

FORM APPROVED COUNTY COUNSEL  
 BY: GREGORY P. PRAMOS DATE: 3/3/16

Departmental Concurrence

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
 COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

932



**FROM:** Economic Development Agency

**SUBMITTAL DATE:**

March 3, 2016

**SUBJECT:** Southwest Justice Center Courts Relocation Project - Adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Environmental Assessment Number EA2016011, Reject Bids for Electrical and Low Voltage Trade and Approve the Revised Plans and Specifications to Rebid, District 3, [\$0]

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Adopt the Mitigated Negative Declaration and the Mitigation Monitoring Reporting Program (MMRP) for Environmental Assessment Number EA2016011, based on the findings incorporated in the Initial Study and the conclusion that the Southwest Justice Center Courts Relocation Project will not have a significant effect on the environment with implementation of the mitigation measures contained therein, and the Mitigated Negative Declaration (MND) reflects the Board's independent judgment and analysis;
2. Approve the Southwest Justice Center (SWJC) Courts Relocation Project;

(Continued)

*[Signature]*

Robert Field  
 Assistant County Executive Officer/EDA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 0	\$ 0	\$ 0	\$ 0	Consent <input type="checkbox"/> Policy <input checked="" type="checkbox"/>
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0	

**SOURCE OF FUNDS:** N/A  
 Budget Adjustment: No  
 For Fiscal Year: 2015/16

**C.E.O. RECOMMENDATION:** **REVIEWED BY CIP**  
*[Signature]*  
 Ivan M. Chand  
 County Executive Office Signature 3/8/2016  
**APPROVE**  
 BY: *[Signature]*  
 Rohini Dasika

**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Jeffries, seconded by Supervisor Tavaglione and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Tavaglione, Washington, Benoit and Ashley  
 Nays: None  
 Absent: None  
 Date: March 15, 2016  
 xc: EDA, Recorder

Kecia Harper-Ihem  
 Clerk of the Board  
 By: *[Signature]*  
 Deputy

Prev. Agn. Ref.: 3-17 of 12/8/15; 3-11 of 9/1/15; 3-76 of 2/26/13  
 District: 3  
 Agenda Number:

3-10

A-30  Positions Added  
 Change Order  
 4/5 Vote

# **SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

Economic Development Agency

**FORM 11:** Southwest Justice Center Courts Relocation Project - Adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Environmental Assessment Number EA2016011, Reject Bids for Electrical and Low Voltage Trade and Approve the Revised Plans and Specifications to Rebid, District 3, [\$0]

**DATE:** March 3, 2016

**PAGE:** 2 of 4

## **RECOMMENDED MOTION:** (Continued)

3. Direct the Clerk of the Board to file the attached Notice of Determination (NOD) with the County Clerk for posting within five days of approval by the Board;
4. Find that it is in the best interest of the County to reject all bids received on Bid Package 010 for the Electrical and Low Voltage Trade due to discrepancies in the bid specifications and the need to include additional terms in the specifications;
5. Approve the revised plans and specifications for Bid Package 010 for the Electrical and Low Voltage Trade and authorize Vanir Construction Management, Inc. (Vanir) to release the bids per the revised plans and specifications;
6. Upon completion of the bid process for Bid Package 010, authorize the Assistant County Executive Officer/EDA to submit the contract for award of the bid to the lowest responsive and responsible bidder to the Chairman of the Board, and authorize the Chairman to execute the agreement on behalf of the Board provided that, if any of the following occur, the award will be submitted to the Board for action: there is a bid protest, the lowest bid exceeds the estimated construction budget, the low bidder is disqualified, two or more bids are the same and are the lowest, or a bidder requests relief from its bid due to an error; and
7. Authorize the Assistant County Executive Officer/EDA to administer the contract for the awarded low bidder on Bid Package 010 in accordance with applicable Board policies.

## **BACKGROUND:**

### **Summary**

On February 26, 2013, the Board of Supervisors approved the Memorandum of Understanding between the Judicial Council of California, the Administrative Office of the Courts, and the County of Riverside (County) regarding new replacement space for the Indio County Administrative Center Annex Courthouse. The work includes construction of two new (replacement) juvenile and delinquency courtrooms, a secured, direct access corridor from the existing Southwest Juvenile Hall to the juvenile courtrooms and associated court facilities at the Southwest Justice Center.

EDA prepared an Initial Study for the proposed SWJC Courts Relocation project. In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21177) and State CEQA Guidelines Section 15063, an Initial Study was prepared to analyze the proposed project to determine if any potential significant impacts upon the environment would result from construction and implementation of the project. The results of the analysis demonstrate that the project would not have any significant impacts on the environment with the implementation of the mitigation measures contained in the Initial Study and MMRP. Pursuant to CEQA (Public Resources Code Section 21081.6), the County is required to adopt a reporting and monitoring plan for the mitigation measures identified in the Initial Study/MND to mitigate or avoid significant effects on the environment. The MMRP contained in the Initial Study/MND presented to the Board for adoption is designed to ensure compliance during project implementation.

(Continued)

## **SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

Economic Development Agency

**FORM 11:** Southwest Justice Center Courts Relocation Project - Adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Environmental Assessment Number EA2016011, Reject Bids for Electrical and Low Voltage Trade and Approve the Revised Plans and Specifications to Rebid, District 3, [\$0]

**DATE:** March 3, 2016

**PAGE:** 3 of 4

### **BACKGROUND:**

#### **Summary (Continued)**

On September 24, 2015, and in accordance with Assembly Bill 52, the Pechanga and Soboba Bands (Soboba) of Luiseno Indians were notified about the SWJC Courts Relocation project and invited to consult on September 25, 2015. The initial consultation with Pechanga took place on November 5, 2015 followed by an additional consultation on January 15, 2016 and concluded on January 20, 2016; initial consultation with Soboba took place on November 18, 2015 and concluded on December 17, 2016. As a result, both tribes recommended tribal monitoring during construction because of the potential presence of tribal cultural resources in the area and the potential for accidental discoveries. Mitigation measures were developed in coordination with the tribes to address concerns related to the accidental discovery of cultural resources. Compliance with these mitigation measures will ensure potential impacts from inadvertent discoveries remain at a less-than-significant level.

Subsequent to formal Assembly Bill 52, California Native American tribal government consultation, EDA prepared and circulated the Initial Study/MND for the mandated 20-day public review and comment period from January 23, 2016 to February 11, 2016. Pursuant to State CEQA Guidelines Section 15074, the County will consider all comments received during the review period prior to adoption of the Initial Study/MND.

On December 8, 2015, the Board of Supervisors (Board) approved the plans and specifications for the SWJC Courts Relocation project and authorized Vanir to release bid packages for all trades to complete the project. On January 27, 2016, a bid opening was conducted for the Electrical and Low Voltage Trade. On February 2, 2016, Vanir received a bid protest for Bid Package 010, Electrical and Low Voltage Trade, from Advanced Electrical Technologies, the third lowest bidder. Upon review of the bid protest and the bid specifications, EDA has determined that due to discrepancies in the bid specifications and the spread of bid prices, it is in the County's best interests to revise the specifications for Bid Package 010 and re-bid that portion of the work.

The specifications prepared by the design consultant inadvertently referred to pre-approval being required for equipment suppliers, installation and service organizations, as well as a 40 mile radius requirement from the job site for the installer doing the work. The specifications listed three potential companies for doing the work, but those companies were not within the 40 mile radius. To ensure adequate competition, include the appropriate requirements for system installers, add necessary warranty language, and include revisions now that final fire marshal approval has been received, the specifications have been revised. These revisions and rebid of the trade package should enable the County to obtain a fair and competitive price based on the entire scope of the trade work.

EDA is requesting for the Board to reject all bids for Bid Package 010 for the Electrical and Low Voltage Trade and authorize Vanir to re-advertise for bids using the revised plans and specifications for the trade. In order to keep the project moving forward without any impact and meet project schedule commitments, EDA recommends the Board to authorize the Assistant County Executive Officer/EDA to determine award of Bid Package 010 in accordance with Board Policy B-11 and authorize the Chairman to execute the agreement on behalf of the Board, provided that the lowest bid falls within the allotted project budget amount.

#### **Impact on Citizens and Businesses**

(Commences on Page 4)

**SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

Economic Development Agency

**FORM 11:** Southwest Justice Center Courts Relocation Project - Adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Environmental Assessment Number EA2016011, Reject Bids for Electrical and Low Voltage Trade and Approve the Revised Plans and Specifications to Rebid, District 3, [\$0]

**DATE:** March 3, 2016

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**Impact on Citizens and Businesses**

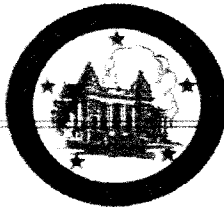
In accordance with CEQA (Public Resources Code Sections 21000 – 21177), the Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the development of the proposed project. Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures identified for the project, described in this document, have been made to reduce effects to less than significant.

**Additional Fiscal Information**

There is no cost associated with this particular action. The project will be funded by Bond Proceeds, thus no additional net county costs will be incurred and no department budget adjustment is required at this time.

Attachments:

Notice of Determination (NOD)  
Specifications



Original Negative Declaration/Notice of Determination was routed to County Clerks for posting on.

3/15/16  
Date

Initial  
KW VIA EDA staff

### Notice of Determination

**To:**

Office of Planning and Research

For U.S Mail:

P.O. Box 3044

Sacramento, CA 95812-3044

Street Address:

1400 Tenth St.

Sacramento, CA 95814

**From:**

Public

Agency:

Riverside County

Address:

3403 10<sup>th</sup> Street, 4<sup>th</sup> Floor

Riverside, CA 92501

Contact:

Mike Sullivan

Phone:

(951) 955-8009

County Clerk

Riverside County –

County of (County Clerk Office)

Address: 4080 Lemon St., 1<sup>st</sup> Floor

Riverside, CA 92502

Lead Agency (if different from above):

Address:

Contact:

Phone:

**SUBJECT: Filing of Notice of Determination in Compliance with Section 21108 or 21152 of the Public Resources Code.**

State Clearinghouse Number (if submitted to State Clearinghouse):

Project Title: Southwest Justice Center Courts Relocation Project (Initial Study: RIVCO/CEQA 201601I)

Project Location:

The proposed project site is located in the northeast portion of the existing Southwest Justice Center (SWJC) campus located at 30755 Auld Road, in the unincorporated French Valley area of Riverside County. The nearest cross street is Leon Road, adjacent to the east. The project is located within the Bachelor Mountain Quadrangle at Latitude 33° 34' 55" North and Longitude 117° 7' 12" West.

Project Description:

The SWJC Courts Relocation Project (Project) entails the construction and operation of a 14,333 square-foot building and execution of necessary agreements facilitating the addition of two juvenile courts and ancillary office space as well as additional surface parking areas, access roads, and walkways. The SWJC is an existing campus environment consisting of improvements and buildings which are currently occupied by the County Division of the Superior Courts of California; County Counsel, District Attorney, Economic Development Agency, Public Defender, Public Social Services, Probation, Purchasing/Fleet Services, and Sheriff; and the city of Temecula Police Department. The County has determined the SWJC must expand its existing courthouse services to provide for additional criminal or civil case types. The Project site is currently vacant and can accommodate additional facilities. One courtroom will handle juvenile dependency cases and the other courtroom will handle juvenile delinquency cases.

This is to advise that the Riverside County Board of Supervisors approved the above project on

Lead agency or  Responsible Agency

3/15/16

(Date)

and has made the following determinations regarding the above described project:


1. The project  will  will not have a significant effect on the environment.
2.  An Environmental Impact Report and Addendum was prepared for this project pursuant to the provisions of CEQA.  
 A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures  were  were not made a condition of the approval of the project.
4. A Mitigation reporting or monitoring plan  was  was not adopted for this project.
5. A statement of Overriding Considerations  was  was not adopted for this project.
6. Findings  were  were not made pursuant to the provisions of CEQA.

MAR 15 2016 3-10

This is to certify that the Final Initial Study with comments and responses and record of project approval, and/or the Mitigated Negative Declaration, is available to the General Public at:

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County of Riverside  
Economic Development Agency  
3403 10<sup>th</sup> Street, 4<sup>th</sup> Floor  
Riverside, CA 92501

Signature:  Title: Senior Environmental Planner

Date: \_\_\_\_\_ Date received for filing at OPR: \_\_\_\_\_

Authority cited: Sections 21083, Public Resources Code.  
Reference Section 21000-21174, Public Resources Code.

