29	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.78	6.43	3.49	0.01		0.30	0.30		0.30	0.30	0.00	649.86	649.86	0.06	0.00	651.19
Total	0.78	6.43	3.49	0.01	0.58	0.30	0.88	0.29	0.30	0.59	0.00	649.86	649.86	0.06	0.00	651.19

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.10	12.10	0.00	0.00	12.11
Total	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.10	12.10	0.00	0.00	12.11

#### 3.3 Grading - 2014

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Fugitive Dust					1.28	0.00	1.28	0.65	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	1.42	11.46	6.43	0.01		0.53	0.53		0.53	0.53	0.00	1,245.56	1,245.56	0.12	0.00	1,247.98
Total	1.42	11.46	6.43	0.01	1.28	0.53	1.81	0.65	0.53	1.18	0.00	1,245.56	1,245.56	0.12	0.00	1,247.98

##### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81
Total	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Fugitive Dust					0.58	0.00	0.58	0.29	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	1.42	11.46	6.43	0.01		0.53	0.53		0.53	0.53	0.00	1,245.56	1,245.56	0.12	0.00	1,247.98
Total	1.42	11.46	6.43	0.01	0.58	0.53	1.11	0.29	0.53	0.82	0.00	1,245.56	1,245.56	0.12	0.00	1,247.98

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81
Total	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81

#### 3.4 Building Construction - 2013

##### 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			
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81
Total	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	22.78	22.78	0.00	0.00	22.81

Category	tons/yr								MT/yr					
	Off-Road	0.29	2.15	1.40	0.00	0.14	0.14	0.14	0.00	229.45	229.45	0.02	0.00	229.95
Total	0.29	2.15	1.40	0.00	0.14	0.14	0.14	0.14	0.00	229.45	229.45	0.02	0.00	229.95

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Hauling</b>															0.00	
Hauling	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0.02	0.22	0.14	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	32.43	32.43	0.00	0.00	
Worker	0.02	0.02	0.24	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	36.29	36.29	0.00	0.00	
Total	0.04	0.24	0.38	0.00	0.08	0.01	0.07	0.00	0.01	0.01	0.00	68.72	68.72	0.00	0.00	

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Off-Road</b>															229.95	
Off-Road	0.29	2.15	1.40	0.00	0.14	0.14	0.14	0.14	0.14	0.00	229.45	229.45	0.02	0.00	229.95	
Total	0.29	2.15	1.40	0.00	0.14	0.14	0.14	0.14	0.14	0.00	229.45	229.45	0.02	0.00	229.95	

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Hauling</b>															0.00	
Hauling	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0.02	0.22	0.14	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	32.43	32.43	0.00	0.00	
Worker	0.02	0.02	0.24	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	36.29	36.29	0.00	0.00	
Total	0.04	0.24	0.38	0.00	0.08	0.01	0.07	0.00	0.01	0.01	0.00	68.72	68.72	0.00	0.00	

#### 3.4 Building Construction - 2014

##### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Off-Road</b>															440.66	
Off-Road	0.51	3.81	2.67	0.01	0.23	0.23	0.23	0.23	0.23	0.00	439.79	439.79	0.04	0.00	440.66	
Total	0.51	3.81	2.67	0.01	0.23	0.23	0.23	0.23	0.23	0.00	439.79	439.79	0.04	0.00	440.66	

##### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Hauling</b>															0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0.04	0.37	0.25	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	62.31	62.31	0.00	0.00	
Worker	0.04	0.04	0.43	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	68.34	68.34	0.00	0.00	
Total	0.08	0.41	0.68	0.00	0.11	0.01	0.12	0.00	0.01	0.01	0.00	130.65	130.65	0.00	0.00	

##### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr								MT/yr							
<b>Off-Road</b>															440.66	
Off-Road	0.51	3.81	2.67	0.01	0.23	0.23	0.23	0.23	0.23	0.00	439.79	439.79	0.04	0.00	440.66	
Total	0.51	3.81	2.67	0.01	0.23	0.23	0.23	0.23	0.23	0.00	439.79	439.79	0.04	0.00	440.66	

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.37	0.25	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	62.31	62.31	0.00	0.00	62.34
Worker	0.04	0.04	0.43	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	68.34	68.34	0.00	0.00	68.42
Total	0.08	0.41	0.68	0.00	0.11	0.01	0.12	0.00	0.01	0.01	0.00	130.65	130.65	0.00	0.00	130.76