**RIVERSIDE COUNTY CLERK & RECORDER**

**AUTHORIZATION  
TO BILL  
BY JOURNAL VOUCHER**

**Project Name: Southwest Justice Center Courts Relocation Project, French Valley,  
County of Riverside**

**Accounting String: 542040-30100-7200800000--FM08110005083**

DATE: January 27, 2016

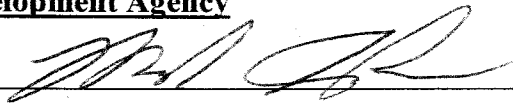
AGENCY: Riverside County Economic Development Agency

THIS AUTHORIZES THE COUNTY CLERK & RECORDER TO BILL FOR FILING AND HANDLING FEES FOR THE ACCOMPANYING DOCUMENT(S).

NUMBER OF DOCUMENTS INCLUDED: One (1)

AUTHORIZED BY: Mike Sullivan, Senior Environmental Planner, Economic Development Agency

Signature: \_\_\_\_\_



PRESENTED BY: Erik Sydow, Facilities Project Manager III, Economic Development Agency

-TO BE FILLED IN BY COUNTY CLERK-

ACCEPTED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

RECEIPT # (S) \_\_\_\_\_



Date: January 27, 2016

To: Mary Ann Meyer, Office of the County Clerk

From: Mike Sullivan, Senior Environmental Planner, Project Management Office

Subject: **County of Riverside Economic Development Agency Project # FM08110005083**  
Southwest Justice Center Courts Relocation Project, French Valley, Riverside County

The Riverside County's Economic Development Agency's Project Management Office is requesting that you post the attached Notice of Determination. Attached you will find an authorization to bill by journal voucher for your posting fee.

**After posting, please return the document to:**

**Mail Stop #1330**

**Attention: Mike Sullivan, Senior Environmental Planner,**

**Economic Development Agency,**

**3403 10<sup>th</sup> Street, Suite 400, Riverside, CA 92501**

**If you have any questions, please contact Mike Sullivan at 955-8009.**

Attachment

cc: file





## Technical Memorandum

To: Sergio Pena, Supervising Facilities Project Manager  
Riverside County Economic Development Agency

From: Eliza Laws, Senior Environmental Analyst  
Brad Perrine, Associate Environmental Analyst  
Albert A. Webb Associates

CC: John Alfred, Supervising Facilities Project Manager  
Laura Ballesteros, Development Specialist  
Riverside County Economic Development Agency

Date: December 5, 2014

Re: Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile  
Courts Relocation Project, Riverside County, California

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The following air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the expected criteria air pollutant emissions and/or criteria GHG emissions generated as a result of construction and operation of the above-referenced Project would exceed the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality and draft screening significance thresholds, respectively, in the Project area. The analysis was conducted within the context of the California Environmental Quality Act (CEQA), as set forth in California Public Resources Code Sections 21000 *et seq.* The methodology follows the *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **California Emissions Estimator Model** (CalEEMod) version 2013.2.2 was used to quantify Project-related emissions.

The Project entails the construction and operation of a building and necessary agreements facilitating the addition of two courtrooms handling juvenile dependency and delinquency case types and ancillary office space as well as additional surface parking areas, access roads, and walkways at the Southwest Justice Center (SWJC) campus in the unincorporated French Valley area of Riverside County. The Project site comprises approximately three acres of disturbed but undeveloped land located entirely within the existing 48-acre parcel of the SWJC. The proposed building will encompass approximately 14,336 square feet, and the proposed parking area will accommodate 55 public parking spaces. No off-site improvements are proposed with the Project.

- **Regional Significance Threshold Analysis**

The thresholds contained in the *CEQA Air Quality Handbook* are considered regional thresholds and are shown on **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below.<sup>1</sup> These regional thresholds were developed based on the SCAQMD’s treatment of a major stationary source.

**Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**

<b>Emission Threshold</b>	<b>Units</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM-10</b>	<b>PM-2.5</b>
Construction	lbs/day	75	100	550	150	150	55
Operation	lbs/day	55	55	550	150	150	55

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 miles per hour, and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (approximately 3 acres) a Fugitive Dust Control Plan or Large Operation Notification is not required.

### **Short-Term Analysis**

Short-term emissions from construction of the Project were evaluated using the CalEEMod version 2013.2.2 program. The total construction period for the proposed Project is approximately 14 months, beginning no earlier than August 1, 2015. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are as follows:

- Construction is anticipated to begin on August 1, 2015, with site grading and will end with paving in October 2016. The modeled schedule is shown below:

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<sup>1</sup> South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

Construction Activity	Start Date	End Date	Total Working Days
Grading	8/1/2015	9/30/2015	43 days
Building Construction	10/1/2015	9/30/2016	262 days
Architectural Coating	6/13/2016	9/30/2016	80 days
Paving	10/1/2016	10/31/2016	21 days

- The CalEEMod default off-road equipment was used for each activity and is shown below, assuming each piece of equipment operates eight hours a day:

Construction Activity	Off-Road Equipment	Unit Amount	Hours/day
Grading	Excavators	1	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	3	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Architectural Coating	Air Compressors	1	8
Paving	Cement & Mortar Mixers	2	8
	Pavers	1	8
	Paving Equipment	2	8
	Rollers	2	8
	Tractors/Loaders/Backhoes	1	8

- Daily trips were added for water trucks to suppress fugitive dust emissions.

The results of this modeling analysis are summarized below.

**Table 2 – Maximum Estimated Daily Construction Emissions**

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Construction Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<b>2015</b>						
Grading	3.91	40.70	27.81	0.03	8.64	5.51
Building Construction	4.33	34.96	25.62	0.04	3.07	2.38
<b>2016</b>						
Building Construction	4.01	33.03	24.86	0.04	2.90	2.22
Architectural Coating	27.75	3.39	3.31	0.00	0.40	0.30
Paving	2.35	22.14	16.30	0.02	1.56	1.28
<b>Maximum<sup>1</sup></b>	<b>31.76</b>	<b>40.70</b>	<b>28.17</b>	<b>0.04</b>	<b>8.64</b>	<b>5.51</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Maximum emissions reported above are the greater of summer or winter emissions and are subject to rounding from the CalEEMod output.

<sup>1</sup> Maximum emissions are the greater of grading alone, paving alone, or the sum of building construction in 2016 and architectural coating in 2016 since those activities may overlap.

As shown on the table above, the emissions from construction of the Project are below the SCAQMD Daily Construction Thresholds for all criteria pollutants.

## Long-Term Analysis

Long-term emissions are evaluated at build-out of a project. The Project is assumed to be operational in 2016. Mobile source emissions refer to on-road motor vehicle emissions generated from the Project's traffic. Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, consumer use of solvents and personal care products, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions. Separate emissions were computed for both the summer and winter.

**Table 3 – Estimated Daily Project Operation Emissions (Summer)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	3.19	0.00	0.01	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	3.45	8.81	32.66	0.07	5.05	1.43
<b>Total</b>	<b>6.64</b>	<b>8.82</b>	<b>32.68</b>	<b>0.07</b>	<b>5.05</b>	<b>1.43</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

**Table 4 – Estimated Daily Project Operation Emissions (Winter)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	3.19	0.00	0.01	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	3.38	9.16	31.21	0.07	5.05	1.43
<b>Total</b>	<b>6.57</b>	<b>9.17</b>	<b>31.23</b>	<b>0.07</b>	<b>5.05</b>	<b>1.43</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Evaluation of the data presented on the above tables indicates that criteria pollutant emissions from operation of this Project will not exceed the SCAQMD regional daily thresholds for any pollutant during summer or winter.

### • Localized Significance Threshold Analysis

#### Background

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project

may generate significant adverse localized air quality impacts (both short- and long-term).<sup>2</sup> LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located within SRA 26.

## Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO<sub>2</sub>, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables and sample construction scenarios to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller.<sup>3</sup> Although the Project site is approximately three acres, the Project is estimated to disturb a smaller area per day. A daily disturbance area of one acre was estimated in accordance with SCAQMD methodology.<sup>4</sup> Therefore, the one-acre LST lookup table was utilized to estimate the construction emissions.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest receptor is an existing single-family residence across Leon Road, approximately 538 feet (164 meters) east of the site. A receptor distance of 100 meters (328 feet) was used to be conservative since the LST Look-Up tables do not include thresholds for 164 meters, which is between the thresholds for receptors located 100 or 200 meters away. The results are summarized below for the construction activity with the most heavy-duty construction equipment.

**Table 5 – LST Results for Daily Construction Emissions**

Pollutant	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10	PM-2.5
<b>LST Threshold for 1 acre at 100 meters</b>	<b>292</b>	<b>2,176</b>	<b>30</b>	<b>8</b>
Grading	42.7	26.3	3.0	2.2
Building Construction	32.5	21.7	1.8	1.6
Paving & Architectural Coatings	35.5	24.3	2.4	2.2
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

As shown on the above table, emissions from construction of the Project will be below the LST established by SCAQMD.

<sup>2</sup> South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>, accessed December 4, 2014.)

<sup>3</sup> <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

<sup>4</sup> <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>

## Long-Term Analysis

According to SCAQMD LST methodology, LSTs apply to the operational phase of a project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site. The proposed Project does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term LST analysis is needed.

- **Greenhouse Gas Analysis**

GHG are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Additionally, unlike the criteria pollutants, GHG do not have adopted significance thresholds associated with them at this time. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects as well. In December 2008, the SCAQMD adopted a threshold of 10,000 metric tonnes of carbon dioxide equivalents per year (MTCO<sub>2</sub>E/yr) for stationary sources projects for which SCAQMD was the lead agency. The most recent draft proposal was in September 2010 and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 MTCO<sub>2</sub>E/yr, respectively.<sup>5</sup> Alternatively, a lead agency has the option to use 3,000 MTCO<sub>2</sub>E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and CO<sub>2</sub>E.<sup>6</sup>

## Short-Term Analysis

### Construction-Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify.

**Table 6 – Project Construction Equipment GHG Emissions**

Year	Metric Tons per year (MT/yr)			
	Total CO <sub>2</sub>	Total CH <sub>4</sub>	Total N <sub>2</sub> O	Total CO <sub>2</sub> E
2015	183.30	0.04	0.00	184.17
2016	390.25	0.07	0.00	391.83
<b>Total</b>	<b>573.55</b>	<b>0.11</b>	<b>0.00</b>	<b>576.00</b>

<sup>5</sup> [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), accessed December 4, 2014.

<sup>6</sup> CO<sub>2</sub>E is the sum of CO<sub>2</sub> emissions estimated plus the sum of CH<sub>4</sub> and N<sub>2</sub>O emissions estimated multiplied by their respective global warming potential (GWP).

Evaluation of the table above indicates that an estimated 576.00 MTCO<sub>2</sub>E will occur from Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold guidance document released in October 2008, on page 3-8, recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the Project’s GHG emissions were spread evening over 30 years to yield an average of 19.20 MTCO<sub>2</sub>E/yr. These results were included in the analysis of the Project’s total GHG emissions on **Table 8 – Total Project-Related GHG Emissions**, below.

## Long-Term Analysis

### Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the Project site create CO<sub>2</sub> resulting from fuel combustion based on the Project’s land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. Hearth emissions do not apply to the Project because no dwelling units are proposed. The CalEEMod output contained in the attached output shows that the GHG emissions from area sources are negligible and are reported at zero for architectural coatings and consumer products and for landscaping.

### Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect 2008 Title 24 improvements (CalEEMod User’s Guide, p. 30.). The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project.

**Table 7 – Energy-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Electricity	53.52	0.00	0.00	53.73
Natural Gas	2.79	0.00	0.00	2.81
<b>Total</b>	<b>56.31</b>	<b>0.00</b>	<b>0.00</b>	<b>56.54</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

### Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in a project-specific traffic analyses. The information provided in the trip generation data contained in CalEEMod defaults was used herein. **Table 8** shows the mobile source emissions from the Project.

## Solid Waste Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. **Table 8** shows the mobile source emissions from the Project.

## Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in Southern California and plays a large role in GHG production.

There are three processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial): (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment. CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from Northern California. **Table 8** shows the GHG emissions from water-related energy usage for the Project.

## Total Project GHG Emissions

As shown on **Table 8 – Total Project-Related GHG Emissions**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 817.85 MTCO<sub>2</sub>E/yr which includes construction-related emissions amortized over a typical project life of 30 years.

**Table 8 – Total Project-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Amortized Construction	--	--	--	19.20
Area	0.00	0.00	0.00	0.00
Energy	56.31	0.00	0.00	56.54
Mobile	715.75	0.03	0.00	716.28
Solid Waste	2.71	0.16	0.00	6.07
Water	17.07	0.09	0.00	19.76
<b>Total</b>	<b>791.84</b>	<b>0.28</b>	<b>0.00</b>	<b>817.85</b>

The total GHG emissions from the Project are below the lowest SCAQMD recommended screening level of 1,400 MTCO<sub>2</sub>E/yr for commercial projects. Therefore, the proposed Project will not exceed any draft GHG screening thresholds.

## • Conclusion

The conclusion of this analysis indicates that the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD on a regional or localized level. The Project will also not exceed any draft GHG screening threshold recommended by SCAQMD.



## **CALEEMOD OUTPUT FILES**

## SWJC Juvenile Courts Relocation Project Riverside-South Coast County, Summer

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	14.34	1000sqft	0.33	14,336.00	0
Other Non-Asphalt Surfaces	1.80	Acre	1.80	78,408.00	0
Parking Lot	38.39	1000sqft	0.88	38,385.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2016
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See table

Off-road Equipment - See table

Off-road Equipment - See table

Off-road Equipment - See table

Trips and VMT - Water truck trips added

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	80.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	NumDays	18.00	21.00
tblConstructionPhase	PhaseEndDate	1/20/2017	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	6/13/2016
tblGrading	AcresOfGrading	21.50	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	23.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

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## 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	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Energy	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Mobile	3.4482	8.8083	32.6614	0.0734	4.9300	0.1234	5.0533	1.3156	0.1134	1.4291		6,424.1855	6,424.1855	0.2150		6,428.7013
<b>Total</b>	<b>6.6429</b>	<b>8.8224</b>	<b>32.6789</b>	<b>0.0735</b>	<b>4.9300</b>	<b>0.1245</b>	<b>5.0544</b>	<b>1.3156</b>	<b>0.1145</b>	<b>1.4302</b>		<b>6,441.0633</b>	<b>6,441.0633</b>	<b>0.2154</b>	<b>3.1000e-004</b>	<b>6,445.6824</b>

### 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	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Energy	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Mobile	3.4482	8.8083	32.6614	0.0734	4.9300	0.1234	5.0533	1.3156	0.1134	1.4291		6,424.1855	6,424.1855	0.2150		6,428.7013
<b>Total</b>	<b>6.6429</b>	<b>8.8224</b>	<b>32.6789</b>	<b>0.0735</b>	<b>4.9300</b>	<b>0.1245</b>	<b>5.0544</b>	<b>1.3156</b>	<b>0.1145</b>	<b>1.4302</b>		<b>6,441.0633</b>	<b>6,441.0633</b>	<b>0.2154</b>	<b>3.1000e-004</b>	<b>6,445.6824</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	8/1/2015	9/30/2015	5	43	
2	Building Construction	Building Construction	10/1/2015	9/30/2016	5	262	
3	Architectural Coating	Architectural Coating	6/13/2016	9/30/2016	5	80	
4	Paving	Paving	10/1/2016	10/31/2016	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,843; Non-Residential Outdoor: 46,948 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Grading - 2015

#### 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					6.1207	0.0000	6.1207	3.3209	0.0000	3.3209			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>6.1207</b>	<b>2.3284</b>	<b>8.4491</b>	<b>3.3209</b>	<b>2.1421</b>	<b>5.4630</b>		<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0176	0.1909	0.1888	4.2000e-004	0.0126	3.8600e-003	0.0164	3.5900e-003	3.5500e-003	7.1400e-003		42.7537	42.7537	3.1000e-004		42.7602
Worker	0.0639	0.0758	0.9467	2.0100e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0000e-003	0.0455		172.7297	172.7297	7.8600e-003		172.8947
<b>Total</b>	<b>0.0814</b>	<b>0.2667</b>	<b>1.1355</b>	<b>2.4300e-003</b>	<b>0.1802</b>	<b>4.9500e-003</b>	<b>0.1852</b>	<b>0.0481</b>	<b>4.5500e-003</b>	<b>0.0526</b>		<b>215.4834</b>	<b>215.4834</b>	<b>8.1700e-003</b>		<b>215.6549</b>



### 3.2 Grading - 2015

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1207	0.0000	6.1207	3.3209	0.0000	3.3209			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>6.1207</b>	<b>2.3284</b>	<b>8.4491</b>	<b>3.3209</b>	<b>2.1421</b>	<b>5.4630</b>	<b>0.0000</b>	<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0176	0.1909	0.1888	4.2000e-004	0.0126	3.8600e-003	0.0164	3.5900e-003	3.5500e-003	7.1400e-003		42.7537	42.7537	3.1000e-004		42.7602
Worker	0.0639	0.0758	0.9467	2.0100e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0000e-003	0.0455		172.7297	172.7297	7.8600e-003		172.8947
<b>Total</b>	<b>0.0814</b>	<b>0.2667</b>	<b>1.1355</b>	<b>2.4300e-003</b>	<b>0.1802</b>	<b>4.9500e-003</b>	<b>0.1852</b>	<b>0.0481</b>	<b>4.5500e-003</b>	<b>0.0526</b>		<b>215.4834</b>	<b>215.4834</b>	<b>8.1700e-003</b>		<b>215.6549</b>

**3.3 Building Construction - 2015****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	3.8870	32.4182	20.0375	0.0287		2.2678	2.2678		2.1293	2.1293		2,886.429 2	2,886.429 2	0.7336		2,901.834 5
<b>Total</b>	<b>3.8870</b>	<b>32.4182</b>	<b>20.0375</b>	<b>0.0287</b>		<b>2.2678</b>	<b>2.2678</b>		<b>2.1293</b>	<b>2.1293</b>		<b>2,886.429 2</b>	<b>2,886.429 2</b>	<b>0.7336</b>		<b>2,901.834 5</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2019	2.1954	2.1717	4.8500e-003	0.1447	0.0443	0.1891	0.0413	0.0408	0.0821		491.6678	491.6678	3.5400e-003		491.7421
Worker	0.2300	0.2727	3.4080	7.2400e-003	0.6036	3.9400e-003	0.6075	0.1601	3.6100e-003	0.1637		621.8270	621.8270	0.0283		622.4210
<b>Total</b>	<b>0.4318</b>	<b>2.4681</b>	<b>5.5797</b>	<b>0.0121</b>	<b>0.7483</b>	<b>0.0483</b>	<b>0.7966</b>	<b>0.2014</b>	<b>0.0444</b>	<b>0.2458</b>		<b>1,113.494 8</b>	<b>1,113.494 8</b>	<b>0.0318</b>		<b>1,114.163 1</b>

### 3.3 Building Construction - 2015

#### 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	3.8870	32.4182	20.0375	0.0287		2.2678	2.2678		2.1293	2.1293	0.0000	2,886.429 2	2,886.429 2	0.7336		2,901.834 5
<b>Total</b>	<b>3.8870</b>	<b>32.4182</b>	<b>20.0375</b>	<b>0.0287</b>		<b>2.2678</b>	<b>2.2678</b>		<b>2.1293</b>	<b>2.1293</b>	<b>0.0000</b>	<b>2,886.429 2</b>	<b>2,886.429 2</b>	<b>0.7336</b>		<b>2,901.834 5</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2019	2.1954	2.1717	4.8500e-003	0.1447	0.0443	0.1891	0.0413	0.0408	0.0821		491.6678	491.6678	3.5400e-003		491.7421
Worker	0.2300	0.2727	3.4080	7.2400e-003	0.6036	3.9400e-003	0.6075	0.1601	3.6100e-003	0.1637		621.8270	621.8270	0.0283		622.4210
<b>Total</b>	<b>0.4318</b>	<b>2.4681</b>	<b>5.5797</b>	<b>0.0121</b>	<b>0.7483</b>	<b>0.0483</b>	<b>0.7966</b>	<b>0.2014</b>	<b>0.0444</b>	<b>0.2458</b>		<b>1,113.494 8</b>	<b>1,113.494 8</b>	<b>0.0318</b>		<b>1,114.163 1</b>

### 3.3 Building Construction - 2016

#### 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	3.6240	30.7934	19.7845	0.0287		2.1098	2.1098		1.9794	1.9794		2,863.9447	2,863.9447	0.7208		2,879.0804
<b>Total</b>	<b>3.6240</b>	<b>30.7934</b>	<b>19.7845</b>	<b>0.0287</b>		<b>2.1098</b>	<b>2.1098</b>		<b>1.9794</b>	<b>1.9794</b>		<b>2,863.9447</b>	<b>2,863.9447</b>	<b>0.7208</b>		<b>2,879.0804</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1789	1.9301	2.0211	4.8400e-003	0.1447	0.0375	0.1822	0.0413	0.0345	0.0758		485.9444	485.9444	3.1600e-003		486.0108
Worker	0.2069	0.2443	3.0624	7.2400e-003	0.6036	3.7700e-003	0.6074	0.1601	3.4700e-003	0.1635		599.1741	599.1741	0.0258		599.7168
<b>Total</b>	<b>0.3858</b>	<b>2.1744</b>	<b>5.0834</b>	<b>0.0121</b>	<b>0.7483</b>	<b>0.0412</b>	<b>0.7895</b>	<b>0.2014</b>	<b>0.0379</b>	<b>0.2393</b>		<b>1,085.1185</b>	<b>1,085.1185</b>	<b>0.0290</b>		<b>1,085.7276</b>

### 3.3 Building Construction - 2016

#### 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	3.6240	30.7934	19.7845	0.0287		2.1098	2.1098		1.9794	1.9794	0.0000	2,863.9447	2,863.9447	0.7208		2,879.0804
<b>Total</b>	<b>3.6240</b>	<b>30.7934</b>	<b>19.7845</b>	<b>0.0287</b>		<b>2.1098</b>	<b>2.1098</b>		<b>1.9794</b>	<b>1.9794</b>	<b>0.0000</b>	<b>2,863.9447</b>	<b>2,863.9447</b>	<b>0.7208</b>		<b>2,879.0804</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1789	1.9301	2.0211	4.8400e-003	0.1447	0.0375	0.1822	0.0413	0.0345	0.0758		485.9444	485.9444	3.1600e-003		486.0108
Worker	0.2069	0.2443	3.0624	7.2400e-003	0.6036	3.7700e-003	0.6074	0.1601	3.4700e-003	0.1635		599.1741	599.1741	0.0258		599.7168
<b>Total</b>	<b>0.3858</b>	<b>2.1744</b>	<b>5.0834</b>	<b>0.0121</b>	<b>0.7483</b>	<b>0.0412</b>	<b>0.7895</b>	<b>0.2014</b>	<b>0.0379</b>	<b>0.2393</b>		<b>1,085.1185</b>	<b>1,085.1185</b>	<b>0.0290</b>		<b>1,085.7276</b>

### 3.4 Architectural Coating - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4913	3.1630	2.5119	3.9600e-003		0.2622	0.2622		0.2622	0.2622		375.2641	375.2641	0.0442		376.1932
<b>Total</b>	<b>27.6916</b>	<b>3.1630</b>	<b>2.5119</b>	<b>3.9600e-003</b>		<b>0.2622</b>	<b>0.2622</b>		<b>0.2622</b>	<b>0.2622</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0442</b>		<b>376.1932</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.1678	0.1758	4.2000e-004	0.0126	3.2600e-003	0.0158	3.5900e-003	3.0000e-003	6.5900e-003		42.2560	42.2560	2.7000e-004		42.2618
Worker	0.0422	0.0498	0.6238	1.4800e-003	0.1230	7.7000e-004	0.1237	0.0326	7.1000e-004	0.0333		122.0540	122.0540	5.2600e-003		122.1645
<b>Total</b>	<b>0.0577</b>	<b>0.2176</b>	<b>0.7996</b>	<b>1.9000e-003</b>	<b>0.1355</b>	<b>4.0300e-003</b>	<b>0.1396</b>	<b>0.0362</b>	<b>3.7100e-003</b>	<b>0.0399</b>		<b>164.3100</b>	<b>164.3100</b>	<b>5.5300e-003</b>		<b>164.4263</b>

### 3.4 Architectural Coating - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4913	3.1630	2.5119	3.9600e-003		0.2622	0.2622		0.2622	0.2622	0.0000	375.2641	375.2641	0.0442		376.1932
<b>Total</b>	<b>27.6916</b>	<b>3.1630</b>	<b>2.5119</b>	<b>3.9600e-003</b>		<b>0.2622</b>	<b>0.2622</b>		<b>0.2622</b>	<b>0.2622</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0442</b>		<b>376.1932</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.1678	0.1758	4.2000e-004	0.0126	3.2600e-003	0.0158	3.5900e-003	3.0000e-003	6.5900e-003		42.2560	42.2560	2.7000e-004		42.2618
Worker	0.0422	0.0498	0.6238	1.4800e-003	0.1230	7.7000e-004	0.1237	0.0326	7.1000e-004	0.0333		122.0540	122.0540	5.2600e-003		122.1645
<b>Total</b>	<b>0.0577</b>	<b>0.2176</b>	<b>0.7996</b>	<b>1.9000e-003</b>	<b>0.1355</b>	<b>4.0300e-003</b>	<b>0.1396</b>	<b>0.0362</b>	<b>3.7100e-003</b>	<b>0.0399</b>		<b>164.3100</b>	<b>164.3100</b>	<b>5.5300e-003</b>		<b>164.4263</b>