### 3.5 Paving - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.36	2.23	1.38	0.00			0.19	0.19		0.19	0.19	0.00	174.64	174.64	0.03	0.00	175.27
Paving	0.00						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.36	2.23	1.38	0.00			0.19	0.19		0.19	0.19	0.00	174.64	174.64	0.03	0.00	175.27

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08
Total	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.36	2.23	1.38	0.00			0.19	0.19		0.19	0.19	0.00	174.64	174.64	0.03	0.00	175.27
Paving	0.00						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	0.36	2.23	1.38	0.00			0.19	0.19		0.19	0.19	0.00	174.64	174.64	0.03	0.00	175.27

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08
Total	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08

### 3.5 Paving - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.66	4.08	2.62	0.00			0.35	0.35		0.35	0.35	0.00	334.73	334.73	0.05	0.00	335.86
Paving	0.00						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	0.66	4.08	2.62	0.00			0.35	0.35		0.35	0.35	0.00	334.73	334.73	0.05	0.00	335.86

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08
Total	0.01	0.01	0.06	0.00			0.00	0.00	0.00	0.00	0.00	9.07	9.07	0.00	0.00	9.08

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.11	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	17.08	17.08	0.00	0.00	17.10
Total	0.01	0.01	0.11	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	17.08	17.08	0.00	0.00	17.10

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Off-Road	0.66	4.06	2.62	0.00		0.35	0.35		0.35	0.35	0.00	334.73	334.73	0.05	0.00	335.88
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.66	4.06	2.62	0.00		0.35	0.35		0.35	0.35	0.00	334.73	334.73	0.05	0.00	335.88

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.11	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	17.08	17.08	0.00	0.00	17.10
Total	0.01	0.01	0.11	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	17.08	17.08	0.00	0.00	17.10

#### 3.6 Architectural Coating - 2013

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Archit. Coating	2.25					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.03	0.20	0.13	0.00		0.02	0.02		0.02	0.02	0.00	16.83	16.83	0.00	0.00	16.89
Total	2.28	0.20	0.13	0.00		0.02	0.02		0.02	0.02	0.00	16.83	16.83	0.00	0.00	16.89

##### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.02	0.03	0.27	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	40.52	40.52	0.00	0.00	40.57
Total	0.02	0.03	0.27	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	40.52	40.52	0.00	0.00	40.57

##### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Archit. Coating	2.25					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.03	0.20	0.13	0.00		0.02	0.02		0.02	0.02	0.00	16.83	16.83	0.00	0.00	16.89
Total	2.28	0.20	0.13	0.00		0.02	0.02		0.02	0.02	0.00	16.83	16.83	0.00	0.00	16.89

##### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.02	0.03	0.27	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	40.52	40.52	0.00	0.00	40.57
Total	0.02	0.03	0.27	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	40.52	40.52	0.00	0.00	40.57

### 3.6 Architectural Coating - 2014

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Archit. Coating	4.31						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.06	0.35	0.24	0.00			0.03	0.03		0.03	0.03	0.00	32.26	32.26	0.00	0.00
Total	4.37	0.35	0.24	0.00			0.03	0.03		0.03	0.03	0.00	32.26	32.26	0.00	0.00
																32.36

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.04	0.04	0.48	0.00	0.10	0.00	0.10	0.00	0.00	0.00	76.31	76.31	0.00	0.00	0.00	76.40
Total	0.04	0.04	0.48	0.00	0.10	0.00	0.10	0.00	0.00	0.00	76.31	76.31	0.00	0.00	0.00	76.40

#### Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Archit. Coating	4.31						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.06	0.35	0.24	0.00			0.03	0.03		0.03	0.03	0.00	32.26	32.26	0.00	0.00
Total	4.37	0.35	0.24	0.00			0.03	0.03		0.03	0.03	0.00	32.26	32.26	0.00	0.00
																32.36

#### Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.04	0.04	0.48	0.00	0.10	0.00	0.10	0.00	0.00	0.00	76.31	76.31	0.00	0.00	0.00	76.40
Total	0.04	0.04	0.48	0.00	0.10	0.00	0.10	0.00	0.00	0.00	76.31	76.31	0.00	0.00	0.00	76.40