**3.5 Paving - 2016****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1469	21.8663	14.9949	0.0223		1.3170	1.3170		1.2140	1.2140		2,272.0603	2,272.0603	0.6654		2,286.0326
Paving	0.1098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.2567</b>	<b>21.8663</b>	<b>14.9949</b>	<b>0.0223</b>		<b>1.3170</b>	<b>1.3170</b>		<b>1.2140</b>	<b>1.2140</b>		<b>2,272.0603</b>	<b>2,272.0603</b>	<b>0.6654</b>		<b>2,286.0326</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.1678	0.1758	4.2000e-004	0.0126	3.2600e-003	0.0158	3.5900e-003	3.0000e-003	6.5900e-003		42.2560	42.2560	2.7000e-004		42.2618
Worker	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003		222.1173
<b>Total</b>	<b>0.0922</b>	<b>0.2583</b>	<b>1.3100</b>	<b>3.1000e-003</b>	<b>0.2361</b>	<b>4.6600e-003</b>	<b>0.2408</b>	<b>0.0629</b>	<b>4.2800e-003</b>	<b>0.0672</b>		<b>264.1724</b>	<b>264.1724</b>	<b>9.8400e-003</b>		<b>264.3791</b>



### 3.5 Paving - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1469	21.8663	14.9949	0.0223		1.3170	1.3170		1.2140	1.2140	0.0000	2,272.0603	2,272.0603	0.6654		2,286.0326
Paving	0.1098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.2567</b>	<b>21.8663</b>	<b>14.9949</b>	<b>0.0223</b>		<b>1.3170</b>	<b>1.3170</b>		<b>1.2140</b>	<b>1.2140</b>	<b>0.0000</b>	<b>2,272.0603</b>	<b>2,272.0603</b>	<b>0.6654</b>		<b>2,286.0326</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.1678	0.1758	4.2000e-004	0.0126	3.2600e-003	0.0158	3.5900e-003	3.0000e-003	6.5900e-003		42.2560	42.2560	2.7000e-004		42.2618
Worker	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003		222.1173
<b>Total</b>	<b>0.0922</b>	<b>0.2583</b>	<b>1.3100</b>	<b>3.1000e-003</b>	<b>0.2361</b>	<b>4.6600e-003</b>	<b>0.2408</b>	<b>0.0629</b>	<b>4.2800e-003</b>	<b>0.0672</b>		<b>264.1724</b>	<b>264.1724</b>	<b>9.8400e-003</b>		<b>264.3791</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4482	8.8083	32.6614	0.0734	4.9300	0.1234	5.0533	1.3156	0.1134	1.4291		6,424.1855	6,424.1855	0.2150		6,428.7013
Unmitigated	3.4482	8.8083	32.6614	0.0734	4.9300	0.1234	5.0533	1.3156	0.1134	1.4291		6,424.1855	6,424.1855	0.2150		6,428.7013

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	988.18	0.00	0.00	1,662,095	1,662,095
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	988.18	0.00	0.00	1,662,095	1,662,095

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
NaturalGas Unmitigated	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	143.36	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1.5500e-003</b>	<b>0.0141</b>	<b>0.0118</b>	<b>8.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>16.8659</b>	<b>16.8659</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>16.9685</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0.14336	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
<b>Total</b>		<b>1.5500e-003</b>	<b>0.0141</b>	<b>0.0118</b>	<b>8.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>16.8659</b>	<b>16.8659</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>16.9685</b>

### 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Unmitigated	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
<b>Total</b>	<b>3.1931</b>	<b>5.0000e-005</b>	<b>5.7100e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0119</b>	<b>0.0119</b>	<b>3.0000e-005</b>		<b>0.0126</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
<b>Total</b>	<b>3.1931</b>	<b>5.0000e-005</b>	<b>5.7100e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0119</b>	<b>0.0119</b>	<b>3.0000e-005</b>		<b>0.0126</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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## SWJC Juvenile Courts Relocation Project Riverside-South Coast County, Winter

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	14.34	1000sqft	0.33	14,336.00	0
Other Non-Asphalt Surfaces	1.80	Acre	1.80	78,408.00	0
Parking Lot	38.39	1000sqft	0.88	38,385.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2016
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See table

Off-road Equipment - See table

Off-road Equipment - See table

Off-road Equipment - See table

Trips and VMT - Water truck trips added

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	80.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	NumDays	18.00	21.00
tblConstructionPhase	PhaseEndDate	1/20/2017	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	6/13/2016
tblGrading	AcresOfGrading	21.50	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	23.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

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## 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	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Energy	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Mobile	3.3762	9.1629	31.2086	0.0685	4.9300	0.1241	5.0540	1.3156	0.1141	1.4297		6,012.3086	6,012.3086	0.2154		6,016.8313
<b>Total</b>	<b>6.5708</b>	<b>9.1770</b>	<b>31.2261</b>	<b>0.0685</b>	<b>4.9300</b>	<b>0.1252</b>	<b>5.0551</b>	<b>1.3156</b>	<b>0.1152</b>	<b>1.4308</b>		<b>6,029.1864</b>	<b>6,029.1864</b>	<b>0.2157</b>	<b>3.1000e-004</b>	<b>6,033.8125</b>

### 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	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Energy	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Mobile	3.3762	9.1629	31.2086	0.0685	4.9300	0.1241	5.0540	1.3156	0.1141	1.4297		6,012.3086	6,012.3086	0.2154		6,016.8313
<b>Total</b>	<b>6.5708</b>	<b>9.1770</b>	<b>31.2261</b>	<b>0.0685</b>	<b>4.9300</b>	<b>0.1252</b>	<b>5.0551</b>	<b>1.3156</b>	<b>0.1152</b>	<b>1.4308</b>		<b>6,029.1864</b>	<b>6,029.1864</b>	<b>0.2157</b>	<b>3.1000e-004</b>	<b>6,033.8125</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	8/1/2015	9/30/2015	5	43	
2	Building Construction	Building Construction	10/1/2015	9/30/2016	5	262	
3	Architectural Coating	Architectural Coating	6/13/2016	9/30/2016	5	80	
4	Paving	Paving	10/1/2016	10/31/2016	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,843; Non-Residential Outdoor: 46,948 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2015****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					6.1207	0.0000	6.1207	3.3209	0.0000	3.3209			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>6.1207</b>	<b>2.3284</b>	<b>8.4491</b>	<b>3.3209</b>	<b>2.1421</b>	<b>5.4630</b>		<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0187	0.1959	0.2127	4.2000e-004	0.0126	3.9000e-003	0.0165	3.5900e-003	3.5800e-003	7.1800e-003		42.3857	42.3857	3.2000e-004		42.3923
Worker	0.0611	0.0808	0.8178	1.8400e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0000e-003	0.0455		157.8652	157.8652	7.8600e-003		158.0302
<b>Total</b>	<b>0.0798</b>	<b>0.2766</b>	<b>1.0305</b>	<b>2.2600e-003</b>	<b>0.1802</b>	<b>4.9900e-003</b>	<b>0.1852</b>	<b>0.0481</b>	<b>4.5800e-003</b>	<b>0.0527</b>		<b>200.2509</b>	<b>200.2509</b>	<b>8.1800e-003</b>		<b>200.4225</b>

### 3.2 Grading - 2015

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1207	0.0000	6.1207	3.3209	0.0000	3.3209			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>6.1207</b>	<b>2.3284</b>	<b>8.4491</b>	<b>3.3209</b>	<b>2.1421</b>	<b>5.4630</b>	<b>0.0000</b>	<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0187	0.1959	0.2127	4.2000e-004	0.0126	3.9000e-003	0.0165	3.5900e-003	3.5800e-003	7.1800e-003		42.3857	42.3857	3.2000e-004		42.3923
Worker	0.0611	0.0808	0.8178	1.8400e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0000e-003	0.0455		157.8652	157.8652	7.8600e-003		158.0302
<b>Total</b>	<b>0.0798</b>	<b>0.2766</b>	<b>1.0305</b>	<b>2.2600e-003</b>	<b>0.1802</b>	<b>4.9900e-003</b>	<b>0.1852</b>	<b>0.0481</b>	<b>4.5800e-003</b>	<b>0.0527</b>		<b>200.2509</b>	<b>200.2509</b>	<b>8.1800e-003</b>		<b>200.4225</b>

**3.3 Building Construction - 2015****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	3.8870	32.4182	20.0375	0.0287		2.2678	2.2678		2.1293	2.1293		2,886.429 2	2,886.429 2	0.7336		2,901.834 5
<b>Total</b>	<b>3.8870</b>	<b>32.4182</b>	<b>20.0375</b>	<b>0.0287</b>		<b>2.2678</b>	<b>2.2678</b>		<b>2.1293</b>	<b>2.1293</b>		<b>2,886.429 2</b>	<b>2,886.429 2</b>	<b>0.7336</b>		<b>2,901.834 5</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2151	2.2527	2.4457	4.8100e-003	0.1447	0.0448	0.1895	0.0413	0.0412	0.0826		487.4351	487.4351	3.6500e-003		487.5117
Worker	0.2199	0.2908	2.9442	6.6100e-003	0.6036	3.9400e-003	0.6075	0.1601	3.6100e-003	0.1637		568.3147	568.3147	0.0283		568.9087
<b>Total</b>	<b>0.4350</b>	<b>2.5434</b>	<b>5.3899</b>	<b>0.0114</b>	<b>0.7483</b>	<b>0.0488</b>	<b>0.7971</b>	<b>0.2014</b>	<b>0.0448</b>	<b>0.2462</b>		<b>1,055.749 8</b>	<b>1,055.749 8</b>	<b>0.0319</b>		<b>1,056.420 4</b>

### 3.3 Building Construction - 2015

#### 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	3.8870	32.4182	20.0375	0.0287		2.2678	2.2678		2.1293	2.1293	0.0000	2,886.4292	2,886.4292	0.7336		2,901.8345
<b>Total</b>	<b>3.8870</b>	<b>32.4182</b>	<b>20.0375</b>	<b>0.0287</b>		<b>2.2678</b>	<b>2.2678</b>		<b>2.1293</b>	<b>2.1293</b>	<b>0.0000</b>	<b>2,886.4292</b>	<b>2,886.4292</b>	<b>0.7336</b>		<b>2,901.8345</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2151	2.2527	2.4457	4.8100e-003	0.1447	0.0448	0.1895	0.0413	0.0412	0.0826		487.4351	487.4351	3.6500e-003		487.5117
Worker	0.2199	0.2908	2.9442	6.6100e-003	0.6036	3.9400e-003	0.6075	0.1601	3.6100e-003	0.1637		568.3147	568.3147	0.0283		568.9087
<b>Total</b>	<b>0.4350</b>	<b>2.5434</b>	<b>5.3899</b>	<b>0.0114</b>	<b>0.7483</b>	<b>0.0488</b>	<b>0.7971</b>	<b>0.2014</b>	<b>0.0448</b>	<b>0.2462</b>		<b>1,055.7498</b>	<b>1,055.7498</b>	<b>0.0319</b>		<b>1,056.4204</b>



### 3.3 Building Construction - 2016

#### 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	3.6240	30.7934	19.7845	0.0287		2.1098	2.1098		1.9794	1.9794		2,863.9447	2,863.9447	0.7208		2,879.0804
<b>Total</b>	<b>3.6240</b>	<b>30.7934</b>	<b>19.7845</b>	<b>0.0287</b>		<b>2.1098</b>	<b>2.1098</b>		<b>1.9794</b>	<b>1.9794</b>		<b>2,863.9447</b>	<b>2,863.9447</b>	<b>0.7208</b>		<b>2,879.0804</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1906	1.9785	2.2980	4.8000e-003	0.1447	0.0378	0.1825	0.0413	0.0348	0.0761		481.7389	481.7389	3.2700e-003		481.8075
Worker	0.1974	0.2603	2.6387	6.6100e-003	0.6036	3.7700e-003	0.6074	0.1601	3.4700e-003	0.1635		547.5529	547.5529	0.0258		548.0956
<b>Total</b>	<b>0.3880</b>	<b>2.2388</b>	<b>4.9367</b>	<b>0.0114</b>	<b>0.7483</b>	<b>0.0416</b>	<b>0.7899</b>	<b>0.2014</b>	<b>0.0382</b>	<b>0.2396</b>		<b>1,029.2918</b>	<b>1,029.2918</b>	<b>0.0291</b>		<b>1,029.9031</b>

### 3.3 Building Construction - 2016

#### 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	3.6240	30.7934	19.7845	0.0287		2.1098	2.1098		1.9794	1.9794	0.0000	2,863.9447	2,863.9447	0.7208		2,879.0804
<b>Total</b>	<b>3.6240</b>	<b>30.7934</b>	<b>19.7845</b>	<b>0.0287</b>		<b>2.1098</b>	<b>2.1098</b>		<b>1.9794</b>	<b>1.9794</b>	<b>0.0000</b>	<b>2,863.9447</b>	<b>2,863.9447</b>	<b>0.7208</b>		<b>2,879.0804</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1906	1.9785	2.2980	4.8000e-003	0.1447	0.0378	0.1825	0.0413	0.0348	0.0761		481.7389	481.7389	3.2700e-003		481.8075
Worker	0.1974	0.2603	2.6387	6.6100e-003	0.6036	3.7700e-003	0.6074	0.1601	3.4700e-003	0.1635		547.5529	547.5529	0.0258		548.0956
<b>Total</b>	<b>0.3880</b>	<b>2.2388</b>	<b>4.9367</b>	<b>0.0114</b>	<b>0.7483</b>	<b>0.0416</b>	<b>0.7899</b>	<b>0.2014</b>	<b>0.0382</b>	<b>0.2396</b>		<b>1,029.2918</b>	<b>1,029.2918</b>	<b>0.0291</b>		<b>1,029.9031</b>

### 3.4 Architectural Coating - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4913	3.1630	2.5119	3.9600e-003		0.2622	0.2622		0.2622	0.2622		375.2641	375.2641	0.0442		376.1932
<b>Total</b>	<b>27.6916</b>	<b>3.1630</b>	<b>2.5119</b>	<b>3.9600e-003</b>		<b>0.2622</b>	<b>0.2622</b>		<b>0.2622</b>	<b>0.2622</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0442</b>		<b>376.1932</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0166	0.1721	0.1998	4.2000e-004	0.0126	3.2900e-003	0.0159	3.5900e-003	3.0200e-003	6.6200e-003		41.8903	41.8903	2.8000e-004		41.8963
Worker	0.0402	0.0530	0.5375	1.3500e-003	0.1230	7.7000e-004	0.1237	0.0326	7.1000e-004	0.0333		111.5386	111.5386	5.2600e-003		111.6491
<b>Total</b>	<b>0.0568</b>	<b>0.2251</b>	<b>0.7373</b>	<b>1.7700e-003</b>	<b>0.1355</b>	<b>4.0600e-003</b>	<b>0.1396</b>	<b>0.0362</b>	<b>3.7300e-003</b>	<b>0.0399</b>		<b>153.4289</b>	<b>153.4289</b>	<b>5.5400e-003</b>		<b>153.5454</b>

### 3.4 Architectural Coating - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4913	3.1630	2.5119	3.9600e-003		0.2622	0.2622		0.2622	0.2622	0.0000	375.2641	375.2641	0.0442		376.1932
<b>Total</b>	<b>27.6916</b>	<b>3.1630</b>	<b>2.5119</b>	<b>3.9600e-003</b>		<b>0.2622</b>	<b>0.2622</b>		<b>0.2622</b>	<b>0.2622</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0442</b>		<b>376.1932</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0166	0.1721	0.1998	4.2000e-004	0.0126	3.2900e-003	0.0159	3.5900e-003	3.0200e-003	6.6200e-003		41.8903	41.8903	2.8000e-004		41.8963
Worker	0.0402	0.0530	0.5375	1.3500e-003	0.1230	7.7000e-004	0.1237	0.0326	7.1000e-004	0.0333		111.5386	111.5386	5.2600e-003		111.6491
<b>Total</b>	<b>0.0568</b>	<b>0.2251</b>	<b>0.7373</b>	<b>1.7700e-003</b>	<b>0.1355</b>	<b>4.0600e-003</b>	<b>0.1396</b>	<b>0.0362</b>	<b>3.7300e-003</b>	<b>0.0399</b>		<b>153.4289</b>	<b>153.4289</b>	<b>5.5400e-003</b>		<b>153.5454</b>

**3.5 Paving - 2016****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1469	21.8663	14.9949	0.0223		1.3170	1.3170		1.2140	1.2140		2,272.0603	2,272.0603	0.6654		2,286.0326
Paving	0.1098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.2567</b>	<b>21.8663</b>	<b>14.9949</b>	<b>0.0223</b>		<b>1.3170</b>	<b>1.3170</b>		<b>1.2140</b>	<b>1.2140</b>		<b>2,272.0603</b>	<b>2,272.0603</b>	<b>0.6654</b>		<b>2,286.0326</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0166	0.1721	0.1998	4.2000e-004	0.0126	3.2900e-003	0.0159	3.5900e-003	3.0200e-003	6.6200e-003		41.8903	41.8903	2.8000e-004		41.8963
Worker	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		202.7974	202.7974	9.5700e-003		202.9984
<b>Total</b>	<b>0.0897</b>	<b>0.2685</b>	<b>1.1771</b>	<b>2.8700e-003</b>	<b>0.2361</b>	<b>4.6900e-003</b>	<b>0.2408</b>	<b>0.0629</b>	<b>4.3000e-003</b>	<b>0.0672</b>		<b>244.6877</b>	<b>244.6877</b>	<b>9.8500e-003</b>		<b>244.8947</b>

### 3.5 Paving - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1469	21.8663	14.9949	0.0223		1.3170	1.3170		1.2140	1.2140	0.0000	2,272.0603	2,272.0603	0.6654		2,286.0326
Paving	0.1098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.2567</b>	<b>21.8663</b>	<b>14.9949</b>	<b>0.0223</b>		<b>1.3170</b>	<b>1.3170</b>		<b>1.2140</b>	<b>1.2140</b>	<b>0.0000</b>	<b>2,272.0603</b>	<b>2,272.0603</b>	<b>0.6654</b>		<b>2,286.0326</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0166	0.1721	0.1998	4.2000e-004	0.0126	3.2900e-003	0.0159	3.5900e-003	3.0200e-003	6.6200e-003		41.8903	41.8903	2.8000e-004		41.8963
Worker	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		202.7974	202.7974	9.5700e-003		202.9984
<b>Total</b>	<b>0.0897</b>	<b>0.2685</b>	<b>1.1771</b>	<b>2.8700e-003</b>	<b>0.2361</b>	<b>4.6900e-003</b>	<b>0.2408</b>	<b>0.0629</b>	<b>4.3000e-003</b>	<b>0.0672</b>		<b>244.6877</b>	<b>244.6877</b>	<b>9.8500e-003</b>		<b>244.8947</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3762	9.1629	31.2086	0.0685	4.9300	0.1241	5.0540	1.3156	0.1141	1.4297		6,012.3086	6,012.3086	0.2154		6,016.8313
Unmitigated	3.3762	9.1629	31.2086	0.0685	4.9300	0.1241	5.0540	1.3156	0.1141	1.4297		6,012.3086	6,012.3086	0.2154		6,016.8313

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	988.18	0.00	0.00	1,662,095	1,662,095
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	988.18	0.00	0.00	1,662,095	1,662,095

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
NaturalGas Unmitigated	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685



### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	143.36	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1.5500e-003</b>	<b>0.0141</b>	<b>0.0118</b>	<b>8.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>16.8659</b>	<b>16.8659</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>16.9685</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0.14336	1.5500e-003	0.0141	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		16.8659	16.8659	3.2000e-004	3.1000e-004	16.9685
<b>Total</b>		<b>1.5500e-003</b>	<b>0.0141</b>	<b>0.0118</b>	<b>8.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>16.8659</b>	<b>16.8659</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>16.9685</b>

### 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
Unmitigated	3.1931	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
<b>Total</b>	<b>3.1931</b>	<b>5.0000e-005</b>	<b>5.7100e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0119</b>	<b>0.0119</b>	<b>3.0000e-005</b>		<b>0.0126</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	5.7100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0119	0.0119	3.0000e-005		0.0126
<b>Total</b>	<b>3.1931</b>	<b>5.0000e-005</b>	<b>5.7100e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0119</b>	<b>0.0119</b>	<b>3.0000e-005</b>		<b>0.0126</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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**SWJC Juvenile Courts Relocation Project  
Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	14.34	1000sqft	0.33	14,336.00	0
Other Non-Asphalt Surfaces	1.80	Acre	1.80	78,408.00	0
Parking Lot	38.39	1000sqft	0.88	38,385.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2016
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use -
- Construction Phase - See table
- Off-road Equipment - See table
- Off-road Equipment - See table
- Off-road Equipment - See table
- Trips and VMT - Water truck trips added
- Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	80.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	NumDays	18.00	21.00
tblConstructionPhase	PhaseEndDate	1/20/2017	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	6/13/2016
tblGrading	AcresOfGrading	21.50	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	21.00	23.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

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**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5827	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003
Energy	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	56.3143	56.3143	2.5100e-003	5.6000e-004	56.5408
Mobile	0.4171	1.2172	4.1859	8.9900e-003	0.6304	0.0161	0.6464	0.1685	0.0148	0.1832	0.0000	715.7485	715.7485	0.0254	0.0000	716.2807
Waste						0.0000	0.0000		0.0000	0.0000	2.7079	0.0000	2.7079	0.1600	0.0000	6.0686
Water						0.0000	0.0000		0.0000	0.0000	0.9038	16.1662	17.0700	0.0936	2.3500e-003	19.7621
<b>Total</b>	<b>1.0001</b>	<b>1.2198</b>	<b>4.1888</b>	<b>9.0100e-003</b>	<b>0.6304</b>	<b>0.0163</b>	<b>0.6466</b>	<b>0.1685</b>	<b>0.0150</b>	<b>0.1834</b>	<b>3.6117</b>	<b>788.2304</b>	<b>791.8420</b>	<b>0.2815</b>	<b>2.9100e-003</b>	<b>798.6537</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5827	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003
Energy	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	56.3143	56.3143	2.5100e-003	5.6000e-004	56.5408
Mobile	0.4171	1.2172	4.1859	8.9900e-003	0.6304	0.0161	0.6464	0.1685	0.0148	0.1832	0.0000	715.7485	715.7485	0.0254	0.0000	716.2807
Waste						0.0000	0.0000		0.0000	0.0000	2.7079	0.0000	2.7079	0.1600	0.0000	6.0686
Water						0.0000	0.0000		0.0000	0.0000	0.9038	16.1662	17.0700	0.0936	2.3400e-003	19.7607
<b>Total</b>	<b>1.0001</b>	<b>1.2198</b>	<b>4.1888</b>	<b>9.0100e-003</b>	<b>0.6304</b>	<b>0.0163</b>	<b>0.6466</b>	<b>0.1685</b>	<b>0.0150</b>	<b>0.1834</b>	<b>3.6117</b>	<b>788.2304</b>	<b>791.8420</b>	<b>0.2814</b>	<b>2.9000e-003</b>	<b>798.6522</b>

	ROG	NOx	CO	SO2	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>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.34</b>	<b>0.00</b>

## 3.0 Construction Detail

### Construction Phase



Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	8/1/2015	9/30/2015	5	43	
2	Building Construction	Building Construction	10/1/2015	9/30/2016	5	262	
3	Architectural Coating	Architectural Coating	6/13/2016	9/30/2016	5	80	
4	Paving	Paving	10/1/2016	10/31/2016	5	21	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,843; Non-Residential Outdoor: 46,948 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Grading - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1316	0.0000	0.1316	0.0714	0.0000	0.0714	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0824	0.8690	0.5735	6.4000e-004		0.0501	0.0501		0.0461	0.0461	0.0000	61.0298	61.0298	0.0182	0.0000	61.4124
<b>Total</b>	<b>0.0824</b>	<b>0.8690</b>	<b>0.5735</b>	<b>6.4000e-004</b>	<b>0.1316</b>	<b>0.0501</b>	<b>0.1817</b>	<b>0.0714</b>	<b>0.0461</b>	<b>0.1175</b>	<b>0.0000</b>	<b>61.0298</b>	<b>61.0298</b>	<b>0.0182</b>	<b>0.0000</b>	<b>61.4124</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	4.2900e-003	4.7000e-003	1.0000e-005	2.7000e-004	8.0000e-005	3.5000e-004	8.0000e-005	8.0000e-005	1.5000e-004	0.0000	0.8309	0.8309	1.0000e-005	0.0000	0.8310
Worker	1.2400e-003	1.8100e-003	0.0182	4.0000e-005	3.5400e-003	2.0000e-005	3.5700e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	3.1210	3.1210	1.5000e-004	0.0000	3.1242
<b>Total</b>	<b>1.6400e-003</b>	<b>6.1000e-003</b>	<b>0.0229</b>	<b>5.0000e-005</b>	<b>3.8100e-003</b>	<b>1.0000e-004</b>	<b>3.9200e-003</b>	<b>1.0200e-003</b>	<b>1.0000e-004</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>3.9519</b>	<b>3.9519</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.9552</b>