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Mitigated	5.28	12.91	52.93	0.09	9.52	0.59	10.11	0.15	0.51	0.66	0.00	8,398.23	8,398.23	0.34	0.00	8,405.36
Unmitigated	5.28	12.91	52.93	0.09	9.52	0.59	10.11	0.15	0.51	0.66	0.00	8,398.23	8,398.23	0.34	0.00	8,405.36
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Single Family Housing	6,197.80	6,524.00	5,975.88	17,523,086		17,523,066	
Total	6,197.80	6,524.00	5,975.88	17,523,086		17,523,066	

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60

#### 5.0 Energy Detail

##### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00			0.00	0.00	1,951.81	1,951.81	0.09	0.03	1,964.04
Electricity Unmitigated						0.00	0.00			0.00	0.00	1,951.81	1,951.81	0.09	0.03	1,964.04
NaturalGas Mitigated	0.20	1.74	0.74	0.01		0.00	0.14			0.00	0.14	2,015.50	2,015.50	0.04	0.04	2,027.77
NaturalGas Unmitigated	0.20	1.74	0.74	0.01		0.00	0.14			0.00	0.14	2,015.50	2,015.50	0.04	0.04	2,027.77
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

Land Use	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
	kBTU	tons/yr										MT/yr					
Single Family Housing	3.77691e+007	0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	2,015.50	2,015.50	0.04	0.04	2,027.77
Total		0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	2,015.50	2,015.50	0.04	0.04	2,027.77

###### Mitigated

Land Use	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
	kBTU	tons/yr										MT/yr					
Single Family Housing	3.77691e+007	0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	2,015.50	2,015.50	0.04	0.04	2,027.77
Total		0.20	1.74	0.74	0.01		0.00	0.14		0.00	0.14	0.00	2,015.50	2,015.50	0.04	0.04	2,027.77

##### 5.3 Energy by Land Use - Electricity

###### Unmitigated

Land Use	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	kWh	tons/yr					MT/yr		
Single Family Housing	6.71023e+006					1,951.81	0.09	0.03	1,964.04
Total						1,951.81	0.09	0.03	1,964.04

###### Mitigated

Land Use	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	kWh	tons/yr					MT/yr		
Single Family Housing	6.71023e+006					1,951.81	0.09	0.03	1,964.04
Total						1,951.81	0.09	0.03	1,964.04

#### 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	7.25	0.17	14.46	0.00		0.00	0.12		0.00	0.12	0.00	694.61	694.61	0.04	0.01	699.20	
Unmitigated	7.25	0.17	14.46	0.00		0.00	0.12		0.00	0.12	0.00	694.61	694.61	0.04	0.01	699.20	
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	0.66					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	6.06					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.07	0.00	0.00	0.00		0.00	0.05		0.00	0.05	0.00	671.42	671.42	0.01	0.01	675.51	
Landscaping	0.46	0.17	14.46	0.00		0.00	0.08		0.00	0.08	0.00	23.18	23.18	0.02	0.00	23.69	
Total	7.25	0.17	14.46	0.00		0.00	0.13		0.00	0.13	0.00	694.60	694.60	0.03	0.01	699.20	

### 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	0.66					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	6.06					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.07	0.00	0.00	0.00		0.00	0.05		0.00	0.05	0.00	671.42	671.42	0.01	0.01	675.51	
Landscaping	0.46	0.17	14.46	0.00		0.00	0.08		0.00	0.08	0.00	23.18	23.18	0.02	0.00	23.69	
Total	7.25	0.17	14.46	0.00		0.00	0.13		0.00	0.13	0.00	694.60	694.60	0.03	0.01	699.20	

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr						MT/yr		
Mitigated					354.38	1.87	0.05	409.77	
Unmitigated					354.38	1.87	0.05	409.77	
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		
Single Family Housing	60.7236 / 38.2822					354.38	1.87	0.05	409.77	
Total						354.38	1.87	0.05	409.77	

#### Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	tons/yr						MT/yr		

Single Family Housing	60,723.67				354.38	1.87	0.05	409.77
	38,282.2							
Total					354.38	1.87	0.05	409.77

## 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					221.88	13.11	0.00	497.25
Unmitigated					221.88	13.11	0.00	497.25
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			
Single Family Housing	1093.06					221.88	13.11	0.00	497.25
Total						221.88	13.11	0.00	497.25

#### Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Tons	tons/yr				MT/yr			
Single Family Housing	1093.06					221.88	13.11	0.00	497.25
Total						221.88	13.11	0.00	497.25

## 9.0 Vegetation