### 3.2 Grading - 2015

#### 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					0.1316	0.0000	0.1316	0.0714	0.0000	0.0714	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0824	0.8689	0.5735	6.4000e-004		0.0501	0.0501		0.0461	0.0461	0.0000	61.0297	61.0297	0.0182	0.0000	61.4124
<b>Total</b>	<b>0.0824</b>	<b>0.8689</b>	<b>0.5735</b>	<b>6.4000e-004</b>	<b>0.1316</b>	<b>0.0501</b>	<b>0.1817</b>	<b>0.0714</b>	<b>0.0461</b>	<b>0.1175</b>	<b>0.0000</b>	<b>61.0297</b>	<b>61.0297</b>	<b>0.0182</b>	<b>0.0000</b>	<b>61.4124</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	4.2900e-003	4.7000e-003	1.0000e-005	2.7000e-004	8.0000e-005	3.5000e-004	8.0000e-005	8.0000e-005	1.5000e-004	0.0000	0.8309	0.8309	1.0000e-005	0.0000	0.8310
Worker	1.2400e-003	1.8100e-003	0.0182	4.0000e-005	3.5400e-003	2.0000e-005	3.5700e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	3.1210	3.1210	1.5000e-004	0.0000	3.1242
<b>Total</b>	<b>1.6400e-003</b>	<b>6.1000e-003</b>	<b>0.0229</b>	<b>5.0000e-005</b>	<b>3.8100e-003</b>	<b>1.0000e-004</b>	<b>3.9200e-003</b>	<b>1.0200e-003</b>	<b>1.0000e-004</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>3.9519</b>	<b>3.9519</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.9552</b>

### 3.3 Building Construction - 2015

#### 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	0.1283	1.0698	0.6612	9.5000e-004		0.0748	0.0748		0.0703	0.0703	0.0000	86.4113	86.4113	0.0220	0.0000	86.8725
<b>Total</b>	<b>0.1283</b>	<b>1.0698</b>	<b>0.6612</b>	<b>9.5000e-004</b>		<b>0.0748</b>	<b>0.0748</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>86.4113</b>	<b>86.4113</b>	<b>0.0220</b>	<b>0.0000</b>	<b>86.8725</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0300e-003	0.0758	0.0829	1.6000e-004	4.7100e-003	1.4700e-003	6.1800e-003	1.3500e-003	1.3500e-003	2.7000e-003	0.0000	14.6659	14.6659	1.1000e-004	0.0000	14.6681
Worker	6.8300e-003	0.0100	0.1007	2.2000e-004	0.0196	1.3000e-004	0.0197	5.2000e-003	1.2000e-004	5.3200e-003	0.0000	17.2454	17.2454	8.5000e-004	0.0000	17.2632
<b>Total</b>	<b>0.0139</b>	<b>0.0858</b>	<b>0.1837</b>	<b>3.8000e-004</b>	<b>0.0243</b>	<b>1.6000e-003</b>	<b>0.0259</b>	<b>6.5500e-003</b>	<b>1.4700e-003</b>	<b>8.0200e-003</b>	<b>0.0000</b>	<b>31.9113</b>	<b>31.9113</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>31.9313</b>

### 3.3 Building Construction - 2015

#### 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	0.1283	1.0698	0.6612	9.5000e-004		0.0748	0.0748		0.0703	0.0703	0.0000	86.4112	86.4112	0.0220	0.0000	86.8724
<b>Total</b>	<b>0.1283</b>	<b>1.0698</b>	<b>0.6612</b>	<b>9.5000e-004</b>		<b>0.0748</b>	<b>0.0748</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>86.4112</b>	<b>86.4112</b>	<b>0.0220</b>	<b>0.0000</b>	<b>86.8724</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0300e-003	0.0758	0.0829	1.6000e-004	4.7100e-003	1.4700e-003	6.1800e-003	1.3500e-003	1.3500e-003	2.7000e-003	0.0000	14.6659	14.6659	1.1000e-004	0.0000	14.6681
Worker	6.8300e-003	0.0100	0.1007	2.2000e-004	0.0196	1.3000e-004	0.0197	5.2000e-003	1.2000e-004	5.3200e-003	0.0000	17.2454	17.2454	8.5000e-004	0.0000	17.2632
<b>Total</b>	<b>0.0139</b>	<b>0.0858</b>	<b>0.1837</b>	<b>3.8000e-004</b>	<b>0.0243</b>	<b>1.6000e-003</b>	<b>0.0259</b>	<b>6.5500e-003</b>	<b>1.4700e-003</b>	<b>8.0200e-003</b>	<b>0.0000</b>	<b>31.9113</b>	<b>31.9113</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>31.9313</b>

### 3.3 Building Construction - 2016

#### 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	0.3552	3.0178	1.9389	2.8100e-003		0.2068	0.2068		0.1940	0.1940	0.0000	254.6164	254.6164	0.0641	0.0000	255.9621
<b>Total</b>	<b>0.3552</b>	<b>3.0178</b>	<b>1.9389</b>	<b>2.8100e-003</b>		<b>0.2068</b>	<b>0.2068</b>		<b>0.1940</b>	<b>0.1940</b>	<b>0.0000</b>	<b>254.6164</b>	<b>254.6164</b>	<b>0.0641</b>	<b>0.0000</b>	<b>255.9621</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0185	0.1977	0.2314	4.7000e-004	0.0140	3.6900e-003	0.0177	4.0000e-003	3.3900e-003	7.3900e-003	0.0000	43.0454	43.0454	2.9000e-004	0.0000	43.0514
Worker	0.0182	0.0266	0.2680	6.6000e-004	0.0582	3.7000e-004	0.0585	0.0155	3.4000e-004	0.0158	0.0000	49.3435	49.3435	2.3000e-003	0.0000	49.3917
<b>Total</b>	<b>0.0367</b>	<b>0.2243</b>	<b>0.4994</b>	<b>1.1300e-003</b>	<b>0.0722</b>	<b>4.0600e-003</b>	<b>0.0762</b>	<b>0.0195</b>	<b>3.7300e-003</b>	<b>0.0232</b>	<b>0.0000</b>	<b>92.3889</b>	<b>92.3889</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>92.4431</b>

### 3.3 Building Construction - 2016

#### 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	0.3552	3.0178	1.9389	2.8100e-003		0.2068	0.2068		0.1940	0.1940	0.0000	254.6161	254.6161	0.0641	0.0000	255.9618
<b>Total</b>	<b>0.3552</b>	<b>3.0178</b>	<b>1.9389</b>	<b>2.8100e-003</b>		<b>0.2068</b>	<b>0.2068</b>		<b>0.1940</b>	<b>0.1940</b>	<b>0.0000</b>	<b>254.6161</b>	<b>254.6161</b>	<b>0.0641</b>	<b>0.0000</b>	<b>255.9618</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0185	0.1977	0.2314	4.7000e-004	0.0140	3.6900e-003	0.0177	4.0000e-003	3.3900e-003	7.3900e-003	0.0000	43.0454	43.0454	2.9000e-004	0.0000	43.0514
Worker	0.0182	0.0266	0.2680	6.6000e-004	0.0582	3.7000e-004	0.0585	0.0155	3.4000e-004	0.0158	0.0000	49.3435	49.3435	2.3000e-003	0.0000	49.3917
<b>Total</b>	<b>0.0367</b>	<b>0.2243</b>	<b>0.4994</b>	<b>1.1300e-003</b>	<b>0.0722</b>	<b>4.0600e-003</b>	<b>0.0762</b>	<b>0.0195</b>	<b>3.7300e-003</b>	<b>0.0232</b>	<b>0.0000</b>	<b>92.3889</b>	<b>92.3889</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>92.4431</b>



### 3.4 Architectural Coating - 2016

#### 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	1.0880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.1265	0.1005	1.6000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	13.6174	13.6174	1.6100e-003	0.0000	13.6511
<b>Total</b>	<b>1.1077</b>	<b>0.1265</b>	<b>0.1005</b>	<b>1.6000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>13.6174</b>	<b>13.6174</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>13.6511</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6000e-004	7.0200e-003	8.2100e-003	2.0000e-005	5.0000e-004	1.3000e-004	6.3000e-004	1.4000e-004	1.2000e-004	2.6000e-004	0.0000	1.5278	1.5278	1.0000e-005	0.0000	1.5280
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
<b>Total</b>	<b>2.1700e-003</b>	<b>9.2300e-003</b>	<b>0.0305</b>	<b>7.0000e-005</b>	<b>5.3400e-003</b>	<b>1.6000e-004</b>	<b>5.5000e-003</b>	<b>1.4200e-003</b>	<b>1.5000e-004</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>5.6304</b>	<b>5.6304</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>5.6346</b>

### 3.4 Architectural Coating - 2016

#### 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	1.0880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.1265	0.1005	1.6000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	13.6173	13.6173	1.6100e-003	0.0000	13.6511
<b>Total</b>	<b>1.1077</b>	<b>0.1265</b>	<b>0.1005</b>	<b>1.6000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>13.6173</b>	<b>13.6173</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>13.6511</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6000e-004	7.0200e-003	8.2100e-003	2.0000e-005	5.0000e-004	1.3000e-004	6.3000e-004	1.4000e-004	1.2000e-004	2.6000e-004	0.0000	1.5278	1.5278	1.0000e-005	0.0000	1.5280
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
<b>Total</b>	<b>2.1700e-003</b>	<b>9.2300e-003</b>	<b>0.0305</b>	<b>7.0000e-005</b>	<b>5.3400e-003</b>	<b>1.6000e-004</b>	<b>5.5000e-003</b>	<b>1.4200e-003</b>	<b>1.5000e-004</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>5.6304</b>	<b>5.6304</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>5.6346</b>

**3.5 Paving - 2016****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	0.0225	0.2296	0.1575	2.3000e-004		0.0138	0.0138		0.0128	0.0128	0.0000	21.6424	21.6424	6.3400e-003	0.0000	21.7755
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.2296</b>	<b>0.1575</b>	<b>2.3000e-004</b>		<b>0.0138</b>	<b>0.0138</b>		<b>0.0128</b>	<b>0.0128</b>	<b>0.0000</b>	<b>21.6424</b>	<b>21.6424</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>21.7755</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	1.8400e-003	2.1600e-003	0.0000	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4010	0.4010	0.0000	0.0000	0.4011
Worker	7.2000e-004	1.0600e-003	0.0106	3.0000e-005	2.3100e-003	1.0000e-005	2.3200e-003	6.1000e-004	1.0000e-005	6.3000e-004	0.0000	1.9581	1.9581	9.0000e-005	0.0000	1.9600
<b>Total</b>	<b>8.9000e-004</b>	<b>2.9000e-003</b>	<b>0.0128</b>	<b>3.0000e-005</b>	<b>2.4400e-003</b>	<b>4.0000e-005</b>	<b>2.4800e-003</b>	<b>6.5000e-004</b>	<b>4.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>2.3591</b>	<b>2.3591</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.3611</b>

### 3.5 Paving - 2016

#### 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	0.0225	0.2296	0.1575	2.3000e-004		0.0138	0.0138		0.0128	0.0128	0.0000	21.6424	21.6424	6.3400e-003	0.0000	21.7754
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.2296</b>	<b>0.1575</b>	<b>2.3000e-004</b>		<b>0.0138</b>	<b>0.0138</b>		<b>0.0128</b>	<b>0.0128</b>	<b>0.0000</b>	<b>21.6424</b>	<b>21.6424</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>21.7754</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	1.8400e-003	2.1600e-003	0.0000	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4010	0.4010	0.0000	0.0000	0.4011
Worker	7.2000e-004	1.0600e-003	0.0106	3.0000e-005	2.3100e-003	1.0000e-005	2.3200e-003	6.1000e-004	1.0000e-005	6.3000e-004	0.0000	1.9581	1.9581	9.0000e-005	0.0000	1.9600
<b>Total</b>	<b>8.9000e-004</b>	<b>2.9000e-003</b>	<b>0.0128</b>	<b>3.0000e-005</b>	<b>2.4400e-003</b>	<b>4.0000e-005</b>	<b>2.4800e-003</b>	<b>6.5000e-004</b>	<b>4.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>2.3591</b>	<b>2.3591</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.3611</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4171	1.2172	4.1859	8.9900e-003	0.6304	0.0161	0.6464	0.1685	0.0148	0.1832	0.0000	715.7485	715.7485	0.0254	0.0000	716.2807
Unmitigated	0.4171	1.2172	4.1859	8.9900e-003	0.6304	0.0161	0.6464	0.1685	0.0148	0.1832	0.0000	715.7485	715.7485	0.0254	0.0000	716.2807

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	988.18	0.00	0.00	1,662,095	1,662,095
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>988.18</b>	<b>0.00</b>	<b>0.00</b>	<b>1,662,095</b>	<b>1,662,095</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

**5.0 Energy Detail**

Historical Energy Use: N

**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
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53.5220	53.5220	2.4600e-003	5.1000e-004	53.7314
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53.5220	53.5220	2.4600e-003	5.1000e-004	53.7314
NaturalGas Mitigated	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7923	2.7923	5.0000e-005	5.0000e-005	2.8093
NaturalGas Unmitigated	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7923	2.7923	5.0000e-005	5.0000e-005	2.8093

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	52326.4	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7923	2.7923	5.0000e-005	5.0000e-005	2.8093
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.8000e-004</b>	<b>2.5700e-003</b>	<b>2.1500e-003</b>	<b>2.0000e-005</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.7923</b>	<b>2.7923</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>2.8093</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	52326.4	2.8000e-004	2.5700e-003	2.1500e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7923	2.7923	5.0000e-005	5.0000e-005	2.8093
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.8000e-004</b>	<b>2.5700e-003</b>	<b>2.1500e-003</b>	<b>2.0000e-005</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.7923</b>	<b>2.7923</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>2.8093</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	153252	43.8556	2.0200e-003	4.2000e-004	44.0272
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33778.8	9.6664	4.4000e-004	9.0000e-005	9.7042
<b>Total</b>		<b>53.5220</b>	<b>2.4600e-003</b>	<b>5.1000e-004</b>	<b>53.7314</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	153252	43.8556	2.0200e-003	4.2000e-004	44.0272
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33778.8	9.6664	4.4000e-004	9.0000e-005	9.7042
<b>Total</b>		<b>53.5220</b>	<b>2.4600e-003</b>	<b>5.1000e-004</b>	<b>53.7314</b>

### 6.0 Area Detail

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### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5827	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003
Unmitigated	0.5827	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1088					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003
<b>Total</b>	<b>0.5827</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3500e-003</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4300e-003</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1088					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3500e-003	1.3500e-003	0.0000	0.0000	1.4300e-003
<b>Total</b>	<b>0.5827</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3500e-003</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4300e-003</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.0700	0.0936	2.3400e-003	19.7607
Unmitigated	17.0700	0.0936	2.3500e-003	19.7621

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	2.84878 / 1.74603	17.0700	0.0936	2.3500e-003	19.7621
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.0700</b>	<b>0.0936</b>	<b>2.3500e-003</b>	<b>19.7621</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	2.84878 / 1.74603	17.0700	0.0936	2.3400e-003	19.7607
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.0700</b>	<b>0.0936</b>	<b>2.3400e-003</b>	<b>19.7607</b>

## 8.0 Waste Detail

---

## 8.1 Mitigation Measures Waste

### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.7079	0.1600	0.0000	6.0686
Unmitigated	2.7079	0.1600	0.0000	6.0686

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	13.34	2.7079	0.1600	0.0000	6.0686
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.7079</b>	<b>0.1600</b>	<b>0.0000</b>	<b>6.0686</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	13.34	2.7079	0.1600	0.0000	6.0686
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.7079</b>	<b>0.1600</b>	<b>0.0000</b>	<b>6.0686</b>

## 9.0 Operational Offroad

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

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**SOUTHWEST JUSTICE CENTER  
JUVENILE HALL COURTS RELOCATION PROJECT  
DRAFT BIOLOGICAL HABITAT ASSESSMENT REPORT  
March 2014**

**Assessor's Parcel Number  
963-080-013  
United States Geological Survey *Bachelor Mountain, Calif.* quadrangle  
Township 7 South, Range 2 West, Section 7**

**Submitted to:  
Albert A. Webb Associates  
3788 McCray Street  
Riverside, California 92506  
Office: (951) 686-1070  
Fax: (951) 786-0594  
Contact: Cheryl DeGano**

**Submitted by:  
AMEC Environment & Infrastructure, Inc.  
3120 Chicago Avenue, Suite 110  
Riverside, CA 92507  
Contact: Stephen J. Myers, Wildlife Biologist/Ornithologist  
(951) 369-8060  
Principal Investigator and Report Preparer**

**Fieldwork Performed  
4 February 2014 by Stephen J. Myers**

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## **EXECUTIVE SUMMARY**

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AMEC Environment & Infrastructure, Inc. conducted a biological habitat assessment appropriate for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). This assessment was performed for Assessor's Parcel Number 963-080-013 for a proposed project that would result in the construction of a new Juvenile Hall Courts building and accompanying parking lots and access roads. The project is located in the unincorporated area of French Valley, Riverside County, California.

The project site is within MSHCP criteria cell 5879, and is within Narrow Endemic or Criteria Area Plant Species habitat assessment areas. It is within the MSHCP designated habitat assessment area for the Burrowing Owl (*Athene cunicularia hypugaea*). A habitat assessment for Burrowing Owl and rare plants was conducted. Suitable habitat for burrowing owl and for four rare plant species is present on the site.

There are no Waters of the United States, Waters of the state of California, or California Department of Fish and Wildlife (CDFW) jurisdictional streambeds within the study area. There is no significant riparian vegetation onsite, and no vernal pools or areas suitable for vernal pool formation in the project area. There is no need for a Determination of Biologically Equivalent or Superior Preservation (DBESP).

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APPENDIX D CERTIFICATION



## ACRONYMS AND ABBREVIATIONS

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AMEC	AMEC Environment & Infrastructure, Inc.
APN	Assessor's Parcel Number
CDFW	California Department of Fish and Wildlife
DBESP	Determination of Biologically Equivalent or Superior Preservation
MSHCP	Multiple Species Habitat Conservation Plan
msl	Mean Sea Level
MBTA	Migratory Bird Treaty Act
RCIP	Riverside County Integrated Project
USACE	United States Army Corp of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey

## 1.0 PROJECT INFORMATION

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Albert A. Webb Associates contracted AMEC Environment & Infrastructure, Inc. (AMEC) to conduct a habitat assessment and Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis. This assessment was required to comply with the Western Riverside County MSHCP.

The proposed project involves the development of the northeastern portion of the parcel into a new juvenile hall court building, with associated parking areas and access roads and walkways. The Study Area for the project encompasses only a small part (approximately 3 acres) of Assessor's Parcel Number (APN) 963-080-013 (see Figures 1 and 2).

The Study Area is located in the unincorporated area of French Valley, Riverside County, California, (Figures 1 and 2). Specifically, it is located within Section 7, Township 7 South, Range 2 West, as shown on the United States Geological Survey (USGS) 7.5 minute *Bachelor Mountain, California* quadrangle. The proposed project site is bordered on the west by the existing Southwest Justice Center, on the south by the existing Juvenile Hall facilities and undeveloped land, on the east by undeveloped land and rural residences, and on the north by undeveloped land.

### 1.1 Fieldwork

The habitat assessment site visit was performed by AMEC biologist Stephen J. Myers on 4 February 2014. The survey visit was made under favorable weather conditions (70-90% cloud cover, 1-3 mile per hour winds, and a temperature range of 53°F to 55°F). All plant and vertebrate animal species detected were noted. A list of these is attached as Appendix C.

### 1.2 Soils Analysis

The United States Department of Agriculture, Natural Resources Conservation Service (USDA) online Web Soil Survey (USDA 2014) was consulted to determine the soil associations and soil types mapped as occurring within the Study Area. The Study Area includes three different soil types (Figure 3) including:

- BfC: Bosanko clay, 2 to 8 percent slopes
- BkC2: Buchenau silt loam, 2 to 8 percent slopes, eroded
- ChD2: Cieneba sandy loam, 8 to 15 percent slopes, eroded

The Buchenau silt loam and Cieneba sandy loam soil types found within the Study Area are not specifically associated with sensitive biological elements. However, Bosanko clay is a soil type known to support certain rare plants.

### 1.3 Vegetation

Figure 4 illustrates the vegetation communities found within the study area, along with an overlay of the proposed project. The following vegetation communities occur within the Study Area:

Non-native grassland – The vast majority of the site is vegetated with non-native grassland. It is dominated by red brome (*Bromus madritensis* subsp. *rubens*), tocalote (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), redstem filaree (*Erodium cicutarium*), and Mediterranean schismus (*Schismus barbatus*). The site shows signs of relatively recent disturbance (discing and possibly rough grading).

Riversidean Upland Sage Scrub – A small remnant of this vegetation type occurs in the southwest corner of the site (see Photo 3 in Appendix B). The shrub cover in this area is made up entirely of California buckwheat (*Eriogonum fasciculatum*).

A list of all plant species detected on-site during the habitat assessment is contained in Appendix C. A total of 15 species was identified, 9 native and 6 non-native. Seedlings of several other species were germinating at the time of the assessment, but could not be identified. None of the identified species has protected status under State or federal Endangered Species Acts, or are considered sensitive by the California Native Plant Society (CNPS).

Community nomenclature was based on vegetation community descriptions in the MSHCP (Riverside County Integrated Project 2003) and Holland (1986).

#### **1.4 Oak Trees**

No oak trees occur within the Study Area.

#### **1.5 Topography/Hydrology**

The Study Area is primarily on a gentle, north to northeast-facing slope. Elevations on the proposed project site range from approximately 1,370 feet above mean sea level (msl) along the northern project boundary to 1,390 feet above msl in the west-central portion of the project. Runoff from the site generally flows north and northeast towards Auld Road. An existing concrete V-ditch occurs along the western edge of the site, channeling water northward toward Auld Road.

#### **1.6 Jurisdictional Waters Assessment**

There are no Waters of the United States, Waters of the state of California, or CDFW jurisdictional streambeds within the study area.

#### **1.7 Migratory Bird Treaty Act**

Virtually all native bird species are protected by the federal Migratory Bird Treaty Act (MBTA). Impacts to these other bird species are not permitted in any part of the MSHCP area. A variety of birds which are protected by the MBTA occur and could nest in the proposed project area.

Impacts to nesting bird species must be avoided at all times, but the period from approximately 15 February to 31 August is the expected breeding season for bird species occurring in the project area. If project activity or vegetation removal must be initiated during the breeding season, a qualified biologist should check for nesting birds prior to such activity. If active nests

are found, they must be avoided until after the young have fledged. While there is no established protocol for nest avoidance, when consulted, the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 – 300 feet for songbirds, but this is decided on a case by case basis.

Potential burrowing owl (*Athene cunicularia hypugaea*) habitat is present in the project area. See further discussion of the Burrowing Owl in Section 2.4 below.

## **2.0 MSHCP COMPLIANCE**

---

### **2.1 MSHCP Section 3.2.2 Project Relationship to Reserve Assembly**

The proposed project is located within the Southwest Plan Area of the MSHCP, and is within Criteria Cell 5879. The project site is in the northeast portion of the criteria cell. Conservation within this Cell will be approximately 5% of the Cell focusing in the southern portion of the Cell. The proposed project is not located within or near any MSHCP Special Linkage areas and will not interfere with goals for MSHCP reserve assembly.

### **2.2 MSHCP Section 6.1.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools/Fairy Shrimp**

Riparian/riverine areas are lands that contain habitat dominated by trees, shrubs, and persistent emergents, which occur close to or depend upon soil moisture from a nearby water source; or areas with fresh water flowing during all or a portion of the year. Unvegetated drainages (ephemeral streams) may be included if alterations to that drainage have the potential to affect Covered Species and Conservation Areas. The MSHCP requires focused surveys for sensitive riparian bird species when suitable riparian habitat is present and surveys for sensitive fairy shrimp species when vernal pools or other suitable habitat are present.

The full list of MSHCP designated riparian/riverine/vernal pool associated species for which protection of these areas is important is:

- Plants  
Brand's phacelia (*Phacelia stellaris*), California orcutt grass (*Orcuttia californica*), California black walnut (*Juglans californica* var. *californica*), Coulter's matilija poppy (*Romneya coulteri*), Engelmann oak (*Quercus engelmannii*), Fish's milkwort (*Polygala cornuta* var. *fishiae*), graceful tarplant (*Holocarpha virgata* ssp. *elongata*), lemon lily (*Lilium parryi*), Mojave tarplant (*Deinandra mohavensis*), mud nama (*Nama stenocarpum*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), Orcutt's brodiaea (*Brodiaea orcuttii*), Parish's meadowfoam (*Limnanthes gracilis* var. *parishii*), prostrate navarretia (*Navarretia prostrata*), San Diego button-celery (*Eryngium aristulatum* var. *parishii*), San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), San Miguel savory (*Satureja chandleri*), Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*), slender-horned spine flower (*Dodecahema leptoceras*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), spreading navarretia (*Navarretia fossalis*), thread-leaved brodiaea (*Brodiaea filifolia*), vernal barley (*Hordeum intercedens*)

- Invertebrates  
Riverside Fairy Shrimp (*Streptocephalus woottoni*), Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)
- Fish  
Santa Ana Sucker (*Catostomus santaanae*)
- Amphibians  
Arroyo Toad (*Bufo californicus*), Mountain Yellow-legged Frog (*Rana mucosa*), California Red-legged Frog (*Rana aurora draytonii*)
- Birds  
Bald Eagle (*Haliaeetus leucocephalus*), Least Bell's Vireo (*Vireo bellii pusillus*), Peregrine Falcon (*Falco peregrinus*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*).

There is no habitat for any of these species in the Study Area. No vernal pools or areas suitable for vernal pool formation were observed in the Study Area. Even though Bosanko clay occurs on the project site, the site is on a slope that has no potential for ponding water, and therefore no potential for the occurrence of any fairy shrimp species. No features on the project site meet the MSHCP definition of riparian/riverine areas, and there is no significant riparian vegetation present on the site. Thus, there is no need for a separate Determination of Biologically Equivalent or Superior Preservation (DBESP), as the functions and values of this site at project completion will be equivalent to the current functions and values.

### **2.3 MSHCP Section 6.1.3 Protection of Narrow Endemic Plant Species**

The proposed project is within a Narrow Endemic Plant Species Survey Area. The Narrow Endemic Plant Species Survey Area includes the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California orcutt grass, and Wright's trichocoronis.

### **2.4 MSHCP Section 6.3.2 Additional Survey Needs and Procedures**

The proposed project is within a Criteria Area Plant Species habitat assessment area. The species designated include:

- Davidson's saltscale (habitat not present, species occurs in highly alkaline soils)
- Parish's brittlescale (habitat not present, species occurs in highly alkaline soils)
- Thread-leaved brodiaea (habitat may be present – Bosanko clay soils)
- Smooth tarplant (habitat not present, species occurs in highly alkaline soils)
- Coulter's goldfields (habitat not present, species occurs in highly alkaline soils)
- Little mousetail (habitat not present, species occurs in vernal pools and highly alkaline soils)
- Round-leaved Filaree (habitat may be present – Bosanko clay soils)

Of the above seven species, only the thread-leaved brodiaea and round-leaved filaree may occur on the project site, and will require additional, focused surveys.

The proposed project is also within a Narrow Endemic Plant Species Survey Area. The Narrow Endemic Plant Species Survey Area includes the following species:

- Munz's onion (habitat may be present – Bosanko clay soils)
- San Diego ambrosia (habitat not present, species occurs on floodplain terraces and in vernal pools)
- many-stemmed dudleya (habitat may be present – Bosanko clay soils)
- spreading navarretia (habitat not present, species occurs in vernal pools)
- California orcutt grass (habitat not present, species occurs in vernal pools)
- Wright's trichocoronis (habitat not present, species occurs in highly alkaline soils)

Potential habitat (Bosanko clay soils) is present for Munz's onion and many-stemmed dudleya, and additional, focused surveys will be required.

The project site is within the Burrowing Owl habitat assessment area. California Ground Squirrels (*Spermophilus beecheyi*) and their burrows were observed on the site during the survey visits. Although no owls or owl sign (feathers, pellets, whitewash, etc.) were detected, suitable potential habitat is present on the site. Focused Burrowing Owl surveys will be necessary. If Burrowing Owls are found to be present on the site, then MSHCP-approved mitigation must be implemented. Additionally, pre-construction Burrowing Owl surveys will be conducted within 30 days prior to ground disturbing activities.

## **2.5 MSHCP Section 6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface**

The guidelines provided in MSHCP Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface) are intended to reduce edge effects to MSHCP conservation areas. The guidelines describe mitigation for project impacts to conservation areas related to drainage, toxics, lighting, noise, invasive species, barriers, grading, and land development.

The Study Area is not adjacent to any proposed or existing MSHCP conservation area lands; therefore, MSHCP Section 6.1.4 Guidelines do not apply to this project.

## **3.0 CONCLUSIONS**

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### **3.1 MSHCP Requirements**

The project site is within the Burrowing Owl habitat assessment area. Suitable potential habitat is present on the site. Focused Burrowing Owl surveys will be necessary. If Burrowing Owls are found to be present on the site, then MSHCP-approved mitigation must be implemented. Additionally, pre-construction Burrowing Owl surveys must be conducted within 30 days prior to ground disturbing activities.

Habitat may be present for thread-leaved brodiaea, round-leaved filaree, Munz's onion, and many-stemmed dudleya, and additional, focused surveys will be required for those species. No suitable habitat is present for other Criteria Area Plant Species or Narrow Endemic Plant Species.

There are no oak trees or jurisdictional waters on the project site. No suitable habitat is present for MSHCP designated riparian/riverine/vernal pool associated species, including fairy shrimp species.

#### **4.0 PERSONAL CONTACTS, LITERATURE CITED AND REFERENCES**

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## **APPENDIX A**

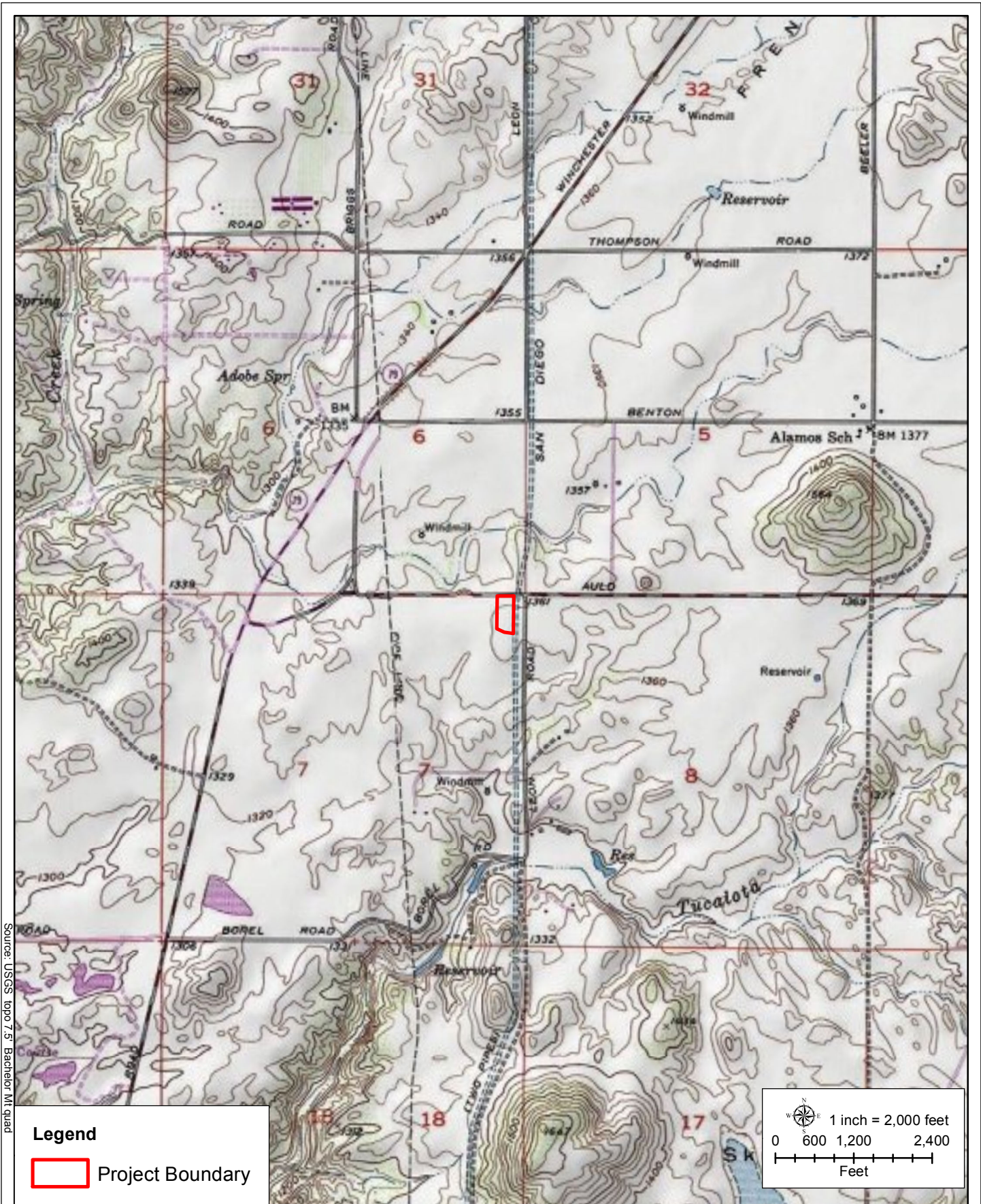
### **FIGURES**



Vicinity & Location  
 Southwest Justice Center  
 Juvenile Hall Courts Relocation Project

FIGURE  
 1



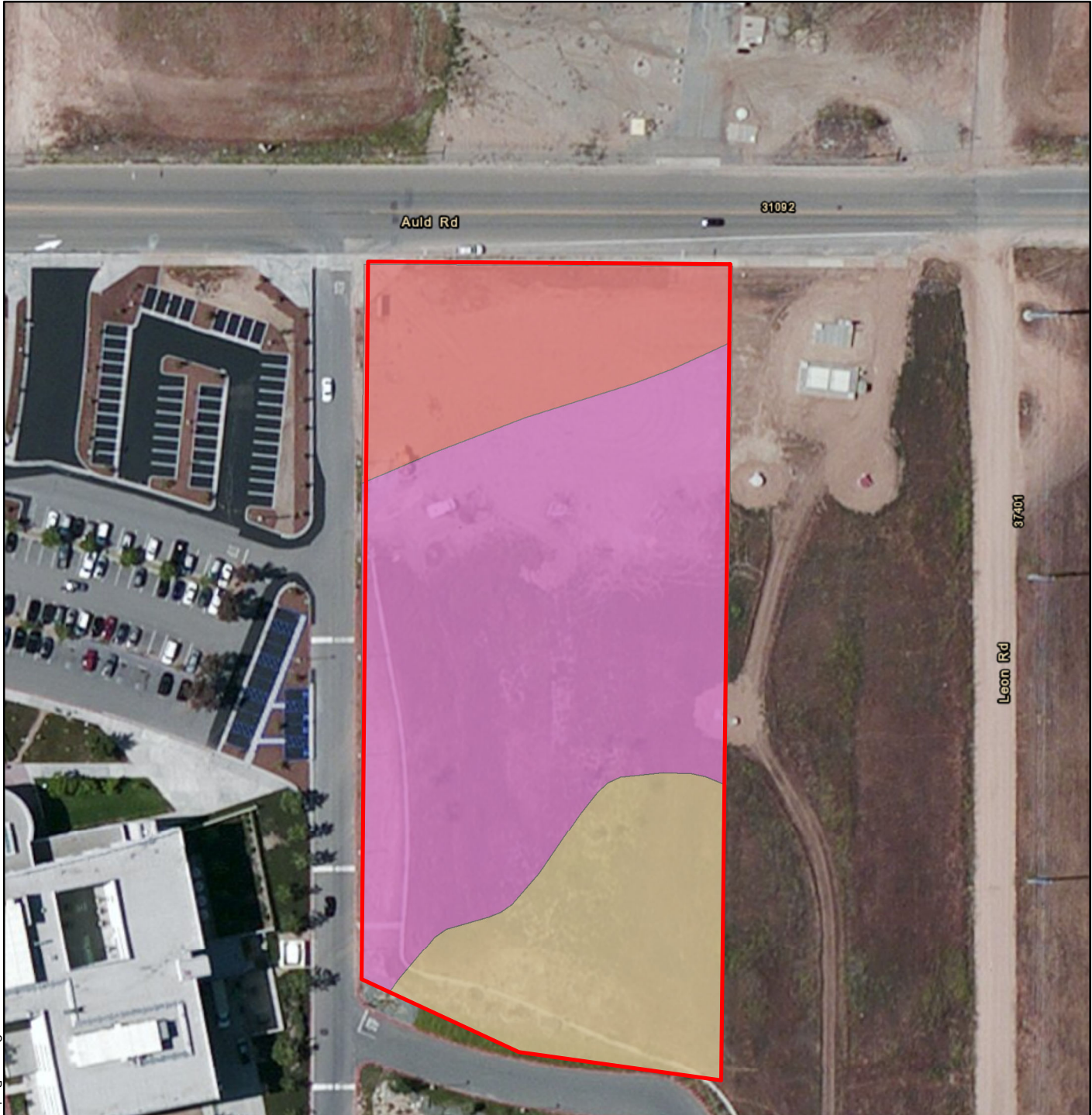


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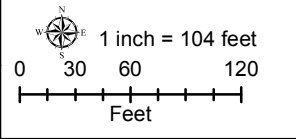
Topographic Map  
 Southwest Justice Center  
 Juvenile Hall Courts Relocation Project

FIGURE  
 2



**Legend**

- Project Boundary
- BfC: Bosanko clay, 2-8% slopes
- BkC2: Buchenau silt loam, 2-8% slopes, eroded
- ChD2: Cieneba sandy loam, 8-15% slopes, eroded



Source: Background-ESRI world imagery, soils-ca 679

S:\active projects\Southwest Justice Center Hab. Assessment 1455400574\maps



Soils Map  
Southwest Justice Center  
Juvenile Hall Courts Relocation Project

**FIGURE**  
**3